Alternative Investments 2020
The Future of Alternative Investments
Executive summary

This report examines the forces driving today’s alternative investment industry and considers where these may take the industry in the coming years, focusing on the core asset classes of private equity buyouts, hedge funds and venture capital.

Alternative investment has matured over the last 30 years and is gradually becoming part of the mainstream financial industry, garnering greater attention and acceptance from both regulators and the general public. However, it is also entering a period of considerable growth and change due to the influence of macroeconomic drivers, post-crisis financial industry regulation, and two critical industry trends: the increasing sophistication of institutional investors and the rise of retail investors as an important source of capital.

The most fundamental macroeconomic driver is the rise of emerging market economies. They generate new investment opportunities and serve as an increasingly important source of capital. At the moment, most emerging market capital flows into alternatives via sovereign wealth funds (SWFs), but the growing number of high net worth individuals in emerging markets – and their openness to alternative investing – will soon become important.

Demographics in the developed world are also critical, as the rising tide of pensioners is leading to a growing funding gap in retirement systems. With the leading central banks likely to keep benchmark interest rates near zero for the foreseeable future – ensuring low returns from fixed-income investments – many pension funds are increasing their allocations to higher return alternative investments.

Meanwhile, post-crisis regulatory reforms intended to improve the stability of the global financial system are creating both challenges and opportunities for alternative investors. Bank capital, liquidity and collateralization reforms have discouraged banks from holding many alternative assets on their books and from lending short-term money to fund some alternative investments (e.g. hedge fund strategies). New regulations aimed directly at the investment and alternatives industry are also requiring firms to improve their infrastructure, transparency and reporting and are speeding up the maturation of the industry. However, the cost and complexity of the new laws is creating barriers to entry for the industry which may reduce innovation in ways that drag down the long-term returns available to investors critical to society, such as pension funds.

Institutional investors are presently the main supplier of capital for alternatives, and their growing confidence and investment capabilities after investing over multiple economic cycles – a complex phenomenon known as “institutionalization” – is a key driver of many future trends in the industry. The process has helped to increase both the size of the industry and its importance to wider society. However, an even more fundamental change in the retirement sector, the shift from defined benefit to defined contribution pensions (where investments are controlled by individuals), may lead to a significant influx of retail capital into the alternatives sector.

This “retailization” trend will be a key driver of growth in the alternatives industry in coming decades, and not just for the current incumbents. Traditional financial services, led by asset managers and banks, will also dramatically expand revenue streams associated with providing access to alternative investments or related products. In turn, regulators will face the challenge of crafting laws that protect investors from unwise investments, while still permitting them to access the returns and diversification benefits associated with alternative products.
The balance of power between investors and alternative investment firms is shifting in the face of both institutionalization and retailization, leading to the convergence into five core business models defined by both the source of capital (institutional or retail) and the degree of asset specialization:

— **global alternative asset managers** will build global platforms offering a wide range of products, but will also invest in creating alpha for large institutions (e.g. through developing in-house operating teams to run target firms)

— **specialists (region/industry)** will rely on a comparative advantage in generating alpha for institutional investors within a niche investment segment

— **retail alternative asset managers** will focus less on alpha creation and more on their ability to master complex retail regulations and provide access to large numbers of retail investors

— **start-up firms** will sidestep the challenge of raising capital from institutions by offering a distinct value proposition to high net worth and retail investors

— **funds of funds** will need to develop new products in order to maintain support from institutional investors, but retailization may enable them to expand into retail products as well

While some firms may choose only one of these business models, others may develop more complex strategies. For instance, global alternative asset managers may be also tempted by the retail market and seek to expand into the retail asset management space, leveraging their brand and market position. This tendency may be heightened for the firms that have IPO’d, since publicly listed firms are much keener to increase their assets under management (AUM). In addition, traditional asset managers may become retail supermarkets with strong product offerings in the alternatives space, competing directly with pure-play alternative investment firms. Ownership and governance models may have significant repercussions on a firm’s choice of business model.

Changes in the industry’s business models will also drive new capabilities and relationships. First, the growth of retail interest in alternatives will require new distribution channels, direct or through other financial intermediaries. Second, on the institutional investor side, the growing sophistication of some larger investors will lead to a more complicated set of relationships, especially for private equity and infrastructure financing. Keen to increase returns and gain more control over their investment strategies, many institutional investors are now developing:

— **direct investing** capabilities in one or more asset types by creating their own investment teams (and thus disintermediating alternative investment firms entirely). However, the skills required for this approach mean that it will only be adopted by a minority of large institutions.

— **co-investing** capabilities, whereby firms also invest directly, but alongside a traditional fund investment and with the help of the fund manager. This reduces investment costs and avoids the need to develop full direct investing capabilities, but institutions must be able to react quickly to co-investment opportunities and ensure that the interests of all parties are aligned in order to avoid the problem of adverse selection, something that many may find challenging.

— **joint ventures** with alternative investment firms, whereby traditional one-off investments in a fund are replaced by a permanent, legally distinct partnership. This offers greater investment flexibility for institutions (e.g. over timing the sale of particular assets) and reduces investment costs, but it is a practical option mainly for very large institutional investors.

— **separately managed accounts**, based on the traditional mutual fund mandate model, appeal to a wider range of institutions, and offer significant flexibility through separating the ownership and the management of the assets (unlike a traditional co-mingled fund). This gives institutions more control and transparency over investments and allows them to change the management team without selling the assets.

Each of these models offers institutional investors a slightly different set of advantages, e.g. in terms of investment costs, control over investment decisions, and the internal capabilities required to put the model into action. That said, many institutions will retain a cornerstone strategy of investing through alternative investment managers as they are constrained by size, organizational set-up, or governance constraints. This conservative strategy will be seen as a safe bet until the long-term returns from the innovative models mentioned above are established.
Introduction and scope

The alternative investment industry is deeply embedded in the global financial system and economy, with investment decisions affecting capital markets, companies, and individuals across the world. This stands in stark contrast to its origins. The industry has grown from a handful of private investors making relatively small investments in companies and start-ups, to one that covers a wide array of asset classes and encompasses thousands of firms managing and investing trillions of dollars globally on behalf of institutional and individual investors alike.

It not only survived the financial crisis, but emerged stronger and more important to stakeholders than ever before. The new economic and regulatory environment is impacting relationships with capital providers, while new business models are fundamentally challenging the competitive landscape.

The goal of this report is to provide readers in the global investment and financial services industries with a perspective on the future of the alternative investments. The report is broken into three parts.

First, we identify and assess the macro level trends that will affect the alternative investment ecosystem. These will include the rise of emerging markets, structural changes to retirement systems, and monetary policy amongst leading central banks.

Second, we will focus on the industry-level drivers of an increase in institutionalization, the rise of retailization, and changes to the regulatory climate.

Third, we will analyse these trends and provide an outlook on how the industry may evolve over the coming decade. We will identify the business and investment models that successful alternative investors and capital providers will employ to navigate the changing ecosystem.

For the sake of clarity, we will use the nomenclature below to describe capital providers and alternative investors:

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPs (Limited partners)</td>
<td>Asset owners that provide capital to alternative investment firms or divisions to invest on asset owners’ behalf</td>
</tr>
<tr>
<td>GPs (General partners)</td>
<td>Firms that deploy capital in companies or securities on behalf of LPs/capital providers (such as private equity buyout or venture capital firms, or hedge funds)</td>
</tr>
<tr>
<td>Institutional investors</td>
<td>A subset of LPs comprised of institutions that invest capital with GPs (such as pension funds, endowments and foundations, and financial institutions)</td>
</tr>
<tr>
<td>Retail investors</td>
<td>A subset of LPs comprised of individuals that invest capital with GPs (such as high net worth or non-wealthy individuals or family offices)</td>
</tr>
<tr>
<td>Investors</td>
<td>An inclusive term that includes both GPs (who invest in securities and companies) and LPs (who may invest with GPs or directly in securities or companies)</td>
</tr>
</tbody>
</table>
Section 1

Macro trends

The alternative investment industry has evolved over three decades to become an important part of the financial system and global economy. Its growth can be traced to a range of external factors, with regulatory changes, economic cycles, and technological developments, all playing critical roles. Within this macro context, entrepreneurs founded a range of firms utilizing a diverse mix of value sources to generate returns for investors. Figure 1 summarizes influential factors and events in the history of alternatives.

"The future of the industry will also be affected by a range of macro factors - of which the rise of emerging markets, ageing in developed economies and monetary policy, will prove particularly influential."
After representing a relatively small part of the financial system in the 20th century, the industry emerged highly relevant for the global economy in the 21st century. The dotcom crash and the financial crisis led many to question the relevance of alternatives, but they proved resilient and emerged stronger following both events. Demand for alternatives has been robust. Total assets under management soared from $1 trillion in 1999 to more than $7 trillion in 2014 (Figure 2), twice the rate of traditional assets from 2005-2013.\textsuperscript{1} and PWC expects the industry to nearly double again to $13 trillion by 2020\textsuperscript{2}. Moreover, its influence on the economy, the broader financial system, and society, has expanded dramatically. Researchers have been able to identify how asset classes such as private equity buyouts, hedge funds, and venture capital impact a wide range of factors, both positively and negatively (Figure 3), as well as the different sources of value that firms use to generate returns for investors (Figure 4).

\textsuperscript{1} The firms referenced here are illustrative examples – only space constraints prevent us from mentioning the many other outstanding firms that played important roles throughout the history of alternative investments.

\textsuperscript{2} Source: World Economic Forum Investors Industries

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**Figure 1: Key moments in the history of alternative investments**

<table>
<thead>
<tr>
<th>Type of Event</th>
<th>Regulation</th>
<th>Technology</th>
<th>Market event</th>
<th>Firm event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958: US Small Business Investment Act of 1958</td>
<td>Enables the creation of VC and PE fund structures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972: Kenbak-1 released</td>
<td>First personal computer heralds the computing era</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1973: Black–Scholes formula published</td>
<td>Enabled the pricing of derivatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1926: Graham-Newman partnership founded</td>
<td>First hedge fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1946: American Research and Development Corporation</td>
<td>First venture capital fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1962: Investors Overseas Services (IOS)</td>
<td>IOS launches first fund of funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1920s-60s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978: Update to Employee Retirement Income Security Act of 1974</td>
<td>Allows pension funds to invest in private funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989: Savings and loan scandal + Drexel Burnham collapsed</td>
<td>Junk bond market collapses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999: Financial Modernization Bill (Gramm-Leach-Bliley Act)</td>
<td>Enables the rise of large investment banks in the US</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998: Long-Term Capital implodes</td>
<td>Threatens stability of financial system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000s-present</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000: Gaussian copula function published</td>
<td>Enables the rise of structured products (CDO/CLO/CDS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000: Commodity Futures Modernization Act of 2000</td>
<td>Enables the growth of derivatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008: Global financial crisis</td>
<td>Start of a global recession</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010s: New financial regulations</td>
<td>Reshapes the financial and investment industries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972: Sequoia Capital founded</td>
<td>Leading venture capital firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972: Kleiner Perkins Caufield &amp; Byers founded</td>
<td>Leading venture capital firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1975: Bridgewater founded</td>
<td>Leading hedge fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976: KKR founded</td>
<td>Leading private equity buyout firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985: Blackstone founded</td>
<td>Leading private equity buyout firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987: Carlyle founded</td>
<td>Leading private equity buyout firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987: KKR takes over RJR Nabisco</td>
<td>Seminal private equity buyout deal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000s: Rise of sovereign wealth funds</td>
<td>Expedites the rise of institutionalization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007: Blackstone IPO</td>
<td>First major IPO of a PE firm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3: Mechanisms through which alternative investing contributes to the economy

<table>
<thead>
<tr>
<th>Al's contribution to the economy</th>
<th>Capital markets</th>
<th>Real economy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liquidity</strong></td>
<td></td>
<td>VC</td>
</tr>
<tr>
<td>• Enables investors to buy/sell assets when they want</td>
<td>![Low]</td>
<td>![High]</td>
</tr>
<tr>
<td><strong>Financial innovation</strong></td>
<td></td>
<td>![Low]</td>
</tr>
<tr>
<td>• Develops new and innovative products, but these can produce new risks as well</td>
<td>![Low]</td>
<td>![High]</td>
</tr>
<tr>
<td><strong>Long-term capital</strong></td>
<td></td>
<td>![Low]</td>
</tr>
<tr>
<td>• Provides the capital needed to invest in long-term projects</td>
<td>![Low]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td><strong>High-risk capital</strong></td>
<td></td>
<td>![Low]</td>
</tr>
<tr>
<td>• Provides capital to projects that are too risky for normal investors</td>
<td>![Low]</td>
<td>![High]</td>
</tr>
<tr>
<td><strong>Transaction costs</strong></td>
<td></td>
<td>![Low]</td>
</tr>
<tr>
<td>• Supports businesses and consumers by reducing the cost of deals/trades</td>
<td>![Low]</td>
<td>![High]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic impact</th>
<th>VC</th>
<th>PE</th>
<th>HF</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increased GDP growth</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• Increased competition within industries</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• Funds the technologies that will change the world tomorrow</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• VC creates new employment</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• PE slightly decreases employment¹</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td><strong>Corporate governance¹</strong></td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• Strengthens governance structures</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• Reduces principal-agent issues</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td><strong>Firm productivity</strong></td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• Improves the productivity of firms</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
<tr>
<td>• Invests in new research</td>
<td>![Low]</td>
<td>![High]</td>
<td>![Moderate]</td>
</tr>
</tbody>
</table>

¹ Concerns have been raised that activist hedge funds may focus too much on short-term results
² Research has shown that private equity buyouts often result in both new jobs being created and existing jobs being eliminated, with a slight decrease in overall employment as a result

Source: World Economic Forum: Investors Industries
The future of the industry will also be affected by a range of macro factors of which the rise of emerging markets, ageing in developed economies and monetary policy (Figure 5), will prove particularly influential. Whilst technological disruption is undoubtedly an important trend impacting the world, we believe that it will only have a secondary impact on the core business models of the alternative investment ecosystem (as opposed to those of investee companies) and thus it will not be covered in detail in this report. However, it is proving influential within certain subsegments, such as capital for entrepreneurs. We cover this topic in detail in another report in the Alternative Investments 2020 series, *The Future of Capital for Entrepreneurs and SMEs.*

**Figure 5: Overview of key macro trends affecting the alternative investment ecosystem**

- **Direct impact on AI**
  - Increasing global trade
  - Increasing share of non-OECD global GDP
  - Creating large new pools of capital

- **Secondary impact on AI**
  - Reducing nominal returns for investors
  - Increasing pension liabilities
  - Driving asset prices to near record levels

**The economic rise of non-OECD countries is:**
- Increasing global trade
- Increasing share of non-OECD global GDP
- Creating large new pools of capital

**Ageing in OECD countries is:**
- Increasing pension liabilities
- Increasing funding gaps at pension funds
- Reduced access to defined benefit plans

**Macro trends are driving change in the alternative investment ecosystem**

**Capital sources**
- Increasing the supply of capital available to firms
- Increasing demand for alternative investments

**Business models**
- Altering the competitive landscape for GPs
- Driving the creation of new GP-LP relationship models

**Investment opportunities**
- Opening large new markets for firms to invest in
- Potentially larger deals

Source: World Economic Forum Investors Industries
1.1. The growing influence of the developing world

Emerging market countries will play a central role in the global economy of the 21st century. Shifts in demographics and economic policy are reshaping the economic landscape. The alternative investment industry is already affected by some of the consequences.

