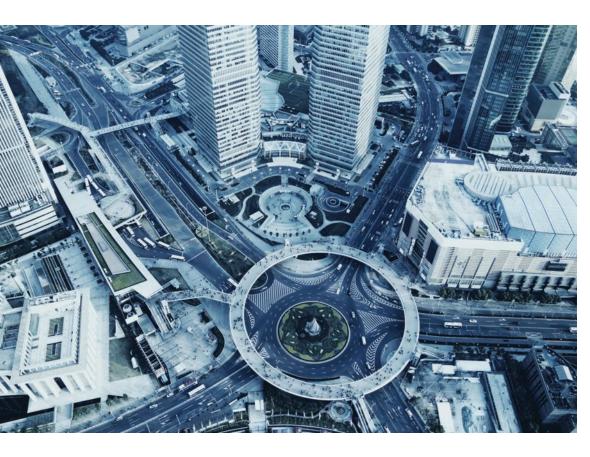
Over the past several years, rapid developments in the global economic environment have pushed asset management to the forefront of social and economic change. An important part of this change – the need for increased and sustainable long-term investment returns – has propelled the alternative asset classes to centre stage. To help alternative asset managers plan for the future, we have considered the likely changes in the alternative asset management industry landscape over the coming years and identified six key business imperatives for alternative asset managers. We have then examined how managers can implement and prosper from each of these six imperatives.

Alternative asset management 2020 Fast forward to centre stage

Report











Contents

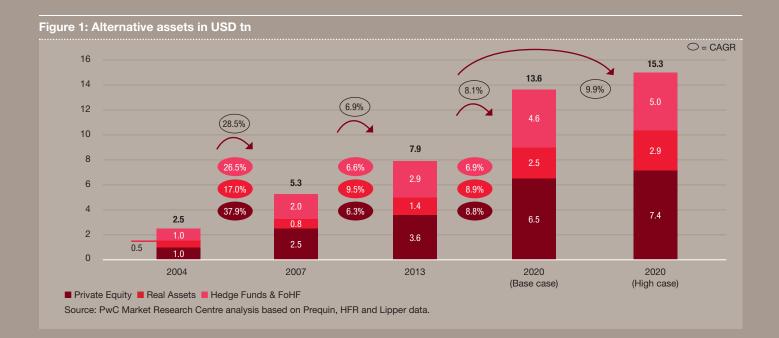
Introduction	4
Executive summary	6
The alternative asset management landscape in 2020	10
Here's how	12
Conclusion	34
Contacts	35

Introduction

Over the past several years, rapid developments in the global economic environment have pushed asset management to the forefront of social and economic change. The need for increased and sustainable long-term investment returns are an important part of this change and has propelled alternative asset management to centre stage.

Alternative firms, with their emphasis on investment outcomes rather than products, and specialisation rather than commoditisation, will increasingly attract investors seeking customisation, diversification and genuine long-term alpha. At the same time, alternatives will increasingly occupy a prominent allocation in the world's economies, both established and emerging. Fast-forwarding to 2020, alternatives will have a centre stage role to play in the investment universe and in the global economy.

Between now and 2020, alternative assets are expected to grow to \$13.6tn in our base case scenario and to \$15.3tn in our high case scenario. High performance of capital markets driven by accommodative monetary policies and stable GDP growth would push alternatives towards the high case scenario. However, the possible rise of interest rates in the US and Europe, coupled with a normal correction in the capital markets, would support the base case.





From now until 2020, the alternative asset management industry will experience a period of transformation as firms look to calibrate their businesses and operations as they move to centre stage. The principal focus for many firms will shift to creating a broader asset class and product mix and opening new distribution channels. While some firms still strive to become more institutionalised, the leading firms will work to build industrial-strength operational platforms. They will meet this challenge by revamping their business and infrastructure to be more agile and scalable, with a high degree of efficiency and operating leverage.

Neither regulation nor investor expectations are, of course, a 'done deal'. Both will still have a major impact and produce some significant challenges as well as opportunities in the years to 2020. But leading alternative firms will, in the coming years, shift focus and invest more time and resources on business strategy, organisational design and data-informed decision-making. Unfocused approaches to all will be increasingly rare.

The diversity of the alternatives industry may mean that measuring business unit and product profitability is not practical for all firms, but firms will need to be increasingly systematic and granular in their analysis of opportunity versus cost. This shift will not come easily to all firms in the sector, some of which pride themselves as being artisanal.

But the majority, by 2020, will see the virtues of becoming fitter for growth, agility and profitability.

Executive summary

Choose your channels

Alternative firms by 2020 will adopt world-class ideas and practices from the broader financial services industry and from traditional asset managers. They will develop more sophisticated market strategies, more focused distribution channels and better recognised brands. Most alternative firms will work out exactly which investor channel or channels they want to target and develop relevant strategies and products. Some will focus more systematically on sovereign investors, pension funds, other sophisticated institutions and private wealth markets. Others will target emerging markets, and still others will pursue the potentially huge asset flows through liquid alternative products. A small number of mega-managers in the alternatives space will operate across all major geographies, channels and strategies.

Build, buy or borrow

Greater segmentation of investors will, in turn, drive greater segmentation of the managers themselves. Deciding which segment of the market to inhabit will require alternative firms to more consciously evaluate what they are as an organisation and where they want to be. They will typically aspire to be one of the following types: diversified alternative firms, specialty firms or multi-strategy firms. All these models exist today; the difference is that firms will by 2020 explicitly choose a growth strategy in order to remain competitive. To develop the chosen business model, firms will pursue one or more of three growth strategies: building, buying or borrowing. Builders grow by building out their internal organisations, leveraging and developing their existing capabilities and investment talent. Buyers expand their alternative capabilities across asset classes and strategies by acquiring talent, track record and scale overnight. Borrowers partner with other institutions, including asset managers, wealth managers, private banks and funds-of-funds, to expand their investment capabilities and take advantage of broadened distribution channels. These 'borrowing' relationships include, but are not limited to, distribution arrangements, joint ventures and subadvisory relationships.





More standardisation, more customisation

The polarisation of the alternatives industry into standardised and customised solutions, already in evidence in 2015, becomes even more marked by 2020. This shift responds to three key investor demands. The first is the ongoing demand by the largest institutional investors for madeto-order products, providing greater customisation and strategic alignment. The second is demand for next-generation commingled funds that are more focused on outcomes. The third is demand for liquid alternative funds in standardised formats as some institutional investors, as well as the mass affluent and newly wealthy, seek easy access to alternative strategies.

From institutional quality to industrial strength

Owners, investors and regulators will broaden their expectations from 'institutional quality' to 'industrial strength'. They will expect alternative firms to operate in a way that goes beyond the prerequisite quality standards to operate even more effectively and offer a broader range of capabilities. Having institutionalised their businesses, alternative firms will seek the higher standard of 'industrial strength'.

Firms will revamp their operations in a cost-effective way that is not disruptive to their day-to-day business. This includes embedding more data-informed decision-making to estimate the impact of business mix changes and process improvement on costs and revenues. They will then implement these process improvements, eliminating operating inefficiencies by automating and outsourcing processes. Firms will look to transform labour-intensive

functions like compliance, tax and investor servicing into ones that are more technology-enabled, scalable and integrated within the overall operating environment. To do this, larger firms will build in more resource bandwidth with change agents who will drive process improvement while core teams continue to drive day-today operations. Firms will also seek to better control operational risk, systematically identifying, prioritising and managing operational risks to target areas of potential vulnerability.

The right resources in the right places

By 2020, the shift to data-informed decision-making will lead to improved organisational designs that can better deliver the right resources to the right places. Design elements that will be adopted by alternative firms include: centres of excellence to leverage expertise; dedicated teams to focus on underserved areas; sourcing strategies to reduce costs for high-volume, repeatable processes; and location strategies to bolster a firm's presence in a particular jurisdiction or to reduce cost.

Many alternative firms will also make more effective use of rightsourcing strategies. In some cases, they will shift to using outsource providers or utility-like platforms where key skills or geographic coverage can be provided more costeffectively, externally. In other cases, alternative firms will continue to use in-house support functions to take advantage of operating leverage benefits. Successful right-sourcing efforts are accompanied by more systematic and efficient internal oversight to bridge the gap between external service providers and internal resources.

Analytics enable alternative firms to better measure the strength of their operational processes and enhance key functional areas such as tax, compliance, reporting and investor servicing.

It's not only about the data

Data and data-centricity are key business imperatives in 2015. By 2020, the focus of leading alternative firms will have largely moved on. They will have laid the necessary 'plumbing', and accessing data across their organisations will be as natural as turning on a tap. To do this, they will adopt data standard protocols allowing all parts of the organisation to exchange information, creating a self-service model. These protocols will also speed information exchange with key counterparties and service providers.

