Global Asset Management 2016

Doubling Down on Data

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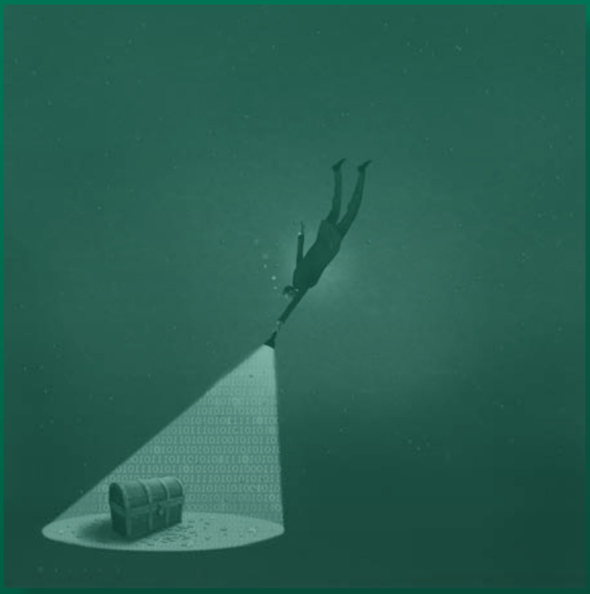

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INTRODUCTION

In 2015, the asset management industry recorded its worst performance since the 2008 financial crisis. Growth in assets under management (AuM) stalled, and net new flows of assets, revenue growth, and revenue margins all fell. Fee pressure on managers continued to rise.

Tepid markets and turbulence, which persist in 2016, are today's reality. That becomes clear at the outset of this report, The Boston Consulting Group's fourteenth annual study of the asset management industry worldwide. A summary of financial performance and a discussion of competitive trends in the first chapter emphasize that asset management continues to rank among the world's most profitable businesses. At the same time, the results highlight the continuing dependence of many managers on rising financial markets to boost asset values rather than on long-term competitive advantage to generate net new flows.

Market-driven asset growth is in the rearview mirror. That gives asset managers an opportunity—and a mandate—to assess the real state of their business and the step change in capabilities required to prevail when market growth isn't a given.

As they do so, it will become increasingly clear that competence in advanced data and analytics will define competitive advantage in the industry in the not-too-distant future. Today's managers face a fundamental and indisputable need to support their investment processes by developing increasingly advanced capabilities in these digital technologies. The alternative, for most firms, is to risk becoming irrelevant and trailing others in the ability to generate superior investment returns.

Armed with these cutting-edge techniques, asset managers have the potential to gain a significant information arbitrage advantage over their peers and are positioned to understand, monitor, and fend off the growing array of risks that confront managers, their clients, and the global financial system.

Designing a comprehensive approach to risk management, the topic of this report's second chapter, is crucial now. As the views of managers and regulators converge, firms have a clearer path to their next risk investments. This report's discussion is informed by extensive additional benchmarking, including measurement of key capabilities defining a comprehensive risk management function.

While the strategies that guide investment decisions have evolved considerably over the years, the tools and analyses underlying them have remained largely the same. Now, however, the wave of new digital technologies, techniques, and data brings huge potential advantage. Crucial to that endeavor is the development of a target operating model, the blueprint of an asset manager's ideal future state and the subject of the third and final chapter of the report. Once considered the province of just a small subset of alternative managers, advanced technologies that include machine learning, artificial intelligence, natural-language processing, and predictive reasoning are beginning to join the mainstream. They're giving fast-moving firms and financial-technology providers the ability to model scenarios that push the boundaries of traditional analytics, and they're delivering targeted insights with unprecedented precision and speed.

This report, like its predecessors, is the product of market-sizing research, an extensive benchmarking survey, and insights gathered from our activities in the marketplace. The benchmarking involved nearly 140 leading asset managers—representing $40 trillion, or more than 55%, of global AuM—and covered more than 3,000 data points per player.

The more detailed assessment of the risk management function in this year's survey included measurements of fundamental capabilities that define the risk management function, such as governance, scope, organization, data, and systems; a review of the organizational model; and detailed benchmarking of risk management staffing and spending.

The aim of our annual research is to provide new insight into the state of the industry and its underlying sources of profitability to help managers build prosperous paths to the future.