Figure 6: Life expectancy increased across the world during the 20th century

Life expectancy at birth, years

<table>
<thead>
<tr>
<th>Year</th>
<th>East Asia</th>
<th>Eastern Europe</th>
<th>Latin America</th>
<th>Muslim World</th>
<th>Russian Sphere</th>
<th>South Asia</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-55</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>1970-75</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>1990-95</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>2005-10</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: CSIS

Figure 7: Working age populations as a percentage of total populations have increased significantly over the past 40 years

Working-Age Population (Aged 20–64), percent of the total population

<table>
<thead>
<tr>
<th>Year</th>
<th>East Asia</th>
<th>Eastern Europe</th>
<th>Latin America</th>
<th>Muslim World</th>
<th>Russian Sphere</th>
<th>South Asia</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>2010</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: CSIS

Figure 8: Population in emerging markets has increased in both relative and absolute terms

Population in emerging markets increased in both relative and absolute levels, % and millions of people

<table>
<thead>
<tr>
<th>Year</th>
<th>Emerging markets global population (area)</th>
<th>Emerging markets share of global population (line)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>78%</td>
<td>87%</td>
</tr>
<tr>
<td>1990</td>
<td>81%</td>
<td>87%</td>
</tr>
<tr>
<td>1995</td>
<td>85%</td>
<td>87%</td>
</tr>
</tbody>
</table>

Source: CSIS

Improvements in global health have led to a dramatic increase in life expectancy in emerging markets (Figure 6), with the total and working population increasing in absolute terms and relative to developed nations (Figure 7 and 8).
At the same time, many countries have adopted more liberal economic policies, such as a notable reduction of tariffs in emerging nations (Figure 9), with the overall freedom of trade continuing to increase following the financial crisis (Figure 10). The result has been a significant increase in trade (Figure 11) and GDP, with emerging nations accounting for 30% of global GDP in 2006, but 50% by 2016 (Figure 12). Driving this is the emergence of a robust middle class in emerging nations, now accounting for $6.9 trillion in annual spending (Figure 13). With large-scale economic reforms underway in countries such as China (Figure 14), the rebalancing of the global economy is likely to continue for quite some time. The shift has created new opportunities for alternative investors, with private equity investments in emerging markets increasing by ten times between 2000 and 2013 (Figure 15).

**Figure 9: Trade tariffs in emerging markets have fallen significantly over the past 30 years**

Average tariff for developing countries, %

Source: World Bank

**Figure 10: The ease of doing international trade continues to improve**

Average trade freedom score

Source: Heritage Foundation
Figure 11: Emerging market trade has nearly doubled over the past 40 years.\textsuperscript{11} Median trade of GDP for developing nations, %

Figure 12: Emerging market trade has nearly doubled over the past 40 years.\textsuperscript{12} Economies’ share of world GDP at market exchange rates, %

Figure 13: The spending potential of the middle class in emerging markets is nearly $7 trillion.\textsuperscript{13}

<table>
<thead>
<tr>
<th>Income segments</th>
<th>Distribution of consumption and population</th>
<th>Annual household income$^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>$%$ of total consumption,$^{1}$ 100% = $9.7$ trillion</td>
<td>$%$ of population, 100% = $5.5$ billion</td>
</tr>
<tr>
<td>Global</td>
<td>2.0</td>
<td>&gt;$113,000</td>
</tr>
<tr>
<td>Upper middle</td>
<td>15.0</td>
<td>$56,500-$113,000</td>
</tr>
<tr>
<td>Middle</td>
<td>13.0</td>
<td>$22,500-$56,499</td>
</tr>
<tr>
<td>Lower middle</td>
<td>23.0</td>
<td>$13,500-$22,499</td>
</tr>
<tr>
<td>Deprived</td>
<td>28.0</td>
<td>&lt;$13,500</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Percentages of consumption for middle-class categories do not sum to $6.9$ trillion, because of rounding
\textsuperscript{2} Based on purchasing-power-adjusted exchange rate

Note: Developing countries are Argentina, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Iran, Malaysia, Mexico, Nigeria, Pakistan, Peru, the Philippines, Poland, Romania, Russia, South Africa, Thailand, Turkey, Ukraine, Venezuela, Vietnam.

Source: Economist Intelligence Unit, June 2009; Euromonitor, June 2009; World Bank, April 2009; McKinsey analysis
Figure 14: China’s Third Plenum (2013) reforms cover a wide range of issues

- Price deregulation
- SOE share cross-holding
- More competition

- Hukou reform
- Unified urban-rural construction land market

More market less state

Sustainable urbanization

Fiscal reforms

Financial & external opening

Environmental protections

Source: Zero Hedge

- Increase central government spending
- Municipal bond reforms
- Property/resource taxes

- Property rights for natural resources
- Environment protection is part of personal performance reviews

China’s Third Plenum

Figure 15: Private equity buyout and venture capital investment in emerging markets has increased in relative and absolute terms

Growth of global private equity buyout/venture capital in emerging markets, $ billions and % of all PE/VC AUM

Source: Preqin, World Economic Forum – Investors Industries analysis
Emerging markets are also an increasingly important source of capital for alternative investment firms, as strong economic growth leads to a commensurate growth in financial markets and national wealth. The share of global financial assets held by emerging nations more than doubled from 7% in 2000 to 18% in 2010 and is continuing to rise (Figure 16). Importantly, the accumulation of assets is not necessarily balanced within such societies, as state entities and the wealthiest individuals in society often hold and manage a disproportionate share of financial assets. In addition, Knight Frank forecasts that during the 2014-2024 period some 40-45% of new ultra high net worth ($30M+) and centa-millionaires and some 60% of new billionaires will come from emerging markets. High-net worth individuals and family offices may only own some 2.5% of global assets, but they have historically been an important source of capital for new funds and for alternative investments overall, accounting for 11% of private equity buyout AUM and 35% of hedge fund AUM.

Assets under management by sovereign wealth funds have grown more than 3x to $7 trillion from 2004-2014 (Figure 17), a rate nearly double that of pension funds over the same period. The majority of those Sovereign Wealth Fund assets is based in emerging markets – reinforcing the demographic trends, and driving changes to both the business model of alternative investment firms and their relationship with institutional investors. A later section will discuss this in more detail.

Figure 17: Total sovereign wealth fund AUM has nearly doubled since 2007

Total sovereign wealth fund AUM, $ trillions

Source: SWF Institute, IFSL
1.2. Social systems and their sustainability

The retirement of the baby boom generation in developed countries, the most populous generation in history, is straining pension systems across the world. Pension systems must simultaneously meet the current cash flow demands of retirees and generate returns sufficient to fulfil their future obligations. Unfortunately, systems are deeply underfunded.

Critically, the degree of underfunding is large in both relative and absolute scales. Funding ratios for state public pension funds in the United States have fallen significantly (Figure 18), as the funding shortfall more than tripled to $1 trillion (Figure 19) between 2004 and 2013. Moreover, the trend holds throughout the world, with DBRS, a bond rating agency, estimating in 2014 that the average defined benefit public pension plan in the United States, Canada, Europe, and Japan was only 78% funded.

The funding gaps are leading public pension funds to allocate larger shares of capital to alternative investments. Recent research has demonstrated that underfunded US and UK public pension plans typically seek to increase their exposure to risky assets, with their associated higher expected returns, in an attempt to close the funding gap. Not surprisingly, there has been a dramatic increase in the amount of capital allocated to alternative investments (Figure 20). The growing importance of institutional investors can also be seen at the asset class level, with 74% of hedge fund capital projected to come from institutions by 2018 (Figure 21).

Figure 18: The funding ratio for US state public pension plans fell significantly after the financial crisis

Ratio of assets/liabilities, %

90%
85%
80%
75%
70%

2005 2006 2007 2008 2009 2010 2011 2012 2013

Figure 19: The funding gap for US state pension plans soared following the financial crisis

Actuarial value of assets needed to equal liabilities, $ billions

1 131 US state retirement systems

Source: Wilshire Consulting

Figure 20: Allocations to alternatives by pension funds have soared in recent years

Aggregate asset allocation in 7 leading pension markets1, % of AUM

<table>
<thead>
<tr>
<th>Year</th>
<th>Equities</th>
<th>Bonds</th>
<th>Alternatives</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>70%</td>
<td>60%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td>2000</td>
<td>90%</td>
<td>70%</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>2005</td>
<td>80%</td>
<td>60%</td>
<td>50%</td>
<td>40%</td>
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<tr>
<td>2010</td>
<td>75%</td>
<td>60%</td>
<td>50%</td>
<td>30%</td>
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<tr>
<td>2015</td>
<td>70%</td>
<td>60%</td>
<td>50%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Change (1995-2014, %)

-7
-9
+20
-4

1 131 US state retirement systems

Source: Wilshire Consulting

1 Includes Australia, Canada, Japan, Netherlands, Switzerland, United Kingdom, and United States

Source: Towers Watson
Under increasing pressure from growing numbers of retirees and poor returns since the dotcom crash, many defined benefit pension plans are being restricted to existing employees, with new employees offered defined contribution plans instead (Figure 22). Differences between retirement plans and the implications of “retailization” of alternative investments are discussed in greater detail in section 2.

**Figure 21:** Institutional investors became the primary source of capital for hedge funds after the financial crisis

Underlying sources of hedge fund capital from 2002 to forecasted 2018, $ billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Institutional (Pensions, SWFs &amp; E&amp;Fs)</th>
<th>High net worth individuals &amp; Family offices</th>
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<tbody>
<tr>
<td>2002</td>
<td>$1.25 T 26%</td>
<td>$1.72 T 65%</td>
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<td>2003</td>
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<td>2017</td>
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<tr>
<td>2018</td>
<td>$1.72 T 65%</td>
<td>$1.72 T 65%</td>
</tr>
</tbody>
</table>

$500 B 80%, $125 B 20%, $907 B 35%

**Source:** Citi Prime Finance analysis based on eVestment HFN data

**Figure 22:** Defined benefit plans are no longer available to most employees, with defined contribution plans having taken their place

Private sector participation rates by type of retirement replace, %

- Only defined benefit
- Only defined contribution
- Both

**Source:** EBRI
1.3. Monetary policy

The extraordinary monetary policies enacted by the United States, United Kingdom, European Union and Japan in the wake of the global financial crisis are having an immense influence on capital markets and the investment system, and this will continue for the foreseeable future. The introduction of quantitative easing has dramatically increased the size of balance sheets at leading central banks (Figure 23), with combined assets at the Federal Reserve, European Central Bank, Bank of England, and Bank of Japan alone exceeding $10 trillion.32

Institutional investors with outstanding liabilities are acutely affected, as quantitative easing reduces the expected returns from fixed-income products and increases the likelihood of funding gaps emerging or growing. The challenge is expected to continue into the foreseeable future, given the slow recovery and a desire by leading central banks to keep benchmark interest rates near 0%.

This is leading to a substantial increase in the demand for assets that offer higher expected returns, particularly by retirement systems in developed countries. A flood of capital has helped the US stock market hit record highs in relative terms, reaching the fourth highest cyclically adjusted price/earnings (CAPE) ratio since 1881 (Figure 24). The search for yield is also increasing demand for high yield bond issuance and real estate in the United States and Europe (Figure 25). The effect can be seen in alternative investments, as debt (Figure 26) and private equity buyout purchase price multiples reach pre-crisis levels (Figure 27).

Figure 23: Central bank balance sheets for leading central banks increased dramatically after the financial crisis33

Central bank balance sheet as % of IMF GDP forecast 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Fed</th>
<th>ECB</th>
<th>BoE</th>
<th>BoJ</th>
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</thead>
<tbody>
<tr>
<td>2007</td>
<td>4.2x</td>
<td>4.2x</td>
<td>1.8x</td>
<td>4.2x</td>
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<tr>
<td>2014</td>
<td>2.6x</td>
<td>4.2x</td>
<td>1.8x</td>
<td>4.2x</td>
</tr>
</tbody>
</table>

1 Data through November 6, 2104
Source: World Economic Forum Investors Industries, Thomson Reuters Datastream

Figure 24: The Shiller price/earnings ratio is at one of its highest levels in the past 130 years

Cyclically adjusted PE ratio for the S&P 500 (aka, Shiller, PE Ratio) 1

1 12 October 2015
Source: Multpl
Faced with difficult decisions about whether to reduce expected retirement outlays, raise retirement ages, make additional contributions to retirement funds, raise taxes, or increase the risk profile of investments in pursuit of higher returns, stakeholders have chosen to incorporate the last into the mix, which is resulting in increased demand for alternatives. Historically, alternatives have been viewed as adding value mainly through diversification. Today, 54% of institutional investors consider the return potential of asset classes like private equity buyouts to be their main objective, with only 12% listing diversification as the top attraction. That said, as governments seek to reduce the strain on budgets during economic downturns, they seek assets reducing portfolio volatility – a role that alternatives continue to play.

The sheer volume of investment moving further out along the risk/return curve will drive the twin industry trends of retailization and institutionalization, reshaping the behaviour of both investors and alternative investment firms within the alternative investment ecosystem.

The flow of funds into the industry, however, is also acting as a dampener on performance, with an increasing amount of funds chasing a relatively stable set of opportunities. The result is usually higher purchase prices. If firms are unable to exit at similarly high prices, whether it is exiting a private equity buyout or venture capital deal or unwinding a hedge fund position, returns will inevitably suffer. However, even if absolute returns do fall, investors may continue to increase their allocations to alternative investments if the expected returns remain favourable compared to traditional investments.
Ecosystem changes

The alternatives industry is also undergoing tremendous change. Three trends in particular stand out for their ability to shape the structure of the industry. The first is driven by regulation, which either affects alternative investment firms directly or changes the way they engage with the broader financial industry. The second is institutionalization, which is structurally changing how many capital providers invest in alternatives. Third, retailization has the potential to redefine and broaden the pool of investors in alternatives.

"The wave of new banking and investment regulations introduced by governments around the world following the financial crisis will shape the industry for years to come."
2.1. Financial services regulation

The wave of new banking and investment regulations introduced by governments around the world following the financial crisis will shape the industry for years to come. This section summarizes the key aspects of the trend, but readers can refer to a sister report in the Alternative Investments 2020 series, Alternative Investments and Regulatory Reform, for a more detailed discussion of the topic. Figure 28 shows which area of finance is affected by each reform and Figure 29 maps which actors in the financial industry are affected by the law. Figure 30 illustrates the potential impact on the alternative investment industry.

Figure 28: Overview of financial reforms in the United States and Europe by area

<table>
<thead>
<tr>
<th>Regulatory reform</th>
<th>Legislative region</th>
<th>Leverage limits</th>
<th>Collateral requirements</th>
<th>Liquidity requirement</th>
<th>Central clearing</th>
<th>Proprietary trading / private equity limits</th>
<th>Trading tax</th>
<th>Brokerage fee limits</th>
<th>Deposit and reporting requirements</th>
<th>Compensation limits</th>
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<tr>
<td>Dodd–Frank Wall Street Reform and Consumer Protection Act, <em>(Dodd-Frank)</em></td>
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Source: World Economic Forum Investors Industries

Areas affected
**Ecosystem changes**

**Figure 29: Implications of regulatory changes for different actors**

<table>
<thead>
<tr>
<th>Regulatory reform</th>
<th>Legislative region</th>
<th>Banks</th>
<th>Asset managers</th>
<th>Insurance companies</th>
<th>Pension funds</th>
<th>High-net worth / Retail investors</th>
<th>Hedge funds</th>
<th>Private equity</th>
<th>Venture capital</th>
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Source: World Economic Forum Investors Industries

- ☐ Primary target
- ☐ Also affected
2.1.1. Bank regulations

Within the financial industry, Basel III, the Volcker Act, Dodd-Frank, Solvency II, and the European Market Infrastructure Regulation (EMIR) are at various stages of implementation. Collectively, the reforms cover a wide range of issues including: bank capital requirements; the risks banks are incentivized to take on; collateral requirements; new liquidity rules; new rules governing derivatives; increased transparency requirements; and a delineation of the businesses that institutions are allowed to engage in.

Key bank reforms that affect the alternative investment ecosystem:

— **Bank capital reforms and bank risk taking:** Banks are required to hold more and higher quality capital. They are also being incentivized, through capital risk weightings, to hold lower risk assets that are less likely to plummet in value during a crisis (to limit liquidity or solvency issues for the institution). Importantly, these incentives discourage banks from investing in alternatives or the related debt by reducing the profitability of engaging in such transactions.