The result will be a data-centric, self-service environment in which time is spent on the analysis and reporting of data, rather than on the manipulation of data. The resulting analytics enable alternative firms to better measure the strength of their operational processes and enhance key functional areas such as tax, compliance, reporting and investor servicing. The model will also help plug the current drain on resources in the manual and non-standardised areas of portfolio monitoring, operational due diligence and investor onboarding.

the focus of leading alternative firms will have largely moved on. They will have laid the necessary 'plumbing', and accessing data across their organisations will be as natural as turning on a tap.



The alternative asset management landscape in 2020

The asset management landscape is undergoing radical change. This change was set out in a paper PwC published in early 2014 – Asset Management 2020: A Brave New World. The paper captures the global trends impacting the industry in the coming years and identifies the consequences of these trends. The key predictions it makes are outlined below and supplemented with a brief analysis of the potential impact on the alternative asset management sector:

- Asset management moves centre-stage. Changing demographics and markets will thrust asset management to centre-stage. First, regulation will continue to hinder banks: for alternatives this furthers significant opportunities such as catalyst hires from banks and the opportunity to further step into the funding gap. Second, as the world ages, retirement and healthcare will become critical issues that asset management can solve: capital preservation and alpha generation will be key. Third, asset managers will dominate the capital raising required to support growing urbanisation and cross-border trade: growing asset classes in infrastructure and real estate play into alternatives firms' areas of expertise. Fourth, asset managers will be at the centre of efforts by sovereign investors to invest and diversify their huge pools of assets: alternative firms are ideally positioned to partner with them.
- Huge rise in assets and shift in investor base. Alternative assets are expected to grow between now and 2020 to reach more than \$13.6tn in our base-case scenario and \$15.3tn in our high-case scenario. Assets under management in the SAAAME (South America, Asia, Africa and the Middle East) economies are set to grow faster than in the developed world as these economies mature. This growth will be evidenced by the projected emergence of 21 new sovereign investors, the vast majority of which will originate from SAAAME.
- Growth in assets will be driven principally by three key trends: a government-incentivised shift to individual retirement plans; the increase of high-net-worth-individuals from emerging populations; and the growth of sovereign investors. This creates the need for more tailored, outcome-based alternative products that provide capital preservation, but provide upside opportunities.

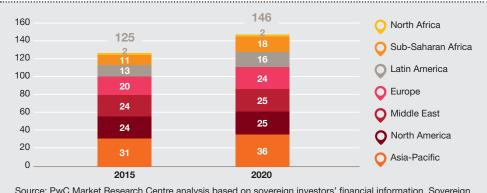


Public pension fund turns to alternatives

By 2020, there will be a fundamental shift towards alternatives by many sovereign and public pension funds. This is the continuation of a trend that first gained traction in the US and then globally. In April 2015, for instance, the world's largest pension fund, the \$1.1tn Government Pension Investment Fund (GPIF) of Japan announced a new strategic asset mix in a bid to achieve higher returns and address the needs of an ageing population. Significantly, GPIF's new mandate allows for a 5% allocation to alternatives, representing a significant opportunity for alternative firms. And it will not end there. Three smaller funds managing about \$250bn - the Promotion and Mutual Aid Corporation for Private Schools of Japan, the Pension Fund Association for Local Government Officials, and the Federation of National Public Service Personnel Mutual Aid Associations - plan to adopt a mix similar to GPIF.

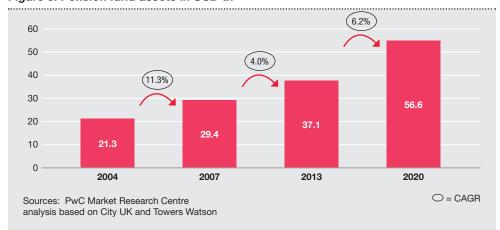
By 2020, it is expected that global pension fund assets will have reached \$56.6tn, with alternative assets expected to play a considerably larger role in their asset allocation mix.

Source: Adoption of New Policy Mix (GPIF) October 31, 2014 gpif.go.jpou



Source: PwC Market Research Centre analysis based on sovereign investors' financial information, Sovereign Wealth Center, Prequin IFSWF, The Natural Resource Governace Institute and the Columbia Center on Sustainable Investment data.

Figure 3: Pension fund assets in USD tn



Pressures on the asset
management industry.
 Alongside rising assets, there
will continue to be increased
regulatory requirements, rising
costs and pressure to reduce fees.
 Alternative firms do not escape
this pressure and will seek to

respond proactively.

• Distribution is redrawn – regional and global platforms dominate. New markets and untapped investor types will open up if alternative firms can develop the products and access the distribution channels to tap them. By the early 2020s, four distinct regional fund distribution blocks will have been formed allowing products to be sold panregionally. These are: north Asia, south Asia, Latin America and Europe. However, these blocks benefit traditional firms more than

- alternatives firms, so distribution alliances will be critical for alternatives firms.
- Alternatives become mainstream. The term 'alternative', already strained to reflect a mix of different strategies, products and firms, becomes further flexed. The growth of liquid alternative products, either in the form of mutual funds or UCITS, continues to create greater integration between alternative and traditional asset management. By 2020, alternative asset management will become synonymous with 'active asset management' and, increasingly, 'multi-asset class solutions'.

New breed of global managers.

- Traditional managers leverage their existing platforms, distribution capabilities and brands to develop full-service, multi-asset class alternative businesses. A few of today's largest diversified alternative firms will become mega-managers in their own right, establishing a presence in all the key geographies and investor segments. The largest alternative firms will continue their growth trajectory and diversification through product, asset class and distribution expansion, fuelled by build, buy and borrow strategies. Specialist firms will seek 'best-of-breed' status by producing sustained performance, while certain emerging firms will fight for shelf space.
- Asset management enters the twenty-first century. By 2020, technology and data-informed decision-making will become mission critical to drive investor engagement, data analytics, operational and cost efficiency, and regulatory and tax reporting. Data management and investment in technology have not always been a top priority for alternative firms – this will change.

Here's how

So what do these huge future shifts in the industry mean for alternative firms and how they operate in the years to 2020 and beyond?

The key business imperatives for alternative firms in 2020 will be:

- Choose your channels
- Build, buy or borrow
- More standardisation, more customisation
- From institutional quality to industrial strength
- The right resources in the right places
- It's not only about the data

The rest of this section looks at each of these key imperatives in turn and examines how managers of alternative strategies can implement and prosper from them.





Choose your channels

World-class asset management organisations may serve many different markets, but they have one thing in common: they understand the different market segments and tailor their products to each market's unique specifications.

Alternative firms will spend a bigger portion of their time and resources over the coming years figuring out how to access the discrete pools of wealth that will exist by 2020 and how to tailor their products to each pool's unique specifications. While marketing and distribution challenges are not unique to the alternatives sector, the solutions probably are. This is because the distribution landscape for alternatives has been historically difficult to navigate. In 2015, few alternative firms possess brands that are well-recognised, wellunderstood and global. In the leadup to the 2020s, leading alternative firms will have determined exactly which investor channels they want to target and will have developed strategies for each channel.

Here's how:

By the early 2020s, few alternative firms will still take a scattergun approach to distribution. Many firms will devote more resources to deciding which investor channels they want to play in, how profitable each of those channels are and how to optimise their chosen channels. These decisions will respond to the natural strengths and goals of firms, but also to their views on the likely future behaviour and needs of investors. Decisions will also respond to views on regulatory challenges and opportunities that different channels and markets present. Regulation brings cost burdens, but it also offers distribution opportunities, particularly for firms with global operations, firms already accustomed to registered products and firms willing to step up to the increased requirements.

The shift in global economic power from developed regions to developing regions drives continued focus on sovereign investors, fast-growing institutions and the emerging middle classes in new markets. These groups of investors will increasingly seek branded multi-capability firms. A number of alternative firms exist in this category in 2015, while others will aspire to join them in the 2020s through various growth strategies.

The sovereign investor channel

By 2020, sovereign investor assets are projected to grow by 6.2% to hit \$15.3tn.

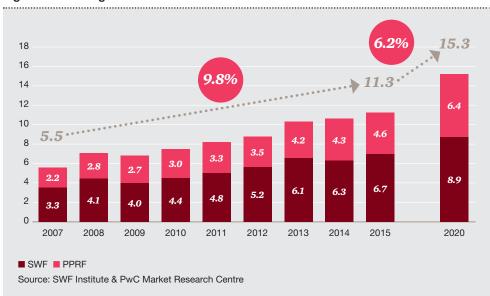
Geographically and economically diverse sovereign investors will require a highly bespoke approach due, in large part, to their different economic objectives. Sovereign investors, comprising sovereign wealth funds, public pension reserve funds (PPRF)² and other large pension funds, will continue to seek high levels of transparency. They will also seek high standards of governance, reporting and economic alignment with alternative firms.

Sovereign investors will also seek more in-house control and transparency over their assets. They are transitioning from a model of hiring external asset managers to talent insourcing, and are hiring experts across asset classes, industries and geographies. Where they interact with alternative firms, sovereign investors are consolidating relationships and seeking innovative ways to align both parties' economic interests.

² Source: "Sovereign Wealth and Pension Fund Issues" by Adrian Blundell-Wignall, Yu-Wei Hu and Juan Yermo. 2008

Sovereign investors require a direct and individualistic approach to earn their business.

Figure 4: Sovereign investors' assets in USD tn



Here's how:

By 2020, there will be more sovereign investor participation in alternatives with the largest increases in allocations likely to be private equity, real estate and infrastructure. Sovereign investors pay a great deal of attention to past performance, regardless of the size of the asset management firm, so distribution to sovereign investors is not limited to mega-alternative asset firms. If long-term performance is outstanding, firms of any size can secure mandates.

Sovereign investors require a direct and individualistic approach to earn their business. Alternative asset firms need to thoroughly understand these non-homogeneous institutions, their individual needs and objectives, and develop long-term relationships with them.

Alternatives and sovereign investors: a perfect fit?

Sovereign investors usually have one of three economic objectives: capital maximisation, stabilisation and economic development.

Sovereign investors with capital maximisation objectives

- Search for higher alpha and diversification
- Alternatives to reach 14% of portfolios in 2020
- Private equity allocations by 2020 are expected to increase to 38% of alternative portfolios (36% in 2015)
- Real estate is expected to increase to 41% of alternative portfolios (from 38% in 2015)
- Hedge fund allocations and derivatives are projected to decline respectively to 6% (from 10% in 2015) and 2% (from 3% in 2015)
- · Ageing populations and slower economic growth will encourage PPRFs to seek more yield and more alternatives exposure
- PPRFs will have a more limited risk appetite than sovereign wealth funds due to their explicit pension liabilities

Sovereign investors with economic development objectives

- Naturally favour infrastructure and private equity investments
- Alternatives are expected to account for 29% of sovereign investors' portfolios in 2020 with 79% of that allocation being in private equity and infrastructure

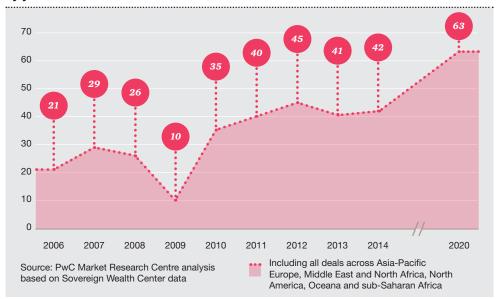
Sovereign investors with stabilisation objectives

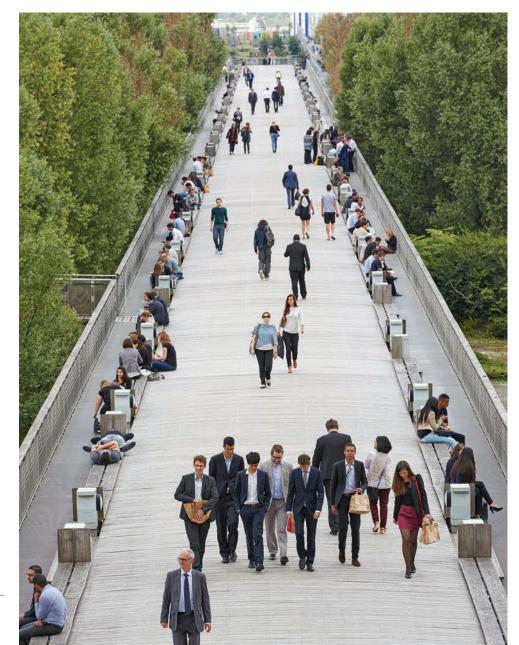
- Shorter investment time horizons
- Typical asset allocation is highly liquid assets like money market instruments and government bonds
- Risk appetite is low, so less likely to shift to alternatives

Source: PwC SWF2020 and The taxonomy of Sovereign Investment Funds - Richard Boxshall: PwC Market Research Centre analysis based on available recent financial information

As a result, the number of coinvestment deals between sovereign investors and alternative firms has risen steadily over the last decade, from an annual average of 21 co-investment deals between 2006-2009, to an annual average of 40 deals between 2010 and 2014.³ The co-investment trend will continue over the coming years, with co-investments expected to reach 63 during 2020.

Figure 5: Completed co-investments deals by sovereign investors alongside firms by year





Emerging markets channels

Latin American and Asian investors, and particularly institutional and high-net-worth investors from China, represent a significant, and in some cases largely untapped opportunity for alternative firms. Other Asian markets will present opportunities, but none will continue to dominate the focus like China, given its greater concentration of high-net-worth individuals (HNWIs).

In 2012, almost 24% of the highnet-worth assets and 34% of mass affluent assets around the globe are in Asia-Pacific. It is expected that Asia-Pacific's share of high-networth assets will increase to 29% by 2020⁴ and mass affluent assets will increase to 43%, much of that increase originating from China.

As Latin American (LatAm) countries look for alternative investments to domestic bonds, alternative firms have an opportunity to create different products that can attract HNWIs and sovereign investors. There is an appetite by investors to invest in projects in LatAm which will contribute to the development of the region and produce above-market returns.

Here's how:

With private wealth growth in emerging markets outpacing developed markets, wealth management becomes an area of explicit focus and differentiation for some alternative firms. They create bespoke products to match specific customer needs in specific emerging markets. First mover advantage is critical.

The internationalisation of the Chinese currency and Beijing's continuous reduction of investment barriers will provide opportunities for alternative asset management firms by 2020. Among changes likely to have significance for both the China and Hong Kong markets by 2020, several are already in evidence:

- The launch by a foreign entity of the first Qualified Domestic Limited Partnership (QDLP) hedge fund.
- The establishment of Shanghai-Hong Kong Stock Connect.
- The launch of duty-free zones by two Chinese provinces to encourage the establishment of financial services firms across the respective provinces.
- The Mainland-Hong Kong Mutual Recognition of Funds (MRF) initiative.

The Chinese regulatory authorities will become more knowledgeable about different fund structures leading to a fine-tuning of their technical expertise. A positive feedback loop will slowly form, giving impetus to the alternatives industry in mainland China.

In LatAm, distribution channels are concentrated among a few firms and are likely to be controlled by the biggest banks well beyond 2020. In Brazil, for example, the asset management industry is concentrated among a few big firms with the top ten asset managers responsible for 88% of assets under management in the country.⁵ To enhance the distribution of alternative products within the region, alternative firms will consider alliances with local asset managers and distributors.

By 2020, firms that have successfully integrated emerging market regulatory requirements into a global compliance framework will have a competitive advantage. These firms will have achieved more consistent, efficient global compliance controls, resulting in cost savings and reduced regulatory risk exposure.

Figure 6: High net worth individuals assets in USD tn

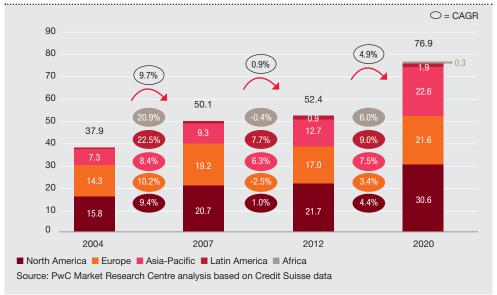
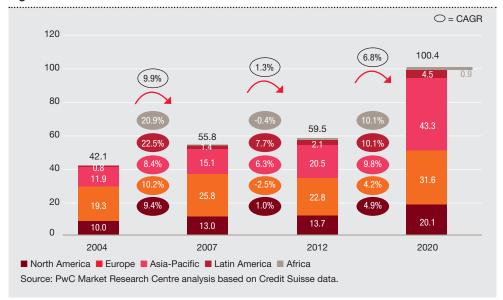


Figure 7: Mass affluent assets in USD tn



For some alternative firms, the emergence of liquid alternatives is an enabler, while for others it is a disrupter.

Given the unique portfolio liquidity needs and different (lower) fees, the questions for alternative managers are if and how to participate.

The retail channel

For some alternative firms, the emergence of liquid alternatives is an enabler, while for others it is a disrupter. Broadly speaking, traditional fund managers will dominate retail alternatives in the 2020s, as this group understands registered products and controls retail-focused platforms.