— **Collateral requirements:** Similarly, the risk weightings applied to collateral requirements for banks have been tightened. Regulators are incentivizing banks to hold instruments that have historically been low in risk as well as liquid across market cycles. The result is an incentive for banks to reduce their support for many types of alternative investments (which are not liquid or considered low risk).

— **Liquidity rules:** Regulators are now requiring banks in the United States and Europe to maintain a 30-day supply of cash and liquid securities. Moreover, they must adhere to the updated International Financial Reporting Standards (IFRS) guidelines that define whether assets can be counted towards the liquidity requirements. Given that effectively no alternative asset meets the liquidity standards, the result is a reduced incentive for banks to hold these assets on their books.

— **Derivatives requirements:** The Dodd-Frank Act and EMIR in the United States and Europe, respectively, have led to the emergence of central derivatives exchanges intended to provide greater transparency in the market, reduce counterparty risk, and prevent contagion from the failure of a systemically important institution. Derivatives must be marked to market each day and firms are required to post collateral that meets requirements similar to those imposed on banks. Hedge funds are thus affected by the need to meet the compliance and reporting requirements and by a reduction in their ability to employ bespoke contracts that closely match their trading strategies.
— **Transparency:** Regulators are further trying to enhance the transparency of the financial system by imposing additional reporting requirements through reforms such as Basel III, Dodd-Frank, and the Markets in Financial Instruments Directive (MiFID II). Regulators will require more information about the activities of financial institutions, helping them to assess the stability of individual firms and the system as a whole. The requirements will likely affect private equity firms and hedge funds in particular, as both will be required to invest more in reporting functions in order to comply with the laws.

— **Permissible bank activities:** Many banks have long had internal alternative investment arms that invested directly in private equity buyouts or real estate, or that traded on behalf of the firm in a manner akin to a hedge fund. These activities are being phased out by banks in the United States, following the Dodd-Frank Act and Volcker rule. They are also strongly discouraged in Europe by the new Basel III capital requirements and would be phased out if the Liikanen proposals are adopted.29

Some of the reforms have already impacted the alternative investment industry. For example, some segments of the hedge fund industry have relied on banks as a major source of short-term funding to carry out their trading strategies. New bank capital and liquidity rules have made banks much more reluctant to advance those funds at cheap rates, forcing affected hedge funds to reduce their activity.

Many of the banking reforms have complex positive and negative effects for the alternatives industry. For example, the shutting of high risk business lines is encouraging some banks to grow their lower risk asset management divisions. Within these divisions, banks are likely to make use of their existing alternative investment skills to develop a retail alternatives capability, with J.P. Morgan Asset Management, Goldman Sachs Asset Management, and Morgan Stanley Investment Management already among the top 10 providers of liquid alternatives products.40

The increase in capital and collateral requirements for risky assets has led banks to reduce their lending to SMEs and infrastructure. However, the withdrawal of the banks is also creating major new opportunities for alternative investment funds dedicated to investing in private debt.

Finally, the financial crisis and the new regulatory restrictions have led to a major and probably long-term downturn in the banking labour market. In spite of introducing a range of new benefits, investment banks have struggled to recruit and retain talent from elite undergraduate and graduate institutions. This at first had a positive effect on the alternatives industry, as institutional investors and private equity buyout firms found it easier to poach talent from investment banks.41, 42 In the longer term, the smaller pool of talent attracted to investment banking and the early career stage at which talent is hired away from banks may well reduce the supply of innovation flowing to the industry and require alternative investment firms to rethink their talent development models.

### 2.1.2. Investment regulations

The investment industry in the United States and Europe is also experiencing tremendous change as a result of regulatory reforms enacted following the financial crisis, notably the Foreign Account Tax Compliance Act (FATCA) in the United States; the Retail Distribution Review (RDR) in the United Kingdom; and the Undertakings for Collective Investment in Transferable Securities (UCITS V), MiFID II, EMIR, Packaged Retail Investment Products (PRIPS), and Alternative Investment Fund Managers Directive (AIFMD) in the European Union.

Politicians and regulators, seeking to protect the financial system from systemic risks and the public from fraud, are requiring investment firms to provide greater transparency into their operations, upgrade their risk and governance structures, and utilize third-party vendors to maintain client deposits and record keeping.

The sheer scale and breadth of new guidelines and regulations have forced alternative investors on both sides of the Atlantic to upgrade their institutional architecture and processes in order to comply with the new reporting and depository requirements. According to surveys, alternative investment firms believe that the most important driver of change in the industry will be the increased demand for transparency by regulators and investors.43, 44, 45 Moreover, 44% believe that they report more information to their investors now than before the crisis and 32% do so more often than before, with both totals expected to increase over the next five years, particularly given that 48% of institutional investors are still dissatisfied with the level of reporting by the industry.46, 47

The transformation from a lightly regulated niche to a large and well-regulated part of finance will permanently change the industry. Firms will need to invest in building the institutional infrastructure necessary to meet the new regulations. The cost of establishing and maintaining such a system could affect the industry in four critical ways. First, the increased costs would likely reduce returns. Second, it could serve as a barrier to entry for new firms. Third, it could advantage existing leaders and drive consolidation in the industry, as larger firms would find it easier to distribute the costs across a larger pool of assets. Finally, it could reduce innovation in the industry, likely negatively affecting returns over the long-term. This should be of particular interest to the pensions sector, which is trying to close its funding gaps by increasing allocations to alternative investments.

More positively, the greater transparency brought about by the new reporting requirements plays to a broader movement in the industry towards greater openness and the need to build trust between investing institutions and alternative investment firms. In order to be considered for large mandates or as a key potential partner, an investment firm must now meet a long list of institutional and governance requirements aimed at piercing the veil of alternative investments. Edi Truell, chairman of the London Pensions Fund Authority, reflected this investor desire for increased transparency when he noted that, “It’s no longer the
Ecosystem changes

case that LPs [such as large institutions] are happy to sit back and let their managers get on with it as long as the returns are coming in. I need to understand why the returns are good – what did they get right and what did they get wrong?”

Ultimately, the improvements in alternative investment firms’ infrastructure and reporting may help increase the depth, health and diversity of relationships between GPs and LPs, which would aid in attracting greater allocations to alternative investments.

2.2. Institutionalization

Institutional investors were critical to the emergence of the modern alternative investment industry, historically as relatively passive investors. However, a number of factors, including a growth in the scale of their investing and in the experience they have accumulated in alternative asset classes, has led some institutions to build up their in-house expertise and capabilities.

This in turn allows them to take a more active role in shaping their own investment strategies. Given the immense scale of many of these investors, their actions are also helping to shape and influence the wider alternative investing ecosystem.

We will first review drivers of institutionalization and then consider the impact they are having on the industry, including major upgrades of institutional capabilities (e.g. to support direct investing at some institutions), changes in industry core economics (e.g. improved deal terms) and greater public and regulatory scrutiny (leading to calls for greater transparency).

Most importantly, institutionalization and its drivers have made alternative investing much more important to wider society, helping to move alternative investments – sometimes seen as the preserve of wealthy individuals – into the mainstream over the last decade. A range of factors, including the scale of the profits, the size and high profile nature of many deal targets, and legal scandals, have thrust the industry into the public and political spotlight like never before. Meanwhile, the 2008 financial crisis led regulators to investigate whether alternatives were systemic in nature (and thus needed further regulatory oversight) and also led investment committees around the world to review their own experiences and that of their peers. The industry, on the whole, was able to withstand the scrutiny and emerge stronger, with institutional investors giving the ultimate vote of confidence by increasing allocations to alternatives significantly in the post-crisis years.

2.2.1. Drivers

The key drivers of institutionalization include the growing scale of institutional investment in alternatives; the growing institutional experience with alternatives as an asset class; the increasing maturity of the alternative investment firms that investing institutions could partner with; and, more recently, the way the global financial crisis has made it easier for institutions to expand internal capabilities by hiring key staff from the banking industry.

2.2.1.1. Scale

The shift towards institutional capital as the dominant source of funding for alternative investors has played perhaps the most fundamental role in the process of institutionalization. The alternative investment industry was initially funded by high net worth investors and smaller institutional investors, such as foundations and endowments. However, during the 1990s and 2000s, increased allocations to alternatives from large pension funds and financial institutions made institutional investors the largest source of capital. The trend was reinforced by the emergence of sovereign wealth funds in the 2000s as another critical source of capital for the industry. Following the financial crisis, institutional investors have increased their allocations to alternatives, further reinforcing the pre-eminent role of institutional capital. The absolute amount of capital invested in alternatives by individual institutions is now enough to enable them to pursue new investment models, which will be discussed later in this report.

2.2.1.2. Experience

Accumulated experience with various alternative asset classes has reached a tipping point for many institutional investors, allowing them to adopt a proactive stance. The adoption rate was relatively slow at first, as the diversity, complexity, and opacity of the industry made it challenging for new investors to conduct diligence on different asset classes and to select the right manager. Stocks and bonds can be analysed using 50-plus years of historical data, but institutions needed to observe how alternative investment subsectors behaved over multiple investment cycles to understand the cash flow patterns, correlations with traditional stocks and bonds, expected returns and their source, as well as the risks. Investment strategies that began at US institutions with small allocations to US-focused early stage venture capital and US private equity buyout firms gradually grew to encompass large investments in a diverse array of asset classes, at multiple stages, and in various regions around the world. Funds of funds played an important role in the growth of alternatives, as they enabled new investors to gain experience investing in new asset classes without having to develop in-house teams dedicated to the space. Today, many institutions have invested in alternative asset classes to varying degrees across two or more economic cycles and have garnered enough experience and confidence to develop in-house teams that invest directly with fund managers. The growing experience with alternatives has also led to a greater acceptance of the industry by managing boards and regulators and an increased awareness by politicians and the public.
2.2.1.3. Industry maturity

The increasing maturity of alternative investment firms enabled them to better partner with large or sophisticated institutional investors. The industry followed a traditional maturity curve, with alternative asset classes developing over time, each expanding to incorporate a greater number of the major geographies, sectors, and deal sizes. Over the course of one or more decades, the top GPs developed the investment processes that allowed institutional LPs to invest in multiple products and geographies. Across the industry, GPs have invested in developing the institutional architecture necessary to meet new regulatory requirements. Many of the largest GPs have gone even further and built internal systems capable of enabling them to meet the requirements of being a publicly listed company and to maintain bespoke relationships with many large institutional investors.

2.2.1.4. Labour market

In the wake of the global financial crisis, institutional investors suddenly had access to a large supply of previously unattainable talent. The global financial services industry shed 174,000 jobs in 2009 and another 195,000 in 2011 and by 2013 a poll found that 60% of those remaining were considering leaving finance. The long-term nature of the labour shift meant that institutions could consider expanding not only their size, but also the capabilities of their investment teams. Leading institutional investors took advantage of the situation, with Canada Pension Plan Investment Board (CPPIB), Ontario Teachers’ Pension Plan (OTPP), and Ontario Municipal Employees’ Retirement System (OMERS) all adding staff and offices overseas following the crisis. Some, such as the CPPIB and OMERS, now manage virtually all of their assets internally through independent investment organizations and can invest directly in assets both in North America and overseas, often bypassing fund managers completely. Paul Renaud, CEO of OMERS Private Equity explains the process, noting that, “Typically [peer institutions] start with a co-investment model, which is what we started with, and eventually you gravitate to majority control ownership.”

Figure 31: Overview of how an institution’s experience with direct investing might evolve

2.2.2. Impact

The impact of institutionalization and its drivers has been profound, in terms of the increasing scale of the alternative investment industry, its importance to the world’s key institutions, and changes to institutional behaviour. Key changes include significant upgrades to the institutional capabilities of GPs and LPs, changes to the core economics of the industry, and greater scrutiny by the public and regulators.

2.2.2.1. Upgrading of institutional investors

The strong performance of alternatives relative to traditional investments during and after the crisis has encouraged some institutions to significantly upgrade their internal capabilities beyond conducting diligence of external fund managers. Most notably, there has been a push by many of the largest and most sophisticated institutional investors to build internal teams capable of investing directly in deals. Doing so allows them to invest through models such as co-investing with a fund manager (alongside a fund investment) and solo direct investments (investing without the help of a fund manager at all) rather than simply investing in a fund in the traditional manner (Figure 31). Some, such as the CPPIB and OMERS, now manage virtually all of their assets internally through independent investment organizations and can invest directly in assets both in North America and overseas, often bypassing fund managers completely. Paul Renaud, CEO of OMERS Private Equity explains the process, noting that, “Typically [peer institutions] start with a co-investment model, which is what we started with, and eventually you gravitate to majority control ownership.”
Ecosystem changes

More institutions are moving down this path and bringing assets under internal management using a variety of models that we describe and compare later in this report. The US state of Oregon is currently considering passing the Investment Modernization Act, which would move management of the Oregon Public Employees Retirement System to a corporate holding company. The structure is similar to those used by Canadian pension plans and would enable the state to increase the equity and fixed income assets that it manages internally from $153 million to $17 billion, whilst also providing the management team with greater autonomy and independence in how it makes investment decisions. In doing so, it would follow the path that most LPs are already taking. Other states, such as the Teacher Retirement System of Texas (TRS) and Arbejdsmarkedets Tilkæmpspension (ATP) are even further along the maturity curve. The former is utilizing an internal group to actively invest $4 billion directly, while the latter took a different approach and created an independent private equity fund manager to invest on behalf of ATP.

Still, the complexity and cost of in-sourcing operations across a range of alternative investment classes means that most LPs will continue to apply a variety of investment models (even within the private equity buyout sphere). Such challenges cannot be underestimated and are covered in greater detail in the World Economic Forum’s report on direct investing by institutional investors (Direct Investing by Institutional Investors: Implications for Investors and Policy-Makers). The report finds that such investors must overcome constraints relating to mandate and investment beliefs, investment resources and capabilities, organizational culture, ability to manage new risks, and external market factors, with those with managing more than $50 billion best placed to do so.

2.2.2. Changes in the core economics

The growing scale of institutional investors, and their increasing allocations to alternatives, has enabled them to negotiate better terms with each successive fund raising cycle. Most alternative asset classes, such as private equity buyouts and hedge funds, can be scaled up relatively efficiently. Venture capital is an exception. For example, researchers have noted that the skills required to complete a $100 million private equity buyout deal can also be applied to a $1 billion dollar without incurring a commensurate increase in costs. The significant increase in capital flowing into alternatives has adversely affected overall returns, but the ability to scale investments has created net benefits that can be shared between GPs and LPs.

Not surprisingly, the increased allocations to alternatives have enabled institutional investors to negotiate better terms and conditions and this trend is likely to continue in the future. For example, the headline management fee of 2% has fallen to an effective rate of 1.6–1.7%. Increased scrutiny of fees paid to fund managers by the public has also spurred institutional investors to demand that transactions fees be returned to them, with the average rebate increasing from 63% for vintage year 2006 funds to 100% for 2011 vintage funds. The balance of power between institutional investors and GPs has shifted to such an extent that LPs have negotiated discounts to performance fees as well, with average hedge fund performance fees falling to an average of 14.7% since 2008, from the classic 20% of earlier years. The trend will likely continue as institutional investors further commit to the sector, with a recent State Street poll finding that pension funds will increase their allocations to private equity (60%) and hedge funds (39%).

Over and above the changes in the level of fees, the industry is experiencing an increase in the variety of structures. Some firms, such as Bain Capital, are providing investors with a menu of fee structures to choose from, with each option having a different level of management fees, carry, and hurdle rate. Other firms vary the tenure of funds, with Blackstone, CVC Capital, and Carlyle having all recently offered funds with lifespans as long as 20 years (compared to the traditional 10 year investment commitment), as well as reduced fees from the traditional 2/20 model.