The first wave of liquid alternatives (1.0) has been largely targeted at the institutional space. The second wave (2.0) will increasingly focus on the retail space, including the fast-growing defined contribution pensions fund market. Traditional asset managers with their established distribution capabilities and trusted brands will dominate 2.0, although a number of predominantly alternative firms will also develop retail capabilities.

Here's how:

Given the nature of the liquid alternatives market and growth potential, the question for many traditional managers is how to enter the market. On the other hand, given the unique portfolio liquidity needs and different (lower) fees, the questions for alternative firms are if and how to participate.

Liquid alternatives is the epitome of convergence between retail products, which are dominated by traditional firms, and alternative products, which are dominated by alternative firms. It therefore represents the potential for a classic alliance of distributor and manufacturer. In a fragmented market where traditional firms and alternative firms do not yet see each other as peers, they will need to figure out how to coexist and even work together. In some

cases, traditional firms will build or buy turnkey platforms to attract alternative portfolio management talent. In other cases, they will leverage their established brands and distribution capabilities to effectively borrow portfolio management talent from alternative firms through sub-advisory and other relationships.

Liquid alternatives pose a number of risks, as well as opportunities. Both alternative and traditional firms will carefully weigh whether they are really committed to marketing alternative products to retail investors. In particular, they consider whether the core alternative strategy can be adapted to a registered product and whether the firm has the necessary portfolio management, operational and marketing skills to offer a profitable and compliant liquid alternatives fund.

Traditional and alternative firms that decide to follow the retail route may have to devise a business plan that is starkly different to their usual modus operandi. In the light of the attention from regulators, asset management firms should enter this new line of business well-prepared from a compliance and organisational standpoint. This includes:

- training
- · assessing customer suitability
- marketing and education
- building out compliance and surveillance, and
- robust liquidity risk management.

Liquid alternatives: from trickle to torrent

According to Morningstar, liquid alternatives assets have recorded a CAGR of 50% between 2008 to 2014, from USD 27 billion in 2008 to USD 304 billion in 2014. The number of funds grew by 226% during the same period from 482 to 1,569 funds. PwC estimates the demand for liquid alternative mutual funds to surge from \$260bn at the end of 2013 to around \$664bn by 2020. In addition, while assets in European hedge funds have grown by 13% a year since 2008, alternative UCITS - the European equivalent of US alternative mutual funds - have grown by more than 30% a year over the same period.

Source: Morningstar Alternative Investments Observer 2009/2015





Build, buy or borrow

Differentiation, relationships and branding will become major planks of business strategy in the alternatives sector. Over the next few years, firms will make major decisions about their business models, explicitly choosing the kind of business they seek to be and developing their business by building, buying or borrowing capabilities.

Structurally, the alternatives market in 2020 will be more clearly focused on three key business models:

Diversified alternative firms.

These large firms play across multiple alternative asset classes and products, including hedge funds, private equity, credit, real estate, mezzanine and infrastructure. They target predominantly institutional investors looking for an investment partner with a diversified offering and experience across asset classes. These diversified firms leverage synergies across the group by crossselling to clients and sharing ideas, insights and capabilities. They stretch their brand and capabilities across alternative asset classes, seeking to add value through a portfolio approach that materially exceeds the sum of its parts.

Becoming a diversified alternative firm may be an obvious choice for many large traditional asset managers as they continue to push aggressively into the alternative space, assembling multi-asset class businesses from within their ranks and filling gaps where needed. It is also a strategy that the largest alternative firms will continue to pursue in search of growth.

Specialty firms. There will still be strong competition among specialist firms, which will devote their resources to becoming best-in-class (e.g. a dedicated hedge fund, private equity or real estate firm keeping to their core competency). These firms create very strong core competencies to become the leading player in

selected and differentiated strategies. Their rationale is that focusing on a set of core competencies provides the best basis for outperformance, and that investors are willing to pay for superior investment capabilities in selected areas. They will primarily target the largest institutional allocators globally, offering bespoke and heavily customised solutions.

Multi-strategy firms. In the middle of these two extremes are a large number of multi-strategy firms. These firms concentrate on generating strong returns and low volatility through strong investment teams and dynamic asset allocation. They invest in leveraging the multistrategy structure to expand into new, often tangential, investment strategies, creating a repeatable model (e.g. a credit manager moving into direct lending). They believe that growing AUM significantly will require offering different strategies within the same asset class. They have the resources, capabilities and credibility to deliver competitive performance in other styles. Their current operating platform is flexible enough to accommodate such a strategy.

Here's how:

Alternative firms have often functioned as manufacturers. sponsors and/or distributors of their own products, and some will stay that way. But in the lead up to 2020 and beyond, these roles evolve. Alternative firms looking to access key investor channels will increasingly sell their products through distributors or other intermediaries. Multi-strategy and diversified alternatives firms will access specialised alternative asset management capabilities in order to broaden their asset class, strategy and/or products offerings.

Regardless of which business model each firm adopts, they will pursue one or more of three possible growth strategies: building, buying or borrowing.

The buyers will primarily comprise managers who are looking to expand their alternative capabilities across asset classes and strategies by acquiring talent, track record and scale overnight. As discussed in PwC's Asset Management M&A trends paper,⁶ alternative asset management deals will dominate the M&A market. And this deal flow will not be solely US domestic activity, as 10 of the 35 deals in 2014 involved non-US buyers looking outside their home territories for attractive acquisition targets.

Large traditional firms will build out their alternative platforms, while large alternative firms will buy to fill capability gaps. Some will opt for a decentralised network of dispersed alternative asset management capabilities such as the multiboutique model. Others will seek an integrated model. Still others will follow a mixed model.

The borrowers believe that they can best achieve their growth strategy by 'partnering' with other institutions including other asset managers, wealth managers, private banks and fund-of-funds, to expand their capabilities and distribution channels. These relationships will take many forms including distribution arrangements, joint ventures and sub-advisory relationships.

Specialty firms need to consider whether to allow their differentiated capabilities to be bought or borrowed by larger firms looking to supplement their asset class or strategy offerings.

Figure 8: US alternative asset management deal volume by subsector

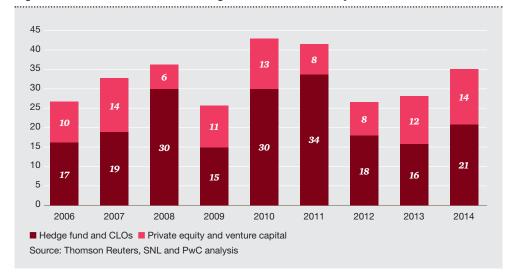
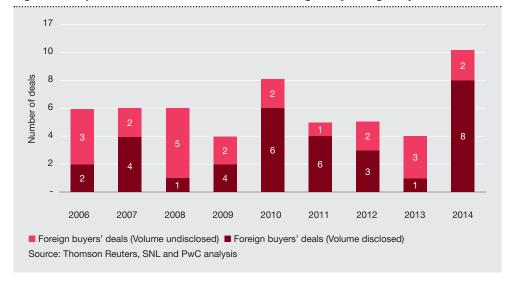


Figure 9: Acquisitions of US alternative asset managers by foreign buyers



For them, teaming up with a larger manager or a distributor can help them access the necessary resources, scale and experience to reach new investor channels. Traditional firms will continue to manufacture and distribute their own products, but they will increasingly decide to buy or borrow the capabilities of dedicated alternatives firms. Diversified alternative firms and multi-strategy firms will also decide on a combination of build, buy and borrow strategies to expand their capabilities.

Regardless of which business model each firm adopts, they will pursue one or more of three possible growth strategies: building, buying or borrowing.



By 2020, alternative asset management firms will effectively decide which approach, or approaches, to take and then focus their resources into developing the appropriate strategies, products and operations.

More standardisation, more customisation

Firms will increasingly evaluate their product development strategies in the years leading up to 2020 in accordance with their overall business objectives. New products will only be launched after an established product development process that considers strategic fit, the marginal costs and ongoing legal, tax, operational and compliance issues.

Alternative asset management firms by 2020 will respond to three key investor demands for products:

- The ongoing demand by the largest institutional investors (e.g. sovereign investors) for made-to-order products with greater customisation.
- Next-generation commingled funds that are focused on outcomes.
- Demand for the creation and servicing of liquid alternative funds for institutional investors and retail investors including investors in developed markets and the newly wealthy in emerging markets seeking alternative strategies.

As a result of these demands, alternative firms will be pulled in different directions. On the one hand, they must show their commitment to finding bespoke solutions for their largest, most strategic institutional investors. On the other hand, they must adapt commingled funds to serve the changing demands of both institutional and private wealth investors. At the same time, they must position themselves to attract the potentially huge (and stable) asset flows from permanent capital vehicles and the world's mass affluent.

By 2020, alternative firms will effectively decide which approach, or approaches, to take and then focus their resources into developing the appropriate strategies, products and operations.