The emergence of private equity infrastructure and private debt funds, which attract lower fees since they require less management, will further cement this trend. As fee structures become more variable, alternative investment firms will need to justify what they charge and how they charge it, and they will be less protected by industry conventions in terms of the fees they levy. Still, the structure of the industry is not conducive to swift changes in terms and conditions, so change will remain slow. A separate paper by the authors, The Shifting Business Model of Private Equity: Evolution, Revolution, and Trench Warfare, provides a more in-depth discussion of this topic.

2.2.2.3. Increased scrutiny

Greater institutional investment and the growth of alternative investments as an asset class have turned alternative investment into a critical investment sector, attracting scrutiny of various kinds: academic, regulatory and public. Among the results has been growing confidence in the claim that some alternatives strategies indeed offer higher returns to investors; calls for increased transparency and reporting; increased scrutiny of the fees paid to investors; and an increasing awareness at larger alternative investment firms that they cannot ignore public concerns.

2.2.2.3.1. Academic

Academia has played a significant role in moving alternatives into the world of mainstream investments. Over the past decade, researchers have completed many papers challenging and assessing virtually every aspect of the major alternative asset classes. Research papers have analysed: a) performance attributes; b) the systemic nature of alternative investments; c) sources of value; d) the impact on labour, governance, and innovation at individual companies and the broader industry sector; and e) how alternative investments impact capital markets.

The research has identified both areas where alternatives provide clear benefits to society and shortcomings of the industry. On a
positive note, a growing body of work finds that private equity buyouts outperform relative to public markets, venture capital contributes to innovation and employment, and hedge funds provide diversification benefits to portfolios. However, findings have also questioned the continued outperformance of hedge funds, noted the structural challenges of scaling for venture capital firms, and noted the negative net job growth sometimes found at private equity owned companies. For additional information on the topic, readers can refer to a sister report in the Alternative Investments 2020 series, An Introduction to Alternative Investments. \(^70\)

2.2.2.3.2. Regulators

The heightened scale and profile of the industry and the aftermath of the financial crisis has led financial regulators to scrutinize the industry like never before, as has been noted earlier in this report. Given the institutionalization of the industry, one can expect continued oversight by regulators going forward. This will be particularly true for areas such as shadow banking, where alternative investment firms have lately played an increasing role. In response, the US Federal Reserve\(^71\) and the United Kingdom’s Financial Stability Board\(^72\) have devoted considerable time to studying the area.

2.2.2.3.3. The public

The profiles of private equity buyouts and hedge funds in the mainstream press have increased substantially in recent years, drawing the attention of the public and governments around the world. The high profile of leading managers\(^73\), \(^74\), \(^75\), \(^76\) coupled with concerns that private equity buyouts are harmful to companies and jobs,\(^77\), \(^78\) that hedge funds are unsafe,\(^79\) too risky,\(^80\) and not worth the fees they charge,\(^81\), \(^82\) and that alternatives are supporting the rise of potentially risky shadow banking activities\(^83\), \(^84\), \(^85\) have all raised the profile of the industry in negative ways.

Meanwhile, investigations into securities violations led to the conviction of individuals\(^86\), \(^87\), \(^88\) hedge funds,\(^89\) and the agreement by leading private equity buyout firms to settle a collusion-related lawsuit.\(^90\)

The increased public exposure and concern over the perceived risks of alternatives led to a series of public inquiries, including the issuance of new transparency guidelines by the pre-crisis Walker Report in the United Kingdom in 2007,\(^91\) and hearings held by the US Senate in 2008 and the US House of Representatives in 2009.\(^92\)

The result of the media, political, and legal coverage has been an increase in the general knowledge about alternative investments and a greater awareness of how they impact the economy, employees, and retirees. Gradually, the critical tone often applied in recent years to private equity buyouts and hedge funds has become more nuanced. The change can be seen within the industry as well, as 84% of private equity buyout firms believe that the public perception of them is either stable or improving.\(^93\)

Importantly, the institutionalization process means that the number of stakeholders and issues that GPs must consider has expanded significantly. Christopher Ullman, managing director of Carlyle’s global communications, notes that: “The audience is huge. As well as investors you have government officials that could legislate or regulate against you, unions that can choose to work with or against you, and various advocacy groups that can have an impact on the success of your businesses…. and issues such as transparency are definitely things [investors] now consider.”\(^94\) Social issues are also on the agenda, with a recent survey finding that 67% of LPs consider environmental, social, and governance (ESG) issues before committing capital to private equity buyout firms.\(^95\)

The final decision on whether or not to invest in alternatives ultimately resides with the governing boards of LPs around the world. The accumulation of knowledge gleaned from their own investment arms, research by academics and regulators, and broader acceptance by the public, has led most of these boards to approve the steady expansion of alternatives. This has increased attention and demands by the public, particularly regarding the introduction of ESG policies at alternative investment firms. A recent survey of private equity buyout firms found that 71% of those in North America and 36% in Europe had implemented ESG guidelines. Investors, the public, and regulators were quoted as the key drivers behind the introduction of those policies.\(^96\)

2.3. Retailization

The rise of retail investors, and non-high net worth individuals in particular, as a key source of capital is the third industry-level trend that will shape the alternative investment landscape over the coming decade. The trend is not as advanced as that of institutionalization. However, social factors such as the rising number of pensioners and their need to boost returns from pension savings have already substantially increased retail investor demand for alternative assets. Meanwhile, regulatory changes in the financial services and investment sector have made the pursuit of such capital more attractive than in the past. Yet the current easing of restrictions may bring additional scrutiny later. Retailization is likely to lead to large inflows of capital into alternative investments over the next decade, significantly affecting the competitive landscape.

2.3.1. Drivers

Demographic shifts, structural changes, and the aftermath of two financial downturns are driving the growth of retailization. Across the developed world, the baby boom generation has begun to retire, placing high demands on pension plans. Unfortunately, the vast majority of these plans are underfunded. Liabilities are higher than expected, due to retirees living longer than anticipated, and healthcare costs having increased faster than projected. Assets are lower than anticipated as a consequence of the financial crisis and dotcom crash depressing returns during the last two decades. In theory, governments should have made contributions sufficient to restore the balance between liabilities and assets, but that has not been the case. Moreover, private companies have
sought to reduce their exposure to pension plans, as the accounting treatment of the funding status of such plans results in a notable increase in the volatility and predictability of quarterly earnings.

In response, public pension plans have sought to reduce benefits and require increased contributions from participants. Corporates are gradually phasing out defined benefit (DB) plans, replacing them with defined contribution (DC) plans. Carl Hess, global head of investments at Towers Watson, notes that “It’s hard to find an economy where there are new DB plans being created…. If we look at Asia, for instance, with the exception of Japan, most have avoided DB. … It will be a while before DC reaches the maturity level of DB, but the pendulum has definitely tilted in that direction.”

The shift from DB to DC retirement plans is a fundamental transformation. By definition, DC plans shift the responsibility for future liabilities from the employer to the employee, while also moving the responsibility for investing and growing the assets to the employee. The fiduciary responsibility of the employer, meanwhile, is dramatically downsized from selecting and safeguarding assets that will meet the expected commitment to simply providing access to a range of funds for employees to invest in and manage on their own. Figure 32 provides an overview of the key differences between each type of plan.

2.3.2. Impact

The global shift from DB to DC retirement plans has profound implications for individuals seeking to retire. Two trends in particular stand out.

First, retail investors are afforded fewer investment options as DC plan participants than those available (via a pension fund manager) under DB plans and this may result in lower returns. At present, in recognition that few individuals are capable of analysing complex investment products or strategies, regulators in most countries seek to protect retail investors by limiting the range of products they can invest in. The result is that few retail investors are permitted to invest in complex assets, such as alternative investments, that often provide higher returns over the long-term. For example, DB pension funds typically allocate 10% to private equity buyouts alone and 25% of their portfolio to alternatives overall, compared to just 2-3% to alternatives for DC plans.

Second, the inferior bargaining power of DC plan participants mean they pay much higher fees to access investments, materially driving down returns. The consulting firm BCG notes that the net revenue on third-party retail funds is 50 bps, twice the amount for third-party institutionally managed capital. A recent filing by Carlyle with the SEC notes that retail fund investors can expect

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**Figure 32: Overview of difference between defined contribution and defined benefit plans**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Defined contribution plan</th>
<th>Defined benefit plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund administrator</td>
<td>A private or government asset manager acts as custodian of assets and executor of transactions</td>
<td>The pension fund acts as custodian of assets and executor of transactions</td>
</tr>
<tr>
<td>Investment manager</td>
<td>The individual determines how much to save in order to meet their objectives and what to invest in</td>
<td>The pension fund determines how much to save in order to meet the plan objectives and what to invest in</td>
</tr>
<tr>
<td>Investment options</td>
<td>The range of options is plan dependent, though non-high net worth individuals are generally not permitted to invest in alternative investments (private equity, hedge funds, venture capital, etc.). Most plans have a focus on liquid assets (stocks, bonds).</td>
<td>Pension funds can invest in any asset, though some may prohibit investment in certain types of investments (tobacco, defense, etc.)</td>
</tr>
<tr>
<td>Contributions</td>
<td>Primarily the employee, though an employer may contribute as well</td>
<td>Primarily the employer, though the employee may contribute as well</td>
</tr>
<tr>
<td>Payouts</td>
<td>Payouts are determined by the performance of the investments selected by the individual</td>
<td>Payouts are defined by a contract between the employee and the pension fund (cash payouts often as a percentage of final salary)</td>
</tr>
<tr>
<td>Investment risk</td>
<td>The individual bears the risk of meeting their target returns to provide for the length of their retirement</td>
<td>The pension fund bears the risk associated with meeting the specified returns for plan participants Healthcare insurance is often included</td>
</tr>
<tr>
<td>Additional benefits</td>
<td>n/a</td>
<td>Healthcare insurance is often included</td>
</tr>
</tbody>
</table>

Source: World Economic Forum Investors Industries
to pay 3.68% annually in fees to access the same investment opportunity purchased by institutional investors for 1.5% per annum.\textsuperscript{101} With such a huge difference in costs, unsurprisingly, a recent survey found that 68% of professional and institutional investors prefer investing in unquoted private equity buyout funds over quoted funds, with only 3% preferring the quoted version of a fund.\textsuperscript{102} The effect on returns is significant, with Towers Watson discovering that large DB plans outperformed large DC plans by 1% per annum over a 17-year period (7.93% versus 6.94%) and small DC plans by 1.75% per annum over the same period (7.93% versus 6.18%).\textsuperscript{103} The difference may seem small, but the impact over a lifetime of saving is tremendous. For example, $100,000 invested at 6.18% per annum will grow to become $604,000 in 30 years’ time, but the same amount invested at 7.93% per annum will yield 63% more ($987,000) in retirement.

DB retirement plans, in principle, pin the legal liability for paying the promised pension on the corporation or government, and this drives an intrinsic desire to maximize returns and minimize costs. Without the legal liability, these same institutions are only incentivized to minimize internal costs to the extent that this allows them to provide competitive options in the marketplace and meet their legal requirements surrounding the maintenance of a plan. The typical outcome is that a corporation outsources most investment management to an external provider. Without an employer incentivized to negotiate hard on fees, employees have limited power to demand lower cost retirement plans. Retail investors are inevitably left paying higher rates for any given asset class.

Not surprisingly, the Office of Fair Trading in the United Kingdom finds that many DC plans have employers who “do not have the necessary understanding of workplace pensions to make good judgements on the value for money of their pension schemes.”\textsuperscript{104} The result is that consumers must trust the consultants and financial advisors hired by the employer who may make “decisions on the basis of maximising their own income streams.”\textsuperscript{105}

The transition from DB to DC plans will dramatically change the distribution of capital for the industry in the long run. Retirement plan assets in the US alone amounted to some $27.4 trillion in 2014 (DB plans accounted for $7.7 trillion in assets and DC, IRA and other retirement assets amounted to $19.7 trillion), with DC plans expected to continue to grow at a much faster rate than DB plans.\textsuperscript{106} If retail investors were able to invest in the same manner as pension funds, they would allocate some $3.25 trillion of the $13.2 trillion in DC plan assets to alternatives and real estate (assuming an allocation rate of 24.8%) – an amount similar to the total size of the global hedge fund industry today.\textsuperscript{107} Critically, the alternatives industry currently relies heavily on DB pension funds, with 40-44% of hedge fund and private equity buyout assets coming from pensions.\textsuperscript{108, 109} Finding a way to access retail capital is thus not only critical to the future growth of the industry, but also to sustaining the current levels of funding. The retailization trend is still in its early stages, but it is important for alternative investors to proactively consider.
The evolving alternative investment landscape

The forces likely to shape the size and character of the alternative investment industry in the future include fundamental macro trends, financial services regulation and the two key industry dynamics of institutionalism and retailization.

While the future looks bright for the alternative investments industry, the next decade will also be a time of major change.

The industry will reach a whole new scale in terms of assets under management, develop new business models and negotiate new relationships.
We will now take a closer look at how that future affects existing GPs and LPs in three ways:

— **New business models for alternative investment firms:** Institutionalization and retailization are altering the competitive landscape. We forecast the business models that successful GPs will use to thrive in the coming years.

— **New relationship models for GPs and LPs:** Institutionalization is driving the emergence of a wide range of relationship models, beyond simply investing in a fund. We examine how this is transforming part of the industry.

— **Rising impact of retailization:** We explore the implications of the retailization trend for all of the key stakeholders in the alternative investment ecosystem.

While the future looks bright for the alternative investments industry, the next decade will also be a time of major change. The industry will reach a whole new scale in terms of assets under management, develop new business models (e.g. retail alternative investment managers) and negotiate new relationships (e.g. joint ventures between GPs/LPs and LPs/LPs). It will also need to forge an increasingly complex relationship with regulators wary about financial product innovation and retail sales practices in the financial industry, as well as raise the level of trust and transparency.

### 3.1. New business models for alternative investment firms

The growing sophistication of institutional investors and the increasing importance of retail investors is shifting the balance of power between LPs and GPs. The result is a reshaping of the competitive landscape and the business models that will likely prove successful in the future.

Ultimately, the change in the nature of the capital base will drive both industry consolidation and an increasingly marked bifurcation of the industry into supermarkets and boutiques. In this sense, the alternative investment landscape is about to undergo the same maturation process that investment banking and asset management have already been through.

The new landscape will align along two axes. The first is by scale and specialization of the GP. The second defines the size and sophistication of the LP providing the capital to be invested.

— The largest GPs will continue to expand their organizational and operational capabilities in order to invest in new regions and asset classes and to better serve a broader base of LPs

— At either end of the scale/specialization axis, GPs will either leverage economies of scale by offering a wide range of products, or seek to leverage their expertise within a particular niche

GPs that fail to adapt to the new competitive landscape could find it increasingly difficult to raise capital. Meanwhile, decisions about the type of LP to raise capital from will determine the strategic options available to the GP.

For example, in order to access retail investors, GPs must contend with an array of regulatory measures aimed at protecting consumers, with the laws often differing from one jurisdiction to another. Almost by definition, the costs of serving a retail base are much higher than those associated with institutional investors.

There are other differences that will help separate the business models of retail-focused GPs from those of their institution-focused peers. The amount of capital that individual retail investors can invest in any given fund is relatively small, which means that investment firms will be in a strong position to dictate how the economic benefits will be split. However, the small scale also means that firms will find it much costlier to serve retail investors for any given amount of capital raised. Together, these two structural differences mean that retail investors can expect to pay higher management fees than institutional investors.

Raising retail capital will mean building large distribution chains and investing in marketing and branding to help turn the firm into a trustworthy household name. In this regard, retail-focused GPs will be following the path already taken by asset managers such as Fidelity and Vanguard.

We also expect some firms to follow a hybrid strategy. Some large GPs, on the back of a strong reputation and returns track record, may decide to build a greater presence in terms of retail distribution. The inverse may be true for traditional asset managers, who may decide to offer alternative investment products to both retail and institutional investors. They would then serve as both a retail alternative investment manager and compete for the space historically occupied by funds of funds.

We segment the future industry landscape into five core models: a) global alternative asset managers; b) specialists (regional or sector); c) retail alternative investment managers; d) start-up firms; and e) funds of funds (Figure 33).
3.1.1. Global alternative asset managers

Global alternative asset managers invest directly in a range of asset classes on behalf of both institutional and retail investors. They create the complex (and likely costly) internal infrastructure to serve institutional and retail investors and to meet the consequent regulatory requirements.

In order to address the needs of institutional investors, global alternative asset managers will typically emphasize their ability to create alpha, e.g. through developing in-house operating teams. These investments may also benefit retail investors, though the firm will likely try to capture as much of the margin as possible for itself in this segment, e.g. through distribution-related fees.

The type of infrastructure that global alternative asset managers build also distinguishes them from traditional asset managers. Only the former have the capability to source and invest directly in private deals and to directly add value to assets post-acquisition. The distinction is particularly strong in private equity related asset classes or distressed situations.

The focus on alpha generation may be diluted when such firms go public, as doing so notably alters the incentive framework. The unpredictability of profits generated from exits, relative to stable fee related income, increases the volatility of quarterly earnings for GPs and depresses the value of share prices relative to traditional asset managers. Blackstone’s Stephen Schwarzman recently highlighted this fact when he noted that “traditional asset managers are on average still trading at a 50 per cent premium to us.”

Management of publicly listed firms face pressures to reduce such volatility by increasing the share of earnings attributed to management fees, which often translates into a focus on increasing total assets under management. This can jeopardize alpha generation, as assets under management and value add returns (returns in excess of the respective benchmark) have historically been inversely correlated for asset classes such as private equity buyouts (Figure 34). For this reason, global alternative asset managers often strive to increase the number of product lines they offer, helping them to avoid crowded trades and strategies.
The evolving alternative investment landscape

The cost of being a global alternative asset manager will likely rise, as back-office costs are expected to increase by 35-45% over the next decade. In addition, recent research finds a decrease in persistence – past performance is less predictive of future performance. The implication is that fewer firms will be able to produce three or more consecutive high performing funds, which has historically been the hurdle to attract significant amounts of institutional capital.

Existing players have taken note and position themselves to effectively serve both institutional and retail LPs. For example, KKR recently introduced the Alternative High Yield Fund and the Alternative Corporate Opportunities Fund, both structured so that individual investors can invest in them, with Michael Gaviser, a managing director at KKR, noting that, “We definitely would like to be part of [US] 401(k) platforms…We think about it every day because there’s so much demand.” Carlyle has followed suit, pairing with investment fund Central Park Group to create the CPG Carlyle Private Equity Fund, which targets individual investors.

Institutional investors expect such GPs to have lengthy track records across a wide array of products, and often demand customized solutions tailored to the particular regulatory environment of the LP. Institutional LPs continue to allocate a disproportionate amount to the largest and most experienced GPs in each asset class. The 25 largest private equity buyout firms manage 41% of all capital, whilst the top 25 hedge funds, in an industry with more than 8,000 funds, control some 29% of all assets (Figure 35).
3.1.2. Specialists (regional or sector)

Specialists typically focus on generating alpha in a related set of regions or sectors and usually within a single asset class. Prominent examples include Silver Lake Partners and Providence Equity Partners (sector specialists) and The Abraaj Group and Actis (emerging market specialists). The scale and scope of these firms ranges from a deliberate focus on a single sector or region to an expanded focus on several closely related sectors or plays across regions (e.g., growth markets).

The structure of the specialist model means that institutional investors are the natural source of capital. Specialists focus almost exclusively on maximizing returns, whilst minimizing non-investment related expenses. Most do not seek to expand beyond their core expertise by offering LPs a range of products, as this would undermine their primary value proposition. Unlike global alternative asset managers, they do not typically invest significantly in developing the institutional infrastructure necessary to be publicly listed, to provide investment opportunities to retail investors, or to engage in brand building outside the investment sphere.

The growing scale and sophistication of LPs is increasing the pressure on specialist GPs. The result is a steady consolidation of the segment, driven by institutional investors concentrating larger allocations with firms that perform. While this trend puts pressure on incumbents, it also reduces the amount of competition from new entrants (which often compete in the specialist model) – LPs set high minimum investment levels and like to invest with firms that have extensive track records. A recent survey of institutional investors found that only 18% were interested in investing with first-time funds over the coming year.

3.1.3. Retail alternative investment managers

Unlike the other strategies, this model is still in the early stages of development. Structurally, it is similar to global alternative asset managers, in that it seeks to leverage economies of scale by offering alternative products across multiple geographies and asset classes.

However, this model reverses the value chain. Retail alternative investment managers are first and foremost about providing convenient access to alternatives for a large pool of anonymous retail investors – with the underlying deals and investment teams being treated as fungible. This is in contrast to global alternative asset managers, who focus first and foremost on the underlying deals and investment teams as a source of competitive advantage – creating a closer alignment with institutional LPs that have the resource for detailed investment team due diligence.

From this perspective, the model of retail alternative investment managers is close to the focus on access that funds of funds have historically offered – and it is not inconceivable that the largest funds of funds could capture this space. It is also a business model that might be appropriate for some banks’ asset management divisions, leveraging the strong infrastructure and brand they already have.

The shift in emphasis leads to a business model that is both differentiated and sustainable, not least because a dense thicket of consumer and financial regulations serves as a barrier to entry. Tim Hames, director general of the British Venture Capital and Private Equity Association (BVCA), has spoken of, “a fear that AIFMD will come in and be followed by increasing levels of regulation comprising a gruesome collection of acronyms… We are in danger of regulating ourselves out of being attractive to investors, particularly at a time when illiquidity is an issue.”

As this implies, successful retail alternative investment managers will need to develop the institutional capacity to continuously craft products in compliance with changing legal statutes and guidelines, so they can sell products to retail investors around the world. The nature of the underlying investment model will play a key role, as the regulatory requirements surrounding issues such as liquidity and transparency may have a different effect on, for example, hedge fund, private equity, and credit strategies.

Retail alternative investment managers competing at a global scale will have to invest heavily in the marketing services required to elevate their brand equity. Howard Groedel, partner at Ulmer & Berne, notes that this “will essentially change the competitive landscape.” They must also develop or deploy large distribution networks to deliver the products and incur substantial marketing and brokerage expenses, though these and branding costs will both serve as a protective barrier against new entrants.

Established retail alternative investment managers may be able to pass on a large share of their administrative costs to investors who lack the scale for effective negotiation – as long as overall returns do not fall below those of traditional investments as a consequence. Ultimately, the reduced return profile may not undermine the model, as leading firms utilizing this model may very likely be traditional asset managers, whether stand-alone or as divisions of a bank. In such a scenario, alternative products are not the only product offered, but merely one of a broader package of investments offered to a client. In contrast to most alternative investment firms, traditional asset managers are already well positioned to serve as retail alternative investment managers, given their extensive distribution networks, experience in marketing similar products, and expertise in managing regulatory complexity across geographies and client types.

Moreover, as was noted earlier in the discussion of the retailization trend, traditional asset managers are aggressively seeking to expand into the alternatives space, with BlackRock, Affiliated Managers, Invesco, Franklin Resources, and AllianceBernstein all offering retail alternative products.
3.1.4. Start-up firms

New firms with a well-defined value proposition will continue to enter the alternative investment ecosystem, though doing so will be increasingly difficult. Firms that focus on investing in illiquid assets, which require capital to be locked up for many years, will find it particularly difficult to raise funds.

Most will not have extensive track records and will need to seek to raise capital directly from high net worth individuals or indirectly through a fund of funds manager or a wealth or asset manager (either as an investment in the fund or as a regulatory-driven product class such as UCITS or a mutual fund).

Following this path will allow funds to by-pass the challenge of raising money from large institutions, which as noted earlier, are not inclined to support new firms. The extent of this challenge can be seen in the fact that just nine private equity buyout firms in Europe attracted 71% of all funds raised and nearly 50% of all private equity funds raised in Europe during the first half of 2013. Bonham Carter, CEO of Jupiter Asset Management, recently noted that, “A few years ago, people all wanted to set up their own boutiques or hedge funds, but the barriers to entry to that are higher now. It’s much harder.”

Most start-up firms can be expected to utilize this model, with spin-out funds managed by teams with long track records being a notable exception. However, firms that are able to consistently outperform will have a natural incentive to scale up their funds by pursuing institutional investors, thus shifting out of the start-up model and into the specialist category. Those that are unable to distinguish themselves through their performance will either struggle to raise new funds from sophisticated investors or may seek to partner with retail alternative investment managers in order to obtain access to less sophisticated retail investors.

3.1.5. Funds of funds

Funds of funds have historically offered institutions and high-net worth retail investors an easy way to access alternative investments. However, the segment has come under intense pressure in recent years, with the number of firms and the assets under management falling in recent years for asset classes such as private equity buyouts and hedge funds.

The key reason is the growing familiarity of institutional LPs with alternative investing: they now have the ability to invest directly with their preferred GPs and prefer doing so without paying another layer in management costs. The impact can be readily seen in the hedge fund space, which has seen capital allocated to hedge funds of funds fall from 45% of all hedge fund capital in 2006 to just 25% in 2013. The future is no brighter, as a recent Russell survey found that only 17% of investors plan on using hedge funds of funds over the next three years and when they do invest, they expect to pay significantly lower fees.

Funds of funds of all types now need scale to survive. Volkert Doeksen, CEO of AlpInvest, a leading private equity fund of funds, highlights: “If you are sub €1 billion and you are trying to collect new clients and raise new funds, then you will find funds of funds a challenging model…[for] the larger players, though, there is plenty of scope to create interesting solutions with LPs.”

Funds of funds remain dynamic and are evolving with the changing landscape. One industry trend that bodes well for their future is the falling correlation between past and future performance by GPs. LPs will no longer be able to rely primarily on past performance, but will need to conduct extensive diligence on individual managers, which is a skill that funds of funds specialize in.

The retailization trend might support future growth for funds of funds, replacing some of the capital lost due to the institutionalization of LPs. Morningstar notes that the growing importance of the retail investor means, “hedge fund [of funds] managers are getting access to a whole new pool of capital.” Legal restrictions in the US currently prevent funds of funds from charging performance fees, but Morningstar projects that they will compensate for this by raising management fees to two or three percent.

However, the tide of retail capital is also attracting traditional asset managers and encouraging the emergence of retail alternative investment managers. These competitors will put pressure on the funds of funds segment which will find it difficult to compete with the range of products, vast distribution network, and household name that traditional asset managers can offer retail investors.

Traditional financial institutions have partnered with fund of funds managers to introduce a range of new products with similar attributes to funds of funds. One such example is Fidelity partnering with fund of hedge funds manager Arden Asset Management. Morningstar reports that “five of the six largest alternative mutual launches last year were in the multi-alternative category.” Institutions such as Morgan Stanley, Blackstone, and Russell Investments have all recently launched new products that could remove the need for funds of funds vehicles.

Under pressure from both ends of the spectrum, many funds of funds will struggle to maintain their economics. They are responding with a number of different strategies. Some are seeking to become divisions of other asset managers to expand their alternative product portfolio. The acquisition of AlpInvest by Carlyle, the global alternative asset manager, in 2013 and the purchase of a majority stake in Euro Private Equity by Natixis, a traditional asset manager, in 2013, are two examples of this strategy.

Others are seeking to maintain their value proposition by specializing in regions or assets that might be too costly to access otherwise. For instance, AlpInvest CEO Volkert Doeksen says that: “In Europe… the market has remained fragmented and there are many niches. It is difficult to cover all these without having a significant, focused team. This is where we see funds of funds continuing to play a role in the future.” The 2013 merger of the Partners Group and the Italy based Perennius Capital Partners is one such example.
Some firms have responded by introducing innovative new business models. One such example is the seeding of new hedge funds by a funds of funds firm or division, which allows them to offer investors unique access to new managers. Examples of this include: Blackstone’s Hedge Fund Solutions division; the partnership between Deutsche Bank and Financial Risk Management, a fund of funds; and the partnership between IMQubator and Synergy Fund Management, an Asia focused hedge fund of funds.149

Another new model is funds of funds as a dynamic allocator of capital, with SkyBridge providing a leading example of a firm that has grown rapidly whilst using this model. In contrast to traditional firms, which offer investors the ability to invest in a fixed life fund, this model dynamically reallocates capital in a portfolio according to a proprietary algorithm.

The hard fact is that allocations to funds of funds fund have fallen significantly during the last decade. David Jeffrey, head of Europe for $50 billion fund investor StepStone Global believes that the 250 or so global funds of funds in the market today could fall in number to as few as 20 or 25, with a few niche players to support the industry.150 The future of the funds of funds industry may not turn out to be that dire, but a reordering of the segment seems certain.

3.2. New relationship models for asset owners and managers

Over the years, most LPs have allocated capital to alternatives by investing in an alternative investment fund, or by investing even less directly through a fund of funds. However, the macro and industry trends we have described are driving very large institutional LPs and larger GPs to seek new relationship structures that move far beyond this norm.

Entirely new relationship models are emerging and becoming relatively common, particularly within the private equity buyout and hedge fund segments. Figure 36 shows how the process of institutionalization has progressively led institutional investors to broaden the range of relationship models they use to invest in alternatives. Figure 37 provides a comparative overview of the different investment structures, whilst Figure 38 shows who is responsible for each step in the investment process. At the extreme, the change in the relationship allows large investors to disintermediate traditional GPs entirely by having their own internal teams invest directly in selected types of assets.

**Figure 36: The type investment models used by institutional investors has expanded over time**

<table>
<thead>
<tr>
<th>Investment Model</th>
<th>1980s-1990s</th>
<th>2000s</th>
<th>2010s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outsource alternative investment function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invest with a funds of funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner with other LPs to invest in a fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional fund structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separately managed accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint-venture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct invest</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degree of experience with alternatives: ○ First used – ○ Inexperienced – □ Experienced – △ Sophisticated

Source: World Economic Forum Investors Industries

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Figure 37: Investment relationship models and their key features

<table>
<thead>
<tr>
<th>Ownership Structure</th>
<th>Alternative investments</th>
<th>Traditional investments</th>
<th>Mutual funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional fund model</td>
<td>Separately managed accounts</td>
<td>Co-investments</td>
</tr>
<tr>
<td>LP owns shares in a fund</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LP directly owns assets</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LP owns shares of an investment</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LP co-owns assets</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LP directly owns assets</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LP co-owns assets</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>LP directly owns assets</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Investment Manager</td>
<td>GP manages the funds</td>
<td>GP manages the funds</td>
<td>GP manages the funds</td>
</tr>
<tr>
<td>Operational Manager</td>
<td>GP operates the assets</td>
<td>GP operates the assets</td>
<td>GP operates the assets</td>
</tr>
<tr>
<td>Management Fees</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Performance Fees</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Ancillary Fees</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tenure</td>
<td>10-15 years</td>
<td>Indefinite</td>
<td>10-15 years</td>
</tr>
</tbody>
</table>

Source: World Economic Forum Investors Industries

Figure 38: Investment process for alternative investments relationships

<table>
<thead>
<tr>
<th>Research</th>
<th>Selection sourcing &amp; due diligence</th>
<th>Investment decision</th>
<th>Financing</th>
<th>Ongoing asset management</th>
<th>Asset sale or exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo investment</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal</td>
</tr>
<tr>
<td>Partnerships*</td>
<td>Internal or delegated</td>
<td>Internal or delegated</td>
<td>Internal or shared</td>
<td>Internal or shared</td>
<td>Internal</td>
</tr>
<tr>
<td>Co-investment*</td>
<td>Delegated or internal</td>
<td>Delegated</td>
<td>Internal</td>
<td>Internal or shared</td>
<td>Delegated or internal</td>
</tr>
<tr>
<td>Direct investing</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal</td>
</tr>
<tr>
<td>Joint-venture</td>
<td>Internal or delegated</td>
<td>Internal or delegated</td>
<td>Internal or shared</td>
<td>Internal or shared</td>
<td>Internal</td>
</tr>
<tr>
<td>Separately Managed Accounts</td>
<td>Delegated</td>
<td>Delegated</td>
<td>Delegated</td>
<td>Delegated</td>
<td>Delegated</td>
</tr>
<tr>
<td>Traditional delegated model</td>
<td>Delegated</td>
<td>Delegated</td>
<td>Delegated</td>
<td>Delegated</td>
<td>Delegated</td>
</tr>
</tbody>
</table>

*Note: Varying levels of asset owner involvement/discretion observed in these models

Source: Oliver Wyman, World Economic Forum Investors Industries
The change may not affect smaller investors pursuing a traditional model of fund investment, but it is already revolutionizing the approaches taken by many of the most sophisticated LPs. The push to rethink the traditional “2/20” model, rather than merely reduce management fees, is driven by the desire to generate higher returns and the increasing capabilities of LPs as a result of institutionalization. Faced with demographic and fiscal pressures on one side and caught in a low yield environment, institutional investors are under intense pressure to reduce costs and increase returns.