Here's how:

Customised solutions are standard

The most sophisticated institutional investors in 2020 will have more complex structures and objectives and demand highly customised alternative solutions.

In a 2014 report,⁷ more than half of the 220 hedge fund investors surveyed said they planned to grow allocations via customised mandates, compared to only 6% who made the same assertion in 2013.

Rather than merely gaining exposure to specific asset classes, institutional investors will increasingly seek outcome-based investment solutions that seek to deliver target returns or predefined cash flows over various durations.

Investors' decisions will also be driven by environmental and social considerations. For example, in a recent survey, 71% of limited partners interviewed said they would decline to participate in a fundraising, or would turn down a co-investment opportunity where environmental, social and governance (ESG) risk issues were present. In addition, 18% of those interviewed also noted that they had withdrawn from an investment or withheld capital on ESG grounds. As noted in the survey, 97% of limited partners interviewed believed that responsible investment will increase in importance over the next few years. It is expected that the amount of investors who will continue to require socially responsible investing as part of side letter arrangements will increase and, in response, managers will have to adopt policies and practices to accommodate these requirements.8

⁷ Waiting to Exhale - Barclays Strategic Consulting, 2014

⁸ PwC Bridging the Gap: Aligning the Responsible Investment interests of Limited Partners and General Partners, May 2015

Partnership models evolve

The shift from standardised products to customised solutions drives more interaction between asset managers and their clients. Asset managers effectively partner with institutional investors to address bespoke needs. These new relationships will bring with them even greater alignment of interest in terms of economics, transparency, service and risk management.

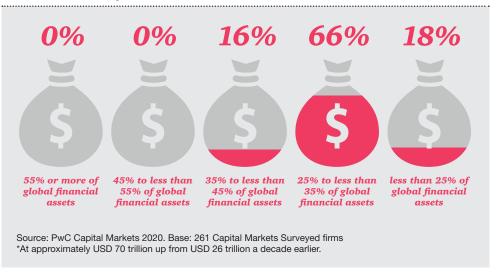
In the case of the largest and most sophisticated institutional investors, the discussion of co-investing and fees will by 2020 have evolved into a discussion of economic sharing to align interests. This takes the form of vertically integrated structural and economic relationships to facilitate economic and risk-sharing rather than the contractual fee for services model. Additionally, hedge funds seek greater alignment of interests by trading fee levels against AUM and liquidity. Alternative firms launch more permanent capital vehicles, such as business development companies (BDCs), Real Estate Investment Trusts (REITs) and public vehicles, to assure a more stable capital base.

Regulation and tax

Regulation and tax are also part of customised alternative solutions. For example, as a consequence of asset management inhabiting the space once occupied by banks, regulators and tax authorities are being forced to address certain new investment activities (e.g. direct lending) which traditionally had been conducted by non-investment entities such as banks. In these jurisdictions, appropriate tax structures, risk appetites and reporting must be considered.

For all investor types, alignment with global tax rules will be a major consideration, given the increasing cross-border nature of investors and investments.

Figure 10: As per the Financial Stability Board (FSB), shadow banking assets accounted for 25% of the global financial assets in 2013*. By 2020 do you think that shadow banking assets will be:



Filling the funding gap

In 2020 and beyond, alternative firms continue to move into areas traditionally dominated by banks, such as lending, securitisation and financing. This provides opportunities for next-generation commingled funds that focus more closely on outcomes. The greater range of assets and the more diverse income streams allow the creation of a number of outcome 'buckets' that each meet the needs of a different investor type.

The funding gap will present considerable new opportunities. In its 2014 Global Banking Monitoring report, the Financial Stability Board (FSB) noted that shadow banking assets accounted for 25% of total global financial assets. The FSB also pointed out that some of the most rapid growth (18%) among non-bank financial intermediaries engaged in shadow banking activities was from investment funds. In addition, a report⁹ showed that a large majority (82%) of capital markets industry executives expect shadow banking assets to grow by 2020, with some of that growth coming from hedge and private equity funds. In China, where shadow banking - also known as the 'private trust' sector

In the case of the largest and most sophisticated institutional investors, the discussion of co-investing and fees has by 2020 evolved into a discussion of economic sharing to align interests.



Some alternative firms create partnerships with banks and the largest institutional investors, providing integrated expertise in managing new asset classes and building products that often have limited liquidity but offer steady income flows.

 has grown to represent 20% of all banking transactions by 2014, shadow banking is also likely to grow rapidly by 2020, despite new regulatory measures.

The shift by asset management firms to fill the funding gap will be encouraged by some governments and also by sophisticated institutional investors who seek access to strategies and the illiquidity risk premium, which are not always available to other investors.

Ongoing government deficits provide opportunities to invest in infrastructure and other projects traditionally done through public programmes. As well as creating commingled funds, some alternative firms create partnerships with banks and the largest institutional investors, providing integrated expertise in managing new asset classes and building products which often have limited liquidity but offer steady income flows. This kind of partnership alleviates the pressure on banks' balance sheets, while harnessing their expertise.

Creation and servicing of retail funds

By 2020, the asset management industry will have invested heavily in the development of retailoriented products and business models to support the demand for liquid alternatives, meaning the number of sponsors of these products will expand considerably from 2015 levels. Traditional asset management firms, who have already begun to expand their alternatives product sets in 2015, will be in a race with alternative firms to provide multi-asset solutions that include alternative strategies.

Both alternative and traditional firms must carefully prepare before launching liquid alternative funds aimed at retail investors, in order to capitalise on opportunities while minimising reputational risk. To this end, they typically conduct a number of pre-launch assessments:

- Preliminary vetting: The types of alternative products that are in demand and the investor channels to target.
- Regulatory 'buy-in': Firms discuss new products with regulators in advance.
- New product approval: Includes approval from key stakeholders such as operations, risk management and compliance, senior management and the board of directors. Regulators expect to see evidence of this process. As alternative products are new for the retail segment, they require greater due diligence by the new products' committee, which should focus on reputational, regulatory and legal risks including valuation practices and reporting capabilities.
- Technology and operations:
 Operations are agile and adaptable to accept new products and assess new service requirements.

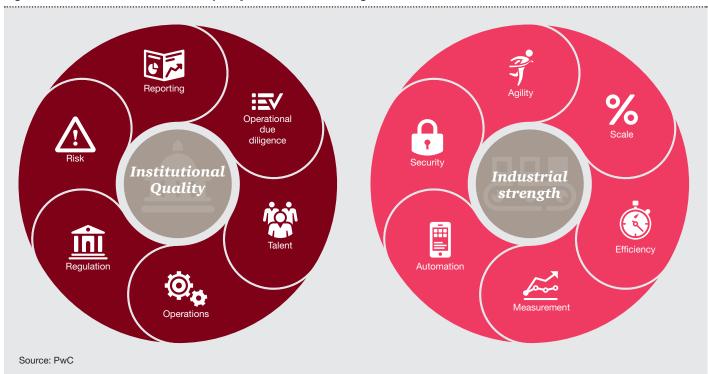


Figure 11: Attributes of institutional quality and industrial strength

From institutional quality to industrial strength

Successful companies in the manufacturing sector can readily adapt to product changes and the level of production. In a rapidly evolving environment, they are able to regularly overhaul their operations and retool their factories. They do this cost-efficiently and without disruption to operations.

Likewise, alternative asset management firms need to be adaptable to changes in their product mix and the demands on their operations. From now until 2020 and beyond, they will consider how they can revamp their operations to provide customised solutions to institutional clients, support new asset classes, products and investors, and keep pace with regulatory and tax requirements. They will seek to do all this in a costeffective way that is not disruptive to their day-to-day business and in a way that focuses resolutely on profitability.

Owners, investors and regulators will raise their expectations beyond the standard of 'institutional quality'. Having institutionalised their businesses, alternative firms will seek the higher standard of 'industrial strength'.

Global regulators too will require varying and ever-increasing degrees of risk management, stress-testing and transition planning. Oversight of the firm's risk management function will remain particularly acute, with an emphasis on independence from portfolio management.

To match these expectations and get to the next level – whether in terms of profitability, growth or diversification – alternative firms increasingly recognise that incremental change won't necessarily move the needle. In some cases, transformational change is required.

Asking the tough questions

The key question many managers will ask themselves is: Can I be a top-quartile investment performer and a top-quartile profit performer too? In other words, the strategy must be a strong performer but, in the final analysis, profit and compensation depend on collecting fees and managing costs. This, in turn, will largely depend on the effectiveness of the manager's infrastructure and operations.

Owners, investors and regulators will raise their expectations beyond the standard of 'institutional quality'. Having institutionalised their businesses, alternative firms will seek the higher standard of 'industrial strength'.