This has had broad ramifications. A recent survey found that 62% of LPs have increased the length of their due diligence on GPs and that they are reducing the number of relationships they maintain. Some have even gone so far as to cease investing with an entire asset class, with CalPERS announcing that they would no longer invest in hedge funds. Much of the concern stems from the belief that fees are too high. Research on private equity buyouts finds that two thirds of profits come in the form of fixed fees. It also suggests that alternative investments can generate risk-adjusted returns in excess of public benchmarks, but they accrue only to investors in top funds. Thus, it is no surprise that some institutions are ending unproductive relationships and finding new ways to deepen relationships with their top-performing investment firms, while simultaneously reducing the share of gross returns paid in the form of fixed fees. Margot Wirth, director of private equity at the California State Teachers Retirement System (CalSTRS), says, “Post financial crisis, leverage has clearly swung in the direction of the LPs [institutional investors]” and 56% of these investors believe that the use of alternative fund structures will increase over the next three years.

The trend of institutionalization has left larger institutions in a better position than ever before to build a new set of relationship models. The result has been strong LP interest in direct investing, co-investment, joint ventures, and separately managed account (SMA) models. However, many LPs will continue to face internal constraints on their ability to develop in-house teams, with limits on compensation, poor governance, political considerations, risk aversion, and institutional culture, limiting their ability to move beyond the traditional fund structure.

Change may come slowly for institutional investors that are particularly responsive to public opinion, such as pension funds in the US and Europe. Investing directly is difficult for many LPs because of their mandates and their governance structures. For example, it can be impossible for an LP to compete with a GP in terms of the level of incentives they offer to internal investment managers. Dutch pension funds Stichting Pensioenfonds ABP (ABP) and Stichting Pensioenfonds Zorg en Welzijn (PFZW - formerly PGGM) were forced to sell AlpInvest to Carlyle in 2010 due to criticism over compensation structures and Harvard Management Company’s star portfolio manager departed in 2005 amidst similar outrages. Josh Lerner, professor of investment banking at Harvard Business School, notes that, “Many LPs [institutional investors] have tried to replicate the payment structure seen among independent managers and it has proven very controversial and almost impossible to do.”

In response, investors such as Jagdeep Bachher, CIO of the University of California (UC) Board of Regents, have argued that institutional investors will need to craft unique strategies to attract and retain high quality talent. In spite of the long-term nature and investment horizon of pension funds and sovereign wealth funds, such government backed funds may be subject to headline risk and other short-term oriented political pressure that can affect investment policy. The decision by the China Investment Corporation, a sovereign wealth fund backed by China, to become a more “passive” investor was a direct response to intense criticism by the public with regard to the short-term losses that it suffered when it invested $3 billion in the Blackstone Group IPO. The political pressure generated by headline risk is felt by public institutional investors across the world and can influence the countries, sectors, companies, and risk profiles that they invest in. Investing in relatively illiquid investments or those which are not easily or regularly marked to market can serve to mitigate some of the risk, particularly with regard to short-term performance volatility, but it cannot eliminate it entirely.
Figure 39: Investor scale and direct investing approach

<table>
<thead>
<tr>
<th>Investor segment</th>
<th>AuM</th>
<th>Typical approach to direct investing</th>
</tr>
</thead>
</table>
| "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)  
• Typically use intermediaries  
• Lack scale to cover all asset classes internally, so gain advice from external experts on most investment decisions |
| Medium-sized investors   | ~$1 to $5BN  |                                                                                                                                                                    |

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

3.2.1. Direct investing

One model being pursued by some institutional investors is investing directly in deals. Several variables determine which institutions are likely to pursue this route, as well as which types of asset classes and geographies they are likely to bring in-house. This report will only provide an overview of the trend, but readers interested in an extensive analysis of the topic can refer to the recently released report by World Economic Forum on the subject, Direct Investing by Institutional Investors: Implications for Investors and Policy-Makers.

The nature of the LP and its investment needs and constraints are key determinants of whether it is in a good position to pursue direct investing. Since one of the primary goals is to reduce costs, and fixed costs in particular, having the scale necessary to deploy large amounts of capital in a given asset class is critical. Maintaining an internal investment team is quite expensive, which means that direct investing is usually only an option for the very largest institutional investors, as can be seen in Figure 39. However, smaller institutions that maintain high allocations to alternatives, such as endowments and foundations, may be able to support internal investment teams as well.

LPs must also consider their ability to attract and retain an in-house team capable of investing in alternative investment classes. The degree of complexity associated with analysing and possibly managing and operating different forms of alternative investments varies wildly by asset class and region (Figure 40). The ability to source, analyse, acquire, manage, and operate private equity assets, including the acquisition of whole companies, is incredibly demanding at each stage of the process and requires a large team of professional investors.
It took the Canada Pension Plan Investment Board (CPPIB) nearly a decade to build an 850-person team to manage 85% of its $170 billion assets in-house. Out of that team, 45 members are focused entirely on direct investing and spread across offices in Toronto, Hong Kong, and London.

Given the large investment required, not all institutional investors will find direct investing across the board the right fit. Many prefer to focus on developing the capacity to invest in tangible assets, such as real estate or infrastructure, which are relatively less complex to analyse, acquire, or maintain.

LPs also need to take geographic issues into consideration when deciding where they invest directly. Investing in geographies beyond the institution’s home region often requires specialized expertise and knowledge of the local economic, political, and business environment and may require a regionally based investment team – a considerable barrier to entry.

The final major issue that an institution must consider is the ecosystem in which it resides. The issues that constrain institutions from building in-house capabilities and restructuring relationships – such as compensation structures – are especially acute in the case of direct investing. Chris Pierre Fortier, vice president of private equity funds at Caisse de depot et placement du Quebec, highlights this challenge:

“We have been able to attract talent, award decent reimbursement and hold on to them. The other North American LPs [investors] have not always been able to achieve this as they are too close to the treasury of the state, and are often seen as more of a civil servant…. At the Caisse and a few of our Canadian peers, we are recognized as investment professionals and we are treated that way. Some funds have struggled to build a team and hold on to their top guys.”

For some firms, direct investing introduces a special set of political, legal, and tax considerations that have the potential to influence the performance of the overall fund. A pension fund may need to adhere to politically motivated constraints, such as not investing in certain sectors (i.e., military arms or tobacco related investments) or countries (i.e., those that have human rights concerns). LPs may also need to incorporate certain values into the process, such as requiring investments to adhere to environmental sustainability guidelines. Conversely, many nations may prohibit certain types of institutions, such as their sovereign wealth funds, from investing directly in certain assets.

An institutional investor will also need to consider the legal and tax implications when structuring a deal, as they can materially affect the value proposition of an investment. Beyond the appropriateness or legal issues, LPs must also be aware of unconscious biases with regard to investing locally or being beholden to local interests, since any doubt may lead to significant media and social pressures. Historically, LPs have exhibited an in-state bias when allocating to GPs and research has exhibited notably lower returns. However, recent research involving a select set of large institutional investors engaged in direct investing has shown enhanced returns through possessing local knowledge. The key differentiator between these circumstances is the proximity of the LP to the final investment. With direct investing, an LP may be able to generate unique insight on a specific investment, which is not the case when investing through a GP.

Overall, the direct investing model will be adopted by a growing share of institutional investors, but its use is likely to be quite severely restricted and tempered by the limitations noted above.
3.2.2. Co-investing

The co-investment model provides an avenue for institutions that would like to be more actively involved in deals, but do not want to fully insource investing in a particular asset class. Co-investing augments the traditional “2/20” relationship, in that it allows LPs to selectively deploy equity directly alongside GPs that it has relationships with.

The model offers two advantages relative to the traditional and direct investing models. First, co-investing is an efficient way to reduce the average cost of investing with any given GP, as the LP is not typically charged management or performance fees on co-investments. The co-investment right serves as an option, whose full value is only captured when an LP elects to exercise it. The option value is greatest for LPs that have the capability to conduct due diligence on co-investment opportunities and respond to a proposed deal in a reasonable period of time.

Clearly, the situation is not ideal for GPs, as they lose the potential income associated with the co-investment. However, the shifting balance of power over time — towards institutional investors — means that GPs are providing the option in order to maintain their access to capital and remain competitive. David Rubinstein, co-founder of the Carlyle Group, recently noted that:

“Today, what investors want is to co-invest. They want to go into a fund, but co-invest additional capital — no fee, no carry — and since so many large investors have that interest, they are now going to GPs (general partners) like us and saying, ‘If you have a big deal, don’t call up one of your brethren in the private equity world. Call us up.’”

David Rubinstein,
Co-founder, Carlyle Group

Jane Rowe, senior vice president of Ontario Teachers’ Pension Plan, echoes this, commenting that “For [GPs] to be in our sweet spot, we have to feel comfortable with the governance they have in place and whether they will be able to create co-investment opportunities for us.” That said, Dennis McCrary, head of co-investments at Pantheon, highlights a benefit to co-investing from the private equity firm’s point of view: “The additional capacity provided by co-investment capital enables the GP to execute larger transactions without having to raise a fund that would be too large for their usual transactions.” Or indeed, approach a rival GP. The second benefit for a large institutional investor is the flexibility to deploy larger sums of equity with its favourite GPs, and in preferred sectors or geographies, on an opportunistic basis. This helps LPs to fine tune their overall portfolio allocation by over/underweighting exposure to certain geographies, asset classes, or sectors.

There are some restrictions on who can conduct co-investments. In order to engage in co-investing, the institution must develop an internal team capable of conducting due diligence on target assets and companies (not just on fund managers). At present, some 38% of LPs note that they would be willing to invest in a specific deal. A similar number of private equity buyout firms, 35%, plan on explicitly providing co-investment opportunities as part of their fund raising efforts, with 60% citing them as an important tool in enticing institutions to commit to a fund. Whilst obtaining the option to co-invest may be relatively easy for many LPs to secure, their ability to exercise it will remain limited to those with strong in-house investment teams. Dennis McCrary, head of co-investments at Pantheon, says, “One of the key issues for a GP is to know the LP [limited partner, usually an institution] will be responsive when reviewing a co-investment. Some LPs who ask to be shown these investments do not have the manpower, the expertise or the inclination to deliver in the way the GPs would like.”

In contrast to direct investing, co-investing allows institutions to outsource the more difficult and complex investment tasks, e.g. sourcing, closing, and exiting deals and managing and operating assets during the ownership phase, while capturing some of the upside in the form of lower fees. Maintaining a passive minority stake also allows large institutions to avoid many of the internal and external political considerations associated with direct investments. However, the added costs of conducting diligence on an investment mean that co-investing may only make sense when deploying large sums of capital. Edi Truell, chairman of London Pensions Fund Authority (LPFA), believes that an institution needs £2 billion or more in private equity allocations before an in-house team can actively add value.

The fundamentals of co-investing make it best suited to large-ticket single transactions such as private equity buyouts, real estate, and infrastructure. Whilst the model may not be suited for venture capital or hedge funds, it is expected to continue to grow. A recent survey by Russell Investments found that, “Co-investments...are expected to show the largest increases in commitments over the next one to three years.” Similarly, a survey by data providers Preqin indicated that 43% of investors plan to increase the capital they put into co-investments.

Recent research focused on private equity buyout co-investments by large institutional investors has indicated that co-investing is at an early stage, as the ability of institutional investors to capture the theoretical benefits of the model have proven limited thus far in practice. It has also shown that co-investments underperform
benchmarks, with poor deal selection and timing by institutional investors being the likely drivers. Still, co-investing remains popular with LPs. A 2014 report by Preqin, the data provider, found that 52% of LPs reported that their co-investment returns were better than their fund returns and more than half of the 77% of LPs that already co-invest plan on doing more in the future. With large institutions under incessant pressure to increase returns, reduce fees, and allocate ever growing sums of capital, the co-investment model provides a middle ground between existing models and the more daunting task of investing directly.

The flexibility of the model, limited intrinsic constraints, and notable upside in the form of reduced fees and large blocks of capital deployed with preferred GPs, provide ample reason for LPs with large allocations to alternatives to pursue this route more aggressively in the coming years.

3.2.3. Joint ventures

Formal joint ventures are a third possible new structure, usually between a GP and an LP. Relative to co-investing, a joint venture offers a much greater degree of permanence and flexibility. An LP is able to both partner with a preferred GP and retain control over an individual investment and the timing of its acquisition and sale.

The JV model offers many distinct advantages over both the traditional “2/20” and co-investing models. It eliminates all the management and performance fees that traditionally flow to an external manager, because the GP and LP share the management duties through the joint venture. In exchange, the LP must pay for a portion of the fixed cost associated with maintaining the joint venture’s permanent investment team.

LPs have flexibility on how much of the investment process they are responsible for. In contrast to direct investing, in which the LP would be responsible for all aspects of an investment, JVs allow the LP to pick and choose which parts to in-source and which aspects to outsource to its partners.

There are other advantages to utilizing this structure. An arm’s length JV can help LPs to hire talent that would otherwise be subject to institutional constraints on compensation. A JV can also serve to complement an LP’s core alternative investment portfolio, as the LP can control investment choices at the deal level and not merely at the fund level.

Similarly, LPs are involved in the decisions about when to acquire or sell an asset. Forecasting the scale and timing of exits (and the resulting cash flows) has always been a source of frustration for LPs, as they have little control over these decisions when taken by commingled funds. The structure also gives LPs the option of maintaining a stake in an investment well beyond the investment horizon offered by the traditional fund model because the LP does not have to sell its shares at the same time as the other partners in the JV. The inherent mismatch between the 3-5 year investment cycle of a 10-year legally limited fund and the ideal holding period for many types of assets has long bedevilled institutional investors. The advantage of JVs is particularly strong in the case of long-term assets such as private equity real estate or infrastructure, but holds true for many investments in private companies as well.

A joint venture can also deploy large sums of capital relatively easily and efficiently, which is a clear benefit for large LPs. The simple math associated with traditional fund relationships is such that any given LP will have a limited stake in an investment, as there are often dozens of other LPs investing in the same fund. The ability to deploy larger sums through JVs is particularly attractive to large LPs, with 67% of institutions with more than $10 billion in assets expressing an interest in private equity real estate or private equity buyout JV’s against just 21% for those with under $1 billion of assets.

The open-ended architecture of joint ventures means that the model can be used to invest in any alternative asset class, unlike the co-investment model. For example, JVs can be used for deal-oriented investments (private equity buyouts, real estate, or infrastructure) as well as asset classes focused on trading securities (hedge funds).

The clear drawback to JVs is the difficulty of actually implementing and maintaining a successful partnership over time. Relative to co-investing, they require far more coordination with partners on issues such as operational integration, organizational management, financial commitments, deal selection, and the timing of exits. Moreover, such alignment must be maintained over multiple years and across many deals. For these reasons, the number of JVs in practice is far fewer than theory would imply, with institutional investors often limiting their JV contribution to financial capital and oversight of the enterprise.