Alternative firms increasingly recognise that incremental change won't necessarily move the needle. In some cases, transformational change is required.

Managing operational capabilities will require equal parts art and science.

The search for agility

Viraj Patel, the head of operations for ALT Asset Management LLC, an alternative firm has a problem. 40 Act LLC, a large traditional firm has taken a significant stake in ALT Asset Management LLC with the goal of launching a liquid alternative strategy which is in huge demand by 40 Act LLC investors.

Viraj tells his CEO Barbara Wassner: "I don't know if we can handle all that growth right now." After 2009, Viraj had overseen a 10% reduction in staff numbers and his operations team is still stretched years later.

"Well Viraj, it sounds like we need to hire some new people," said Barbara. "Let me know what you need. But bear in mind we have to be efficient - we are only getting 100bps on these funds."

Viraj didn't simply want to hire a bunch of new people, he wanted to create a strategy that could dynamically react to changing needs. He wants to make operations more agile and scalable. But how to do it? He didn't have a sense of ALT's unique 'complexity profile' and how that would change with its growth over the coming years. Equally, he was not entirely sure how much more he could get out of his in-house resources and how to best access external expertise, because ALT had never thought about its unique 'capability profile'. "Enough is enough," Viraj said to himself. "No more ad hoc decisions, we're going to get more scientific." He immediately started to write a memo to Barbara, on the necessity of building more agility into ALT's operations.

Fees will continue to come under pressure as firms enter different markets and offer different - and, sometimes, lower fee or lower margin – products. So an increase in AUM will likely not result in a corresponding increase in profitability. Pressure on margins reinforces the need for firms to build agile, scalable and economically viable infrastructure.

An agile operating model

Management company executives will expect their support functions to be agile and scalable with a high degree of efficiency and operating leverage.

Here's how:

Many alternative firms in 2020 will have moved beyond a reactive approach to a more proactive and data-informed operational strategy. Managing operational capabilities will require equal parts art and science. Decisions that have been made primarily based on experience and gut will be informed by specific, objective data. In PwC's Global Data & Analytics Survey 2014: Big Decisions, 94% of respondents representing companies across a number of industries, said that senior management believe they are prepared to make their next big decision but just 38% relied on data and analytics to do so.

An agile operating model places a greater emphasis on an objective understanding of an alternative manager's unique operational demands and aligning it with their specific operational capabilities. More specifically, firms will increasingly define their own 'complexity profile', which is shaped by the external and internal inputs that drive complexity in their businesses. These inputs include operational demand drivers such as the mix of asset classes, fund and fee structures, transactional volume, regulatory requirements, investor demands, reporting and so on. They will then overlay the complexity profile with a 'capability profile'. The capability profile is

comprised of available operational capabilities, such as the operating model, in-house competencies, the degree of automation and service providers. By overlaying the capability profile on the complexity profile, it will be possible to see if and how changes to the complexity profile can be proactively managed. The overlap of the two profiles determines the agility of the alternative firm.

Firms will utilise more data-driven decision-making tools, including modelling of headcount, variable costs and margins, to create these profiles. They will combine the measurable, objective data these tools provide with their own experience and judgement to make more strategic decisions about the operational direction of their business.

Process improvement

An agile operating model requires firms to streamline operations more aggressively, automate processes and delete inefficiencies.

Here's how:

To do this, firms build in more resource bandwidth with change agents who can drive process improvement while others continue to drive the day-to-day operations.

Value-enhancing opportunities will include:

- Improving the ability to identify and measure cost reduction opportunities.
- Creating greater automated cross-functional workflow, both internally and with key service providers.
- Instituting straight-throughprocessing related to the extraction and transformation of data.
- Designing automated environments for routine and repeatable processes.
- · Identifying and segregating high-volume, low-risk processes, in order to outsource or move to lower cost locations.

- Reassessing the organisational design across key areas to ensure there is the right balance of vertical (fund/entity) vs. horizontal (functional) orientation.
- Bifurcating roles where operational demands and unique skill sets highlight the need to do so. Examples include separating the reporting function from the accounting group and separating investor servicing from investor relations.
- Enhancing management insight into the costs, profitability and capital required to operate, or invest in new business segments, geographies or products.
- Using data analytics tools to identify and understand operational, tax or compliance anomalies and make decisions based on them.

Controlling operational risk

Alternative firms in the 2020s have undertaken systematic reassessments to identify, prioritise and manage their key business and operational risks, and to enhance the effectiveness of their operations. The results of these risk assessments will provide a clearer picture of operational risks and allow management to focus on issues that really matter.

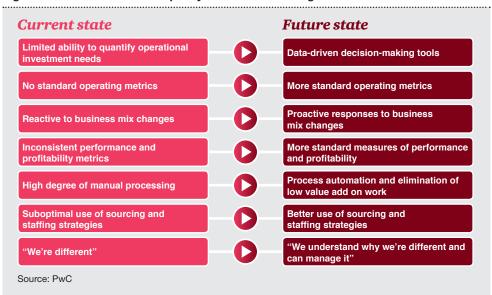
Here's how:

Improvement initiatives are targeted first at functions under high operational pressure and consuming a high percentage of fee income. Targeted initiatives allow firms to identify stress points in their operations, such as immature IT applications, key person dependency, and ad hoc processes supporting the end-to-end lifecycle. There will be a reduced reliance on spreadsheets, manual processes and individuals with a high degree of institutional knowledge.

Getting to grips with complexity and capabilities

A day in the life of a functional manager in 2020 will be very different from today. Dashboard reporting allows them to monitor, measure and manage operations in a proactive manner. Predictive models allow them to better understand how changes in operational demand drivers relating to new products, new strategies, new distribution channels and volume of transactions will impact their complexity profile and inform strategic planning. A more data-informed understanding of operational demands and operational costs allows managers to better understand the marginal costs of launching and managing different products. As a result, senior management will better understand the capability profile of their support functions and functional managers are better able to quantify the return on investments needed to create operating leverage, efficiency and scalability.

Figure 12: From institutional quality to industrial strength



Alternative firms to build dynamic compliance functions

The main ways alternative firms will build more dynamic compliance activities are:

- Building and enhancing controls and processes around their regulatory reporting as they do for other critical business activities. This requires greater collaboration between those with the subject matter expertise (compliance and legal) and those with reporting and analytical skills and control mindset (fund accounting).
- Investing in broader compliance resources with interdisciplinary skills extending beyond legal and compliance into analytics, reporting and technology.
- Pushing certain routine compliance activities into business units.
- Rationalising and reconciling the myriad reporting requirements.
- Developing a flexible data strategy to allow for centralised data capture either inhouse or via outsourced solutions.
- Creating more systematic compliance programmes and checklists including automated record retention and filing, reminders and summary of information for proper review.
- Shifting from a 'rules-based' approach to compliance to a 'principles-based' approach for more consistent controls on a global basis.
- Investing in local expertise and creating local processes as alternative firms target investors from less saturated markets and adapt to new regulatory requirements.



The right resources, in the right places

Organisational redesign and sourcing decisions are often approached merely as exercises to reduce costs. In fact, they are much more than that. These decisions will increasingly reflect an analysis of the resources needed to remain competitive and drive both quality and profitability for the longer term. Put simply, it is about planning to make sure an organisation has the right resources, in the right places, at the right time.

There is no universal blueprint for organisational design. Each alternative firm has its own DNA and must develop its own approach, although common concepts and design elements permeate many organisations.

Key variables alternative firms will address by 2020 to inform organisational design include the volume and type of transactions, the complexity of the asset classes and investment strategies, the predictability of the activity and the nature of the distribution channels. Other considerations include the regulatory and tax environments in which the firm is operating, the availability of talent and the proximity needed to the investment process.

As a result of the measurement and analysis of these and other variables, by 2020 we see a range of organisational changes across the alternatives spectrum.

Here's how:

The key organisational design elements that will be adopted by alternative firms in 2020 and beyond include:

- Transaction centres. Some large firms will shift middle and back offices to offshore transaction centres that support 'businessagnostic' activities. The activities best served by these centres are routine, repeatable transactions (e.g. cash reconciliations, loan administration, asset custody and security master maintenance). These centres function as highvolume processing centres, driving scale by reducing costs per unit, facilitating capacity increases. Other firms may decide to operate near-shore operational hubs to support some or all of the above organisational components.
- Centres of excellence. By contrast, centres of excellence focus on higher value activities than would be supported by a transaction centre. For example, a transaction centre may perform cash reconciliations while the centre of excellence is responsible for processing, account set-up and maintenance. The ethos of these centres is 'practise makes perfect'. They ensure that firms avoid multiple handoffs, are better able to handle peak/valley problems, and can build deep expertise to use across the firm. These centres can be organised by function (horizontal orientation) or business/segment (vertical orientation). For example, a functional model may process all the capital activity for a private equity, real estate and a hedge fund while a business/segment model would handle the end-toend servicing for each fund type.

- Hybrid models. Some firms will opt for a combination of functional and business-aligned models. This may lead to the creation of business segments by strategy or fund type, overseen by the fund CFO/controller. And, these may be functional teams, which support multiple business segments, strategies or funds.
- Dedicated teams. Firms
 increasingly build stand-alone
 teams to support underserved
 areas such as new fund launches
 and client onboarding, driving
 process and technology best
 practices and integrating between
 multiple stakeholders.
- **Substance.** The ongoing impact of regulation and tax will also drive organisational change. Maintaining an adequate level of local activity and genuine substance in key jurisdictions is a growing focus of managers in addressing tax and regulatory developments. AIFMD, for instance, may lead non-EU alternative firms, particularly those based in the US, to create new AIFM entities in Europe or to transform an existing marketing and research unit into an AIFM. These new entities must have substance for operations, regulatory and risk management matters.

Holistic view of sourcing

Sourcing has long been a key driver of profitability in other industries, and a way to improve operating leverage and access specific skills and information. Hedge fund firms, in particular, have embraced the outsourcing of non-core activities. But some firms leading up to the 2020s will recognise the importance of a broader sourcing strategy for their operations. The challenge for alternative firms when assessing their operations is to avoid implementing one-dimensional initiatives aimed

purely at reducing costs. This leads to underinvestment in operations, resulting in infrastructure that is inflexible and unable to scale for complexity, regulatory requirements and growth.

Here's how:

Alternative firms by 2020 will make more effective use of right-sourcing strategies, using third-party administrators, other business process outsourcing firms, and other vendors to create variable costing models and buy in key skills. Right-sourcing is the process by which an asset management firm determines how to most efficiently and effectively provide back- and middle-office services.

By 2020, a number of new solutions will take hold to increase standardisation, enhance control and promote transparency for alternative firms and the broader capital markets. These include financial market utilities (FMUs), emerging and nascent technologies, and utility-like platforms in areas such as Know Your Customer, anti-money laundering, and other risk and regulatory requirements. By 2020, we will also see a number of specialised operations and technology carve-outs run as separate companies, and in combination with one another, to provide specialised services to multiple players across the alternatives industry.

In a growth environment, recruiting and retaining talent is a key issue. Anticipating talent shortages in growing areas like operations, tax and compliance, alternative firms will make right-sourcing in these key areas a strategic focus.

Most hedge fund and hybrid fund asset management firms outsource at least one back-office function to a third-party service provider in 2015.

The emergence of financial market utilities

In response to new regulation, by 2020, incumbent and emergent financial market utilities (FMUs) will have expanded across the capital markets value chain and will play an increasing role with alternative firms. These FMUs will expand from those that are mandated in the capital markets (e.g. trading, clearing and settlement activities) to those that facilitate and lower the cost and operational burden of processes such as investor onboarding and other investor data and documentation challenges. Many, if not most, of these emerging utilities will be owned by different consortiums of financial institutions, existing FMUs and financial technology players. The FMUs and the entities that own them will themselves pursue growth through build or buy strategies to complement core offerings and create new service models for alternative firms.

Source: PwC Capital Markets 2020, will it change for good?

Key performance indicators are key to sourcing

Alternative managers will learn to leverage detailed service level agreements (SLAs) internally and externally to manage key processes, controls and responsiveness. They will establish a framework that defines services and key performance indicators (KPIs) to systematically measure quality and timeliness.



The location of investment talent has long been the primary driver around firm location decisions... other factors such as regulatory and tax matters, the availability of talent and cost will become more important inputs into the decision about where resources are strategically located.

The use of third-party administrators will by 2020 be more common for private equity firms too. Today, alternative firms select administrators primarily based on service levels, capabilities and pricing. Cultural fit, best-of-breed technology, reputation and brand, stability and ability to scale will become more important factors in the administrator selection process by 2020. The ability of administrators to leverage their scale to invest heavily in technology and innovation will become a compelling part of their value proposition.

Location, location

The location of investment talent has long been the primary driver around firm location decisions. Simply stated, the back office has been tethered to the front office. But, by 2020, this close proximity of the back office to the front office will not be a given. Other factors such as regulatory and tax matters, the availability of talent and cost will become more important inputs into the decisions about where resources are strategically located. Already today, alternative firms are creating hubs in Hong Kong, Singapore, Ireland, Luxembourg and the Netherlands, which are being used to both invest and combine substance in a tax-efficient manner. At the same time, consideration is also being given to the regulatory implications of legislation such as AIFMD and, in the future, the Asia funds passport. By 2020, therefore, organisational design will be a decision based on satisfying not just the preference and goals of the front office, but the needs of the middle and back office too.



It's not only about the data

Data centricity is a key business issue in 2015. By 2020, the discussion will have advanced. Leading firms have created a single 'golden' source of data, which is entirely trusted and feeds multiple applications. Making a change in a single source flows to every application. Firms move to a datacentric, self-service environment in which time is spent on the analysis of data and resulting decisionmaking, rather than on its extraction and manipulation. For those firms that are prepared, the discussion about data moves on to one that is focused on actionable data and datainformed decision-making.

Technology in 2020 will no longer be seen as a processor, but as an opportunity driver that leverages capabilities and data to provide advantages across the organisation. Key non-investment activities that will be significantly enhanced by technology improvements include:

- Tax. Alternative firms view taxes as a key operational risk. When launching new products, asset managers in 2020 will carry out full assessments of after-tax performance and tax risk. Firms will seek access to real-time data on taxes and use analytics to inform their decision-making. CFOs and tax directors will provide more tax transparency to owners and investors on a real time basis.
- Compliance. Technology will enhance compliance platforms by enhancing data-gathering techniques and using dashboards to convert the analyst's role from clearing exceptions to that of a forensic investigator and an analytics expert.

Data dashboards hand control to compliance

A day in the life of a compliance analyst in 2020 will be very different from today. Instead of spending the day gathering information, manually wading through 'false positives' and responding to the latest fire drill, compliance analysts will start each day reviewing key risk and compliance metrics presented in dashboard format. Where statistics show activity away from 'expected' or out of the ordinary, they will be able to immediately drill down into the information. They will be able to tag the data with comments, have their own analysis logged for later reports, initiate a case or indicate the matter resolved.

- Cybersecurity. Firms will have built more robust defences against cyber attackers who may increasingly target alternative asset managers, given their highprofile clients and the 'richness' of data.
- Operational due diligence. Technology helps transform one of the biggest drains on resources for alternative firms and their clients - the manual and non-standardised nature of operational due diligence and related information exchange.

Here's how:

Firms expect to be able to view their tax positions and tax scenarios across their entire portfolio on a single dashboard. The overwhelming trend will be to move the tax process to a technologyenabled environment that centralises and connects existing technologies to tax-sensitised databases. The use of a central tax data hub will be the centerpiece of the tax technology eco-system for alternative firms, enabling investors to get more information and greater *Tax impact* modelling will be a critical differentiator for alternative asset managers.

The role of the tax middle office

Successful implementation of a technologyenabled tax environment depends on the maintenance of appropriate source data. Properly establishing the key data needs throughout the organisation requires tax to have a voice in the organisation's middle office. By 2020, the role of the tax middle office emerges to parallel the customary role of the middle office. Drawing on tax, accounting and operational resources and skill sets, it serves as a 'go-between' for the front and back office

The role of the tax middle office will be to ensure that the growing tax data needs of an alternative asset management firm are captured and available. The tax middle office will drive data-related synergies by capturing and tracking key attributes around deal and investment structures to facilitate tax analysis, planning, compliance and forecasting. By doing so, it links the front-office transactional tax planning and the back-office tax compliance in an integrated year-round process.

Ann Jones, the chief compliance officer for ALT Asset Management LLC is pulling up the performance analytics screen for all of ALT's funds. She notices the system has flagged a warning next to ALT's flagship fund. ALT's compliance tools profile their performance against policy rules and external benchmarks. This fund had outperformed the benchmark over the last month by 250 bps. Over the last 5 years, according to her screen, the fund typically has been in a range of plus or minus 100 bps.

The compliance tool presented Ann with the opportunity to 'approve' the warning flag or deem further investigation necessary. She decided to investigate. The tool automatically established a work item, logged Ann's response and passed it to Zhang Wei for investigation. Based on the alert, the tool prepared a standard set of screens and reports for Zhang's review as well as providing him with the functionality to drill into details as necessary. One of the standard screens given the variance to benchmark was the performance contribution analysis, highlighting the sources of performance with a comparison to the benchmark.