Still, there are a number of examples of institutional investors partnering with GPs shown in Figure 41. In addition, the Russian Direct Investment Fund (RDIF), a Russian sovereign wealth fund, has entered into partnership agreements with more than 20 LPs and GPs to invest in assets ranging from infrastructure to private debt to companies. In other instances, institutional investors are partnering with one another to invest in traditionally structured GPs, with the goal of using economies of scale to reduce their cost of investing. One example is the creation of a separately managed account overseen by Pantheon Ventures that would invest in private equity buyout funds on behalf of multiple government pension funds. Another is the creation of a fund that would pool capital from government pensions in the UK, including the Greater Manchester Pension Fund and the London Pensions Fund Authority, in order to invest in infrastructure assets.

An increasing number of large institutions will likely enter into joint ventures over the coming decade, in pursuit not only of lower costs and higher net returns but also investment scale and flexibility.
The SMA model is also well suited to managing assets over different investment horizons and long-term investments in particular. For example, investors with long investment horizons, such as pension funds and sovereign wealth funds, can invest in assets such as private equity infrastructure and private equity real estate without being compelled to exit each investment within a three- to five-year horizon. Meanwhile, LPs can focus on selecting the right GP to add value at each stage of the life of an asset without having to exit the investment and the GP simultaneously.

Maintaining direct ownership of the assets at all times also strengthens the risk management capabilities of the LP, particularly in the case of trading-based asset classes. It permits LPs to better understand the risk associated with the asset in real-time and how this relates to their broader strategy and investment mandate. Of course, in-house capability to conduct the analysis is required, which will generate additional internal expenses for the LP.

SMAs allow LPs to manage capital more efficiently than with a traditional fund investment. Unlike with traditional fund investments, LPs can determine how long they would like a GP to manage a pool of capital for them. If the LP is not satisfied with the terms and conditions, or the fees at the end of the mandate, they can renegotiate them without having to wait three to five years for a new fund raising cycle to begin. The increased competitive pressure on the GP managing the investment allows the LP to demand lower fees and negotiate bespoke structures. The SMA model will primarily be attractive to relatively large private equity related firms and hedge funds, as they have the scale and institutional infrastructure necessary to support bespoke accounts.

Basing the structure on a well-known and tested model makes it much easier for LPs to adopt for several reasons. First, unlike direct or co-investing, SMAs do not require an LP to overcome the operational challenge of developing a large and sophisticated internal investment team. Second, since the SMA model does not require significant new internal capabilities, it is much easier to receive approval from the governing board. Third, LPs can
The evolving alternative investment landscape

benefit from owning specific assets over long horizons, but not be subject to the headline risk associated with acquiring the asset directly. Fourth, the model can be scaled easily and does not require an LP to wait for a preferred GP to raise a new fund before allocating to them.

The SMA model is poised for greater adoption by a broader set of LPs than any other model over the next decade. A recent survey found that 14% of investors with $1 billion in hedge fund investments were seeking managed accounts and 10% were looking to develop managed accounts for funds of hedge funds, whilst 35% of investors in private equity buyouts are considering awarding an SMA and 64% believe that it will become a permanent part of their investment strategy in the future. In addition, a recent survey of GPs found that 26% have introduced managed accounts since the financial crisis and another 18% expect to over the next five years.

Large LPs across the world are already paving the way. Pensionfonds Zorg en Welzijn in Holland and Ontario Teachers’ Pension Plan in Canada are already using this type of account, with others, such as California Public Employees’ Retirement System (CalPERS), considering doing so. CalPERS will be able to draw on the relatively long experience of the Teacher Retirement System of Texas (TRS), which established two $3 billion accounts as early as 2011 with the global buyout

Box 1: Wellcome Trust case study

The Wellcome Trust provides an example of how an institutional investor transformed its investment strategy and the way it engages with the alternative investment industry.

Background

The Wellcome Trust, founded in 1936, is the largest non-governmental provider of funding for scientific and medical research in Europe and the second largest in the world after the Bill & Melinda Gates Foundation. In 2014, it dispensed £690 ($1,075) million in grants, which it funds with returns generated from its £16 ($28) billion endowment.

For most of its history, the foundation followed a traditional investment strategy. This entailed hiring a large number of external managers to invest in a diverse range of assets on behalf of the foundation. However, when Danny Truell joined the Wellcome Trust in 2005 as its CIO, he sought to transform it into “an asset owner, not a fund manager.”

Mr. Truell believed that the investment strategy of the foundation was not fully leveraging a number of its core strengths. First, the fund was not capturing the tenure, risk, or liquidity premiums available from having a theoretically infinite investment horizon. Second, it was not investing enough in the best opportunities to own specific assets over long horizons, but not be subject to the headline risk associated with acquiring the asset directly. Fourth, the model can be scaled easily and does not require an LP to wait for a preferred GP to raise a new fund before allocating to them.

The foundation responded by changing its investment strategy in a number of ways. It shifted assets away from short-term, liquid, and low-risk assets to ones that involved more risk, less liquidity, lower volatility, and longer holding periods. The most notable change was the increase in high risk assets, such as venture capital and private equity buyouts. Allocations to hedge funds also increased significantly, as it sought an asset that had “lower volatility and is relatively liquid,” according to Peter Pereira Gray, a managing director in the investment division. Overall, allocations to a wide range of alternative investments soared from 15% to 37%, whilst the share of cash and bonds fell to less than 4% (Figures 1a and 1b). In order to remain fully invested at all times, the foundation began issuing bonds.

In pursuit of long-term investments, the foundation acquired 40,000 acres of farmland and related properties in 2014, in one of the largest such sales in decades in the UK, and 8 maritime harbors in 2015. It also created a new team to invest in commodities in order to capture the growing illiquidity premium, which is a result of many banks having left the market in response to regulatory changes. Overall, 1/3 of the equity portfolio, more than £5 ($7.8) billion was invested in illiquid assets by 2014.

Figure 1a: Allocations to alternative investments have grown rapidly over the past decade

<table>
<thead>
<tr>
<th>Year</th>
<th>Public equity</th>
<th>Alternative investments</th>
<th>Property</th>
<th>Cash &amp; bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>69</td>
<td>14</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>2006</td>
<td>67</td>
<td>15</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td>2007</td>
<td>71</td>
<td>16</td>
<td>16</td>
<td>37</td>
</tr>
<tr>
<td>2008</td>
<td>87</td>
<td>13</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>2009</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>2010</td>
<td>68</td>
<td>12</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td>2011</td>
<td>67</td>
<td>13</td>
<td>13</td>
<td>63</td>
</tr>
<tr>
<td>2012</td>
<td>69</td>
<td>14</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>2013</td>
<td>71</td>
<td>15</td>
<td>14</td>
<td>60</td>
</tr>
<tr>
<td>2014</td>
<td>69</td>
<td>14</td>
<td>14</td>
<td>63</td>
</tr>
</tbody>
</table>

1 Annual data is through September of each year
Source: Wellcome Trust

Figure 1b: The Wellcome Trust invests in a range of alternatives

2014 share of alternative investments by type, %

- Hedge funds
- Venture capital and growth
- Private equity buyouts
- Other

3 Includes distressed debt and direct investments
Source: Wellcome Trust

4 Includes hedge funds, buyouts, specialist and growth, distressed debt, venture capital, and direct investments
It also moved to concentrate more of its capital in fewer, but higher quality investments. According to its annual report, it does so to “seek excess returns, which are driven by the success of individual assets, business models and partnerships.” Fewer than 100 investments or external partnerships represent 85% of the value of the portfolio. For example, 55% of its public equity portfolio, some £5.3 (£8.3) billion, is invested in just 43 public stocks that experience very low turnover. In line with its beliefs, the foundation had never sold a share in a private company that became a publicly listed one.

The same philosophy is also applied to external managers. Historically, the foundation had invested in more than 300 VC funds and had 48 active relationships in 2005, but that total has since been reduced to just 12. A similar strategy holds with hedge funds, where it only invests with 19 firms in an industry with thousands of competitors, with at least 9 being closed to new investors.

**Investment management**

The foundation sought to execute its strategy in a more cost efficient manner. It identified the potential value-add associated with each asset and whether it or an external manager was best positioned to manage it over the preferred investment horizon. Danny Truell noted that “There are skills that we have and there are skills that we don’t have, and we are fairly hard-nosed about identifying them.” Institutionalization proved influential in this process, as the scale, maturity, governance structure, and extensive investment experience allowed the foundation to pursue managing much of its portfolio in-house.

The benefit to the foundation of directly owning a concentrated portfolio of public and private assets was clear. For public assets, direct ownership reduced: a) the transaction costs associated with trading a large portfolio of stocks; b) management costs; and c) the knowledge loss associated with the investment team having to become familiar with a constantly changing set of assets. Given the increased complexity of private assets, a more nuanced approach was taken. Assets that required fewer resources or unique skill sets, such as real estate and public equities, were readily brought in-house, whilst most private equity and venture capital investments remained with external partners (Figure 2a).

Overall, assets owned directly by the foundation have soared from 7% to 42% over the past decade and that total may reach 50% by 2016 (Figure 2b).

**Figure 2a: The share of assets managed internally varies widely**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Share (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real estate</td>
<td>90%</td>
</tr>
<tr>
<td>Public equity</td>
<td>57%</td>
</tr>
<tr>
<td>Private equity</td>
<td>16%</td>
</tr>
</tbody>
</table>

Source: Wellcome Trust

**Figure 2b: The share of assets managed internally has increased significantly in recent years**

![Bar chart showing the share of assets managed internally from 2005 to 2014.](chart)

Source: Wellcome Trust

Recognizing that it is unlikely to have a comparative advantage in areas such as early stage venture capital, hedge funds, or investing in Asia, the foundation sought to develop deep relationships with a limited number of preferred GPs. In many instances that resulted in concentrating capital with a small number of firms. In others, it resulted in establishing bespoke partnerships with GPs. The creation of multi-asset partnerships is one such example, whereby the foundation funded five evergreen vehicles overseen by different GPs that focus on investing in Brazil, sub-Saharan Africa, the Arab world, Asia and southeast Asia.

**Governance and organizational structure**

The governance structure of the foundation is a key reason why it has been able to pursue and maintain Truell’s strategy of becoming an active asset owner. The board itself is primarily composed of scientists, who are “very empathetic to the view that you make progress over years and decades, not over the next quarter,” according to Mr. Truell. Such a mindset is critical for any owner seeking to deploy a long-term strategy, which focuses on the 10-year total return and not quarterly or annual performance. For example, Geoff Love, Head of Venture Capital and Equity Long/Short Investments, notes that it can take five years just to construct a meaningful portfolio of venture capital.

Yielding returns takes even longer, since VC backed companies remain private standalone companies for an average of six years.

The board also imposes few constraints on what the foundation can invest in and rarely interferes with the activities or management of the investment team. It shields the team from external pressure to create additional investment constraints due to demands from interest groups. Doing so allows it to avoid the headline risk that can derail long-term strategic plans, as was noted earlier in this report, but still allow it to remain open to change should an issue warrant change. Earlier this year it resisted a campaign by The Guardian newspaper calling for it to cease investing in fossil fuel related companies, noting that its current position provided it with more influence on the issue than would be true with divestment. However, in accordance with...
its philosophy, it would remain open to changing its position over the long-term, as was the case with its decision in 2013 to cease investing in tobacco related companies.212

The limited interference by the board also impacts how the investment team is organized. A critical difference is that the Wellcome Trust is not significantly constrained in how it compensates employees, an issue that many other institutional investors face. Doing so allows it to compete for, attract, and retain world class investment talent. At present, the team comprises 25 investment professionals. It also has the flexibility to create and fund separate investment organizations. One such example is Syncona Partners, an evergreen investment company that makes venture capital investments in healthcare related companies. The firm was created and funded with £200 million by the foundation in 2013.

Outcome
The transformation of the Wellcome Trust over the past decade has been a resounding success and expectations remain high for the future. The shift towards alternative investments, direct investing, and deeper relationships with GPs has worked well for the foundation. Returns have been strong. At a portfolio level, it generated an average real return of 7.8% over the past decade, far in excess of its target of 4.5%, and better than benchmarks (in nominal terms) such as the MSCI AC World over the same period.213 The strong returns have enabled the foundation to grow its asset base by nearly 50% and its cash payments to charities by 60% from 2005-15 (Figure 3), a period which included the financial crisis and its aftermath. The new strategy was also able to reduce the volatility of the returns, relative to both the broader markets and historical volatility at the foundation (Figure 4).

The shift towards concentrating on fewer assets and fewer managers has also paid off. One example is venture capital, where the foundation’s 12 relationships with VC firms have given it access to the vast majority of venture backed IPOs.214 The mix of partnerships and direct investing has also enabled it to make early and significant investments in Alibaba, Twitter, JD.com, and Amplimmune, each of which yielded a profit in excess of $100 million.

Figure 3: The market value and charitable cash contributions have risen significantly over the past decade215

Market value and charitable cash contributions, £ millions

Figure 4: Portfolio volatility has fallen in recent years216

Annualized1 volatility (standard deviation) of returns, %

1 Volatility calculated on a 12 month rolling basis ending on 30 September

Source: Wellcome Trust
3.3. Rising impact of retailization

The growing importance of retail capital presents many challenges and opportunities for GPs, LPs, financial institutions, and regulators:

— The alternatives industry can expect retail investors to become a growing source of capital
— Traditional asset managers will significantly expand their engagement with alternative investments and see increased revenues and profits as a result
— Retail investors will be presented with, and will need to select between, a far broader array of products and managers
— The regulatory landscape will evolve to respond to retailization

Below we look in turn at the scale and character of each of these key changes from the perspective of different industry players.

3.3.1. Implications for alternative investment firms

The alternative investment industry can expect to receive record net new inflows of capital from retail investors. This is something of a coming of age: having weathered multiple business cycles spanning decades and with more than $7 trillion under management, the industry has finally reached a maturity that allows it to pursue retail capital.\(^{217}\)

Individuals can already invest in the stock of many leading firms, such as Blackstone, KKR, Carlyle, the Man Group, Och-Ziff, and Fortress, all of which are now publicly traded entities. More importantly, the scale and institutional sophistication of the leading GPs has helped them develop new product structures aimed at retail investors. Blackstone recently partnered with Fidelity in offering a hedge fund focused closed-end mutual fund in which retail investors can invest.\(^{218}\) Examples abound, with Apollo offering the public access to a closed-end alternatives-focused mutual fund;\(^{219}\) KKR providing access to hedge fund like products through an open-ended mutual fund;\(^{220}\) Carlyle offering access to its funds through a partnership with the Central Park Group to accept investments as small as $50,000 from accredited investors;\(^ {221}\) and Fortress providing exposure through two listed REITs.\(^ {222}\)

How large could the market become? Allocations to alternative investments by retail investors are soaring. Consultancies such as McKinsey, Casey Quirk, and Cerulli Associates find that access to alternatives by non-high net worth individuals rose from $800 billion in 2005 to $2 trillion by 2013,\(^ {223}\) with net inflows driven by retail sources forecasted to exceed $1 trillion over the five years between 2012 and 2017,\(^ {224}\) and reaching 15.8% of all mutual fund allocations by 2021.\(^ {225}\) Still, institutional capital will remain the dominant source for the industry for some time, given the regulatory barriers that largely limit retail alternatives to relatively liquid asset classes such as hedge funds.

3.3.2. Implications for asset managers

Traditional asset managers will be one of the leading benefactors of the retailization trend. They will also serve as one of the key distribution channels through which retail investors will be able to access alternatives. The underlying demand for alternatives by retail investors is large and growing. Asset managers are responding by introducing mutual funds that offer access to a range of different alternative strategies (Figure 42).

Figure 42: Growth in alternative strategies in US mutual funds\(^ {226}\)
Alternative strategies in US mutual funds, $ billions

![Figure 42](image_url)

Source: Lipper

\* Includes event driven, long/short equity, dedicated short bias, and equity market neutral categories.

\** Includes commodities general and commodities special categories.

\*** Includes real estate, global real estate, and international real estate categories.

The asset management space is fiercely competitive, with downward pressure on margins for traditional products being the result. The shift from DB to DC in many pension systems may have resulted in a relative increase in margins for comparable products, but overall margins have been under intense pressure due to the rise of exchange-traded funds (ETFs) and index funds and the increased competition brought by the banks seeking to expand their asset management divisions. Overall, global asset managers saw median margins erode by 14% from 2005 to 2011, falling from 37% to 32%.\(^ {227}\) According to BCG, most traditional equity and fixed-income products carry net revenue margins of 10-50 bps.\(^ {228}\) In contrast, alternative products typically yield margins of 100-200 bps.\(^ {229}\)

Figure 43 shows how traditional actively managed products (and their managers) are now under pressure from both passive and alternative products. Passive products are challenging the margins on traditional products, as they offer similar attributes at a lower cost – and with their high growth rate erode the market share of traditional active products. In contrast, alternative products offer much higher margins, which results in lost revenue opportunities for firms that only offer traditional products.
Alternative Investments 2020: The Future of Alternative Investments

Figure 43: Traditional assets and their managers will continue to be squeezed by new faster-growing asset classes. CAGR for 2012-2016, %

To escape this trap, and to address the structural shift from DB-driven institutional investors to DC-driven retail investors, asset managers have sought to expand beyond their historical focus on funds that offer access to stocks and bonds. McKinsey forecasts that by 2020 15% of all global assets under management will be alternatives, but they will produce 40% of all revenues for the asset management industry. Casey Quirk and Cerulli Associates echo this, estimating that 80% of net new revenues for asset managers will come from individuals and $16-17 billion in new global revenue will come from retail alternatives.

The desire of leading asset managers to build franchises in the alternatives space is already apparent. Douglas Hodge, the CEO of PIMCO, the world’s largest fixed-income asset manager, noted that expanding PIMCO’s alternative product offering was “a very important area for us.” Other leading asset managers, such as BlackRock and Fidelity are also making significant investments in alternatives.

3.3.3. Implications for banks

The regulatory aftermath of the financial crisis is leading many global banks to actively expand their asset management businesses. Regulations such as the Dodd-Frank Act in the United States and Basel III in Europe are dramatically reducing the ability of banks to pursue high-risk, high-reward strategies, whilst shareholders are demanding more consistent earnings. Relative to their investment bank trading units, asset management is far less capital intensive, provides opportunities to cross-sell products with other divisions, and produces revenue streams that are much less volatile. Many leading banks, such as Morgan Stanley, Goldman Sachs, Credit Suisse, UBS, J.P. Morgan, and others have responded by seeking to expand their wealth and asset management divisions.

Banks are uniquely positioned to provide alternative products through their asset management divisions. Many have long had internal alternative investment arms that invested directly in private equity buyouts or real estate or traded on behalf of the firm in a manner akin to a hedge fund. These activities are being phased out by banks in the United States, following the Dodd-Frank Act, and are also strongly discouraged in Europe by the new Basel III capital requirements. However, banks with such investment arms have historically worked closely with their existing wealth and asset management divisions, particularly with regard to providing opportunities for their clients to invest in their internal funds. Whilst they may spin-out their investment arms, the in-house knowledge and customer base of banks such as J.P. Morgan, Bank of America, and UBS will remain, in contrast to standalone asset managers that need to develop retail alternative teams organically (or through acquisition).
3.3.4. Implications for retail investors

The non-high net worth retail investor of the future will be able to select from a very broad array of alternative products and managers, and will cease to think of alternatives as a novelty. Indeed, today’s markets are already taking retail investors down this path.

Over the last few years, there has been an explosion in the diversity of products available to retail investors, which now provide access to alternative investments such as hedge funds, real estate, and infrastructure. The range of options and channels available to investors includes:

- standalone products that offer exposure to a single manager
- funds of funds style multi-manager products for a single asset class or a blend of different alternative asset classes
- open or closed-end funds
- products that offer varying degrees of exposure to leverage, derivatives, and/or shorting

Individuals can already access alternative products through various channels such as wealth and asset managers, banks, and brokerages (online or in-person), 401k or related retirement accounts.

The structure and target demographic of the different product classes varies, but alternative assets are proving popular with retail investors. In Europe, demand for alternative UCITS products, a highly regulated structure available to all investors, has skyrocketed. Total assets under management grew from €37.6 billion in 2009, and then grew again to €5.4 billion in 2011. In the US, demand gave rise to a similarly regulated set of alternative mutual funds and ETFs structured to adhere to the ‘40 Act. Such funds are available to virtually all investors, helping to explain the rapid rise in assets from $236 billion in 2008 to $554 billion in 2012. Collectively, these two structures alone were expected to experience net growth of some $700 billion between 2010 and 2016.

3.3.5. Implications for regulators

The retailization trend has many implications for regulators, and the regulatory landscape has already begun to evolve as a result. Politicians, recognizing the challenge that individuals face when saving for retirement, are seeking simultaneously to provide retail investors with more investment options, while continuing to protect them from fraudulent investors.

The US is taking the lead, with three legal adjustments making it easier for alternative investors to reach potential high net worth individuals, while also promoting the transparency of alternative investment funds and making it harder to defraud unsophisticated individuals:

- In 2011, an amendment to the Dodd-Frank Act required most private investment firms in the United States to register with the SEC, providing greater transparency into the operations of GPs.
- The following year the JOBS Act was announced, which removed the long-running restriction on marketing by private investment firms imposed by Regulation D of the Securities Act of 1933.
- However, Dodd-Frank tightened the Securities Act of 1933 definition of the type of investor qualified to invest in private funds. Investors must now have a net worth of $1 million, excluding the investor’s primary residence, up from a similar net worth that included all real estate holdings. Still, the change means that alternative investors will be able to advertise to the 8.5 million households that are accredited investors.

The steady disappearance of DB plans and the growing volume of retail capital invested in alternatives will inevitably lead to further updates and revisions of the laws governing retail investors. Some politicians have begun to view the shift from DB to DC plans as inherently unfair to individuals in DC plans, as they are unable to allocate savings to higher return, higher risk investments. U.S. Senator Tom Harkin (Iowa, D.), then Chairman of the Senate Health, Education, Labor and Pensions Committee, makes precisely this point when referring to long-term asset classes such as real estate and private equity: “Because of the frequency of withdrawals, it’s much harder for 401(k)s to take advantage of the types of investments that pension plans, with their long time horizons, use to diversify their holdings.” In order to address this gap, he proposed creating a structure that would allow employees to maintain personal retirement accounts, but have them pooled and professionally managed in a manner akin to that of a DB plan.

The demand for alternative investments is also leading distributors and investment firms to repackage alternatives into existing investment structures that non-high net worth retail investors already have access to. In the US, there has been a proliferation of alternative investment funds structured to adhere to the ‘40 Act, which governs mutual funds. Similarly, in Europe, alternative-oriented funds are being organized under the Undertakings for Collective Investment in Transferable Securities (UCITS) guidelines originally intended for mutual funds.

The growth of target date funds (mutual funds that rebalance over time based on the expected retirement year) may provide another vehicle for retail investors to gain exposure to alternative investments. Structuring an alternative investment product that adheres to consumer protection laws remains difficult, particularly since funds must provide daily liquidity. However, Pantheon Ventures and the Partners Group, two private equity focused firms, have launched alternative products that could be included in retail retirement plans. Secondary private equity buyout players, such as Pomona Capital, are also exploring the retail retirement space with targeted products.

With the alternative investment world turning to retail investors for capital, the future is likely to bring additional legislation and further attempts to clarify and refine existing laws. Like the current regulatory response, this is likely to be characterized by an uneasy trade-off between improving market access and protecting retail investors from fraud and unnecessary levels of risk.
Conclusion and key implications

The future of the alternative investment industry seems likely to be one of both growth and significant structural change, accompanied by an increasing maturity of the industry’s infrastructure, regulation, and investment relationships.

Growth seems reasonably assured, given the continuing demand for the above-average returns associated with the sector, increasing allocations from many large institutions, new capital flows from emerging markets, and the unfolding process of retailization, as well as the quest for yield pushed by pension funds that are facing adverse demographics. The wild card here is whether the industry can continue to deliver above-average returns to all these constituents.

Structural change also seems inevitable, as more capital begins to flow from an almost entirely new source: retail investors. Retailization, in particular, seems likely to prompt a new set of business models as alternatives are introduced to the mass affluent through new products distributed by retail alternative investment managers and other providers.

Institutionalization, greater regulation and public and academic scrutiny, are speeding up the maturation of the industry by establishing a greater depth and complexity of relationship between large or sophisticated LPs and GPs. It is also driving GPs and LPs alike to upgrade their institutional infrastructure, at a cost, and generating a deeper understanding of how and when the sector can succeed in delivering above-average returns.

This combination of industry growth, structural change and maturation has some important implications for GPs, LPs, regulators and policy makers, and wider society, as we highlight below.

1. Alternative investment firms: Rethinking the competitive landscape

Over the coming decade, alternative investment firms will need to negotiate a new competitive landscape. They will need to make conscious decisions about what kind of firm they are, how much they intend to grow, and what core business model they intend to adopt.

One important decision will be the degree to which they seek to expand their capital base beyond institutional investors by pursuing retail investors. Another decision is whether to continue to focus entirely on generating returns in a specific region or industry? Or rather allocate larger amounts to fewer firms, but those that can provide a balance of returns and the ability to invest in many regions, industries, or alternative assets classes simultaneously? How many relationships with GPs should they maintain and how deep or broad should those relationships be?

As GPs refocus, they will begin to take on very different characteristics. For example, those that pursue retail capital will gain some of their market power from mastering the thicket of related regulations and from investing in marketing and branding, rather than relying solely on their investment prowess. Larger GPs may face a binary decision on whether to build their businesses into global alternative asset managers and compete with the largest alternative firms in the world or remain a specialist player.

GPs that continue to focus on large institutional LPs may need to consider the range of products and services that they offer in addition to traditional fund structures. The largest GPs, in particular, might need to consider how they can support institutional direct investing efforts, develop co-investment strategies, manage joint ventures and offer new investment management accounts such as SMAs.

The maturing of the industry and the impact of new investment regulations may benefit some incumbents, in the sense that GPs investing heavily in key infrastructure and compliance capabilities will, in effect, also be erecting barriers to entry for competitors. However, the long-term cost implications may also work against them if they eat too heavily into returns.

All GPs are likely to have to deal with a much larger amount of scrutiny from regulators and from the market more generally as improved reporting and transparency in the industry, together with new academic studies, combine to lift the veil that has traditionally obscured how the industry delivers above-average returns.

2. Capital providers: Choosing new relationship models and products

The key change for large or sophisticated institutional investors is the increased number of choices they have to access alternatives.

Rather than simply trying to invest with the most successful GPs, which are becoming harder to identify, leading institutional investors now have a series of decisions to make. For example, what kind of GPs will make the best partner? Should the LP spread capital across many funds that focus exclusively on generating returns in a specific region or industry? Or rather allocate larger amounts to fewer firms, but those that can provide a balance of returns and the ability to invest in many regions, industries, or alternative assets classes simultaneously? How many relationships with GPs should they maintain and how deep or broad should those relationships be?

Many will continue to invest in traditional fund structures, perhaps because they lack the investment mandate or operating environment to make radical changes. However, others will follow some of their peers along the evolutionary path that leads from asking for co-investment opportunities to developing entirely new kinds of relationship (e.g. SMAs) or even building the capabilities necessary to engage in direct investing.

Institutions will also need to monitor whether their chosen strategy is delivering the returns that they need. There will be a lot of new capital chasing alternative investment opportunities over the next few years, and not all of it will flow through firms with a dependable track record. Higher compliance costs, industry consolidation, and a slower rate of innovation may eat into returns.
Retail investors will be welcomed to the industry for the first time, as new avenues for accessing alternatives open up in the US and Europe. The market is immature, but many other new types of products can be expected in the coming years, within a fast-evolving regulatory framework. There will be problems, and occasional scandals on the way, but retail investors and their advisors are likely to be faced with an ever-growing set of options and strategies to consider.

Finally, the growth of interest in alternative investments will increase capital inflows, but also the nature and origin of competitors. We expect an increase of the competitive overlap between previously separate segments. The process of going public, and the subsequent focus on growing assets under management by such firms, will only exacerbate this trend.

### 3. Regulators and policy makers: balancing concerns with alternative investment benefits

A key theme of the Alternative Investments 2020 series has been to stress the many connections between alternatives and the rest of the financial industry, and how major changes in one part of the financial system nearly always have some effect – often unintended – on the alternatives industry.

As the industry matures, and the global financial system evolves as a result of macro and industry drivers, understanding these interconnections and their ramifications is becoming more important.

Regulators and policy makers outside the alternatives industry may therefore want to explore the likely future trajectory of the industry and map out how it connects with their particular responsibilities and constituents.

As we have seen, new regulations in one area of the financial industry can both unintentionally raise costs and curb markets in the alternatives industry and spark growth in new markets (e.g., private debt funds and retailization). They can also unintentionally erode the returns passed through to key investors such as pension funds, potentially causing problems for society in the future.

As well as understanding financial industry connections to the alternatives industry, policy makers may therefore also want to:

- monitor changes in the industry, including unexpected growth of subsectors, that occur as a result of regulatory reforms
- design suitable reforms that support investment in innovation and long-term investment in the real economy

### 4. Wider society: A new appraisal of the alternative investment industry

Alternative investors perform many functions that benefit the wider economy and society and that cannot easily be replicated by other kinds of investor.

They support long-term, illiquid, and risky investments of the kind that can transform real economies around the globe, through venture capital and private equity related (buyouts, infrastructure, debt, real estate, etc.) investments. Hedge funds also serve as an important source of liquidity for financial markets and help to impose discipline and better operating practices on the corporate world by forging closer links between the interests of investors and corporate management teams.

At the same time the above-average returns associated with the sector have the potential to help mend the funding gaps in many public and private pension systems, and to allow sovereign wealth funds to deliver on their long-term commitments to nations around the world. However, there remain concerns about how rewards from such activities are shared with LPs and how they are taxed. These need to be part of the assessment of how public investors engage with alternative investors. The opacity and unwarranted complexity that surrounds the industry and the manner in which GPs operate is another area that will need to change in coming years.

In the future, the importance of the alternatives industry is likely to become even more apparent to the broader public, as individuals begin investing in the sector through retail alternatives, with the aim of bolstering the value of personal long-term investment portfolios. Ultimately, consistently demonstrating the value-add that the industry generates and doing so in a transparent fashion will be the key to the industry being accepted by the public and policymakers.
## Appendix: Additional reading

### World Economic Forum and related research papers


### Other research papers

Acknowledgements

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Alternative Investments 2020: The Future of Alternative Investments


3. PreQin

4. HFR data


8. United States Census Bureau - International Data Base


14. PreQin data


23. Sovereign Wealth Fund Institute


37. SEI, Key Course Adjustments for Breaking Through: 5 Ways Private Equity managers can optimize their competitive advantage, 2013.


39. Foster, Mike, “Feeling attacked from all sides? Calm down, it’s a great time to be an asset manager”, Financial News, 15 May 2013.


42. Kiladze, Tim, “Private equity is the new MBA; Investment banks being gutted by pension funds”, Globe and Mail, 15 April 2011.


45. SEI, Key Course Adjustments for Breaking Through: 5 Ways Private Equity managers can optimize their competitive advantage, 2013.


47. SEI, Key Course Adjustments for Breaking Through: 5 Ways Private Equity managers can optimize their competitive advantage, 2013.


Endnotes


244 Backman, Melvin, “Developer Plans to Crowdfund a Manhattan Hotel”, Wall Street Journal, 18 September 2013.

245 Collins, Margaret and Devin Banerjee, “KKR to Carlyle Target $3.6 Trillion in 401(k)s Accounts “, Bloomberg, 4 April 2013.


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