Zhang immediately notes that for the month of June the outsized performance is due to one single investment, in XYZ Corp. The compliance officer requests the XYZ screen for ALT, identifying who owns it personally, who has traded it personally or for the fund, and which analyst covers it. For every person who has 'touched' XYZ, he requests the individual employee relationship screens, drilling down into their knowledge and activities. This includes searching social media sites to search for relationships to anyone at XYZ. He then has the natural language processor run a scan of the taped broker conversations for the last two months for any discussion of XYZ. "Hmmm," he says to himself. The analyst covering XYZ is a social media contact of the head of R&D at XYZ. This needs further investigation...

detail faster. Meanwhile, tax professionals have more time and data available to focus on strategic tax planning initiatives that could positively impact funds' after-tax performance and the performance of the firm overall.

Technology tools also allow alternative firms and investors to monitor tax services at their service providers and understand workflow in real time. Tax departments no longer have to raise queries by phone or email, but are provided with a dashboard to follow, for example, the progress of withholding tax reclamation.

Alternative firms, via their service providers, can perform scenario testing in real time to assess the tax-sensitivity of buying and selling assets for a particular investor. Tax impact modelling will be a critical differentiator for alternative firms.

Compliance

Technology support for compliance processes in 2015 can fairly be described as an unwieldy mix of point solutions that have evolved on shoestring budgets. Each point solution is designed to address a particular regulatory requirement. It is usually developed and deployed on its own, and infrequently integrated with other compliance solutions.

Pressuring this landscape further, regulators have improved the technology used to survey market activity as well as the processes and technology used to conduct their periodic exams. The asset management industry is just beginning to come to grips with the fact that regulators have more sophisticated technology than they do.

Many technology platforms of alternative firms in 2020 can gather, integrate and draw insights from a wide variety of information sources, both inside and outside the firms. Reporting will be a key focus: although most alternative firms recognise that reporting requirements are mushrooming, for many firms, tax and regulatory reporting is not at the required level in 2015.

Further, the technology deployed can flex to adapt to new demands and new sources. Internal information resides in many, unrelated forms. Some of the information is structured such as order, execution, position and balance data. Other sources will contain unstructured information, such as research reports, expert network memorandum, phone records, emails and instant messages. Compliance technology solutions connect the dots.

Cybersecurity technology

Historical underinvestment in this important area is redressed by 2020. Most firms are highly aware of security issues and have instituted sophisticated data protection policies.

First, leadership sets the tone.
Alternative firms recognise the business risks beyond portfolio performance and market risk.
Investors are more educated about emerging operational and security risks and hold management accountable for dealing with them.

Second, alternative firms know their ecosystem better. They know that protecting the firm's revenue streams, business processes, internal information technology, intellectual property and client data goes far beyond physical walls. Firms seek to better understand the flows of all data between their firm and investors and third parties, which may include custodians, administrators, lawyers,

accountants, banks and data warehouse facilities. Firms update third-party due diligence criteria to include cybersecurity.

Third, traditional business continuity and disaster recovery plans are expanded to include the latest threats, scenarios and proper responses.

Technology for operational due diligence

By 2020, technology will have streamlined the operational due diligence process. Many manual processes are bypassed by a more bilateral technology-enabled process that avoids the need to re-key data and facilitates comparisons across alternative asset management firms.

Greater standardisation combined with digitised operational due diligence information and processes will be used to enhance transparency and facilitate information exchange, analysis and benchmarking.



Conclusion

Alternative asset management will undergo a transformation in the years to 2020 and beyond as it adjusts to a new operating and economic environment and moves towards centre stage.

The industry is highly fragmented today with great variation in strategic outlook and operating efficiency among the many firms that comprise the sector. This variation will narrow as the industry becomes more segmented. Those firms who are looking not just for growth but for sustainable growth, will develop more sophisticated market strategies while pursuing a chosen growth strategy that will allow them to acquire the necessary talent and capabilities needed. At the same time, they will have a clear strategy and create robust organisations to exploit the opportunities that will emerge in the coming years. They will, as they have today, still manage highly disparate strategies that leverage unique skillsets. But operationally they will start to look more homogenous as a group as they seek to create 'industrial strength' in their operations and processes.

Greater homogeneity will not mean that alternative firms will lose their edge. On the contrary, increasing standardisation and repeatability of key operational processes will confer durability and should lead to higher profitability in the years ahead.

Durability and profitability will be essential credentials for any alternative firm which has ambitions to follow – or lead – the industry to the centre stage of the investment landscape.

Contacts

Editorial Board

Mike Greenstein

Partner, US & Global Alternatives Leader PwC (US)

+16464713070

michael.s.greenstein@us.pwc.com

Olwyn Alexander

Partner, EMEA Alternatives Leader PwC (Ireland)

+353 (0) 1 7928719

olwyn.m.alexander@ie.pwc.com

Carlyon Knight-Evans

Partner, Asia-Pacific Alternatives Leader PwC (Hong Kong)

+852 2289 2711

carlyon.knight-evans@hk.pwc.com

Rob Mellor

Partner, Global Asset Management 2020 Leader

PwC (UK)

+44 (0) 20 7804 1385

robert.mellor@uk.pwc.com

John Siciliano

Managing Director & Asset Management

Global Strategy Lead

PwC (US)

+1 646 471 5170

john.c.siciliano@us.pwc.com

Michael Spellacy

Partner, Wealth Management

PwC (US)

+1 646 471 2076

michael.spellacy@us.pwc.com

Andrew Thorne

Partner, Asset Management

PwC (US)

+1 617 530 7606

andrew.thorne@us.pwc.com

Dariush Yazdani

Partner, Asset Management

PwC (Luxembourg)

+352 49 48 48 2191

dariush.yazdani@lu.pwc.com

Contacts for business imperatives

Choose your channels

Sovereign Investors

Oscar Teunissen

Partner, Global Sovereign Investors

Tax Leader

PwC (US)

+16464713223

oscar.teunissen@us.pwc.com

Retail

David Brown

Partner, Asset Management

PwC (UK)

david.brown@uk.pwc.com

+44 (0) 7725 704549

Peter Finnerty

Partner, US Mutual Funds Leader

PwC (US)

+1 617 530 4566

peter.finnerty@us.pwc.com

Jose-Benjamin Longree

Partner, Global Fund Distribution Leader

PwC (Luxembourg)

+352 49 48 48 2033

jose-benjamin.longree@lu.pwc.com

Emerging Markets

Justin Ong

Partner, Asia Asset Management Leader

PwC (Singapore)

+65 62363708

justin.ong@sg.pwc.com

Joao Santos

Partner, Brazil Asset Management Leader

PwC (Brazil)

+55 11 3674 2224

joao.santos@br.pwc.com

Build, buy or borrow

Sam Yildirim

Partner, Asset Management Deals Leader

PwC (US)

+1 646 471 2169

samiye.yildirim@us.pwc.com

More standardisation, more customisation

John Siciliano

Managing Director & Asset Management Global Strategy Lead

PwC (US)

+1 646 471 5170

john.c.siciliano@us.pwc.com

From institutional quality to industrial strength

Mike VanDemark

Partner, US Asset Management Technology

Leader

PwC (US)

+1 646 471 8859

michael.vandemark@us.pwc.com

The right resources in the right places

Tim Mueller

Partner, US Alternatives Advisory Leader

PwC (US)

+1 646 471 5516

timothy.mueller@us.pwc.com

Tim Wright

Partner, Asset Management

PwC (UK)

+44 (0) 20 7212 4427

tim.wright@uk.pwc.com

It's not only about the data

Technology

Julien Courbe

Partner, US Asset Management Advisory

Leader

PwC (US)

+1 646 471 4771

julien.courbe@us.pwc.com

Tax

Rob Mellor

Partner, Global Asset Management 2020

Leader

PwC (UK)

+44 (0) 20 780 41385

robert.mellor@uk.pwc.com

Will Taggart

Partner, Global Asset Management Tax

Leader

PwC (US)

+1 646 471 2780

william.taggart@us.pwc.com

Florence Yip

Partner, Asia Asset Management Tax

Leader

PwC (Hong Kong)

+852 2289 1833

florence.kf.yip@hk.pwc.com

www.pwc.com/assetmanagement PwC helps organisations and individuals create the value they're looking for. We're a network of firms in 157 countries with more than 195,000 people who are committed to delivering quality in assurance, tax and advisory services. Find out more and tell us what matters to you by visiting us at www.pwc.com. This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PwC does not accept or assume any liability, responsibility or duty of

care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

For more information on the Global Asset Management Marketing programme, contact Maya Bhatti on +44 207 213 2302 or at maya.bhatti@uk.pwc.com. © 2015 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity.

Please see www.pwc.com/structure for further details.