A SNAPSHOT OF THE INDUSTRY

The global asset management industry endured a year of flat growth in 2015. Weak financial markets and currency turbulence conspired to produce the industry's weakest overall performance since the 2008 financial crisis.

Global Assets Under Management Stall at $71.4 Trillion

The global value of assets under management (AuM) remained essentially flat in 2015, rising just 1%, to $71.4 trillion from $70.5 trillion, after growing 8% the year before and at an average annualized rate of 5% from 2008 through 2014.[1]

The lack of growth was due largely to continued tepid net flows and the generally negative and turbulent performance of global financial markets, which failed to buoy the value of invested assets as in prior years. At the same time, the rising value of the US dollar reduced asset values in dollar terms. (See Exhibit 1.)

Net new flows, the lifeblood of the industry's growth, dipped slightly in 2015 to 1.5% of prior-year AuM, remaining in the same range as during the three previous years.

The results underscored the continuing dependence of many managers on rising financial markets to boost their AuM rather than on long-term competitive advantage to attract net new flows.

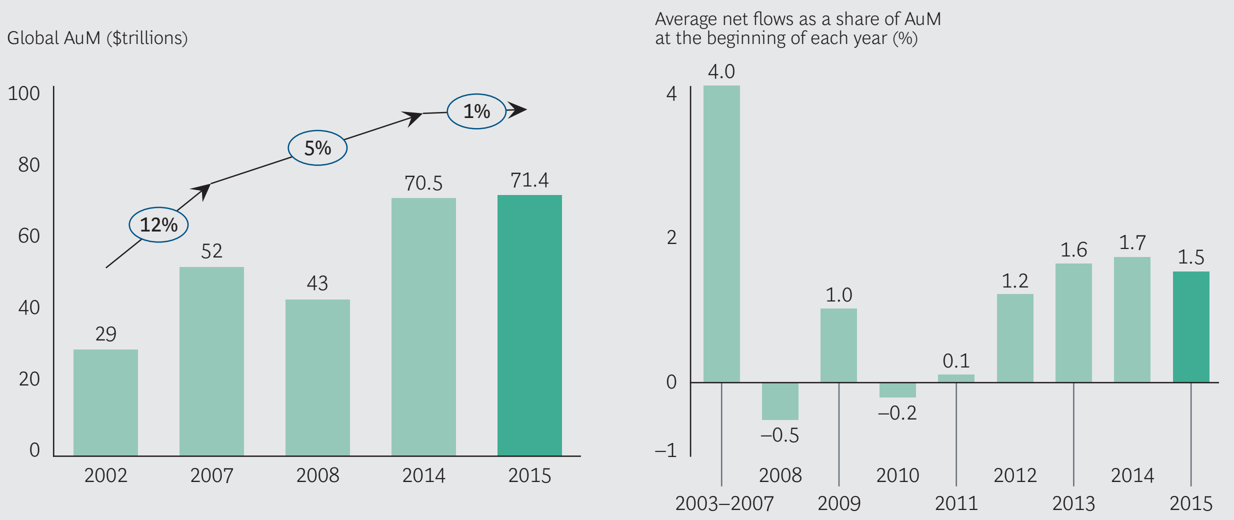
Profits remained relatively stable in 2015, rising 1% to reach $100 billion. Profits as a percentage of revenues remained at a healthy 37%, just slightly below the 2014 level, due to increased cost management by asset managers. However, because industry costs rose 4% in 2015, ahead of the 3% growth in net revenues, asset managers will need to undertake even bolder efficiency measures to slow the growth of costs and to make their cost structures more flexible in response to shifting sources of revenue growth. (See Exhibit 2.)

The results underscored dependence on rising financial markets to boost AuM.

Timid net revenue growth of 3% in absolute terms in 2015 was constrained by slow growth of only 4% in average AUM and by the decrease in overall revenue margins in basis points. After remaining essentially flat from 2010 through 2013, margins fell substantially from 28.9 basis points in 2013 to 28.1 basis points in 2014 and to 27.7 basis points in 2015, as asset managers continued to face fee compression. (See Exhibit 3.)

EXHIBIT 1 | Global AuM Growth Stalled in 2015 Owing to Limited Market Appreciation and Currency Impact

GLOBAL AuM GROWTH PAUSED AT $71.4 TRILLION... ...WHILE NET FLOWS WERE FLAT AT 1.5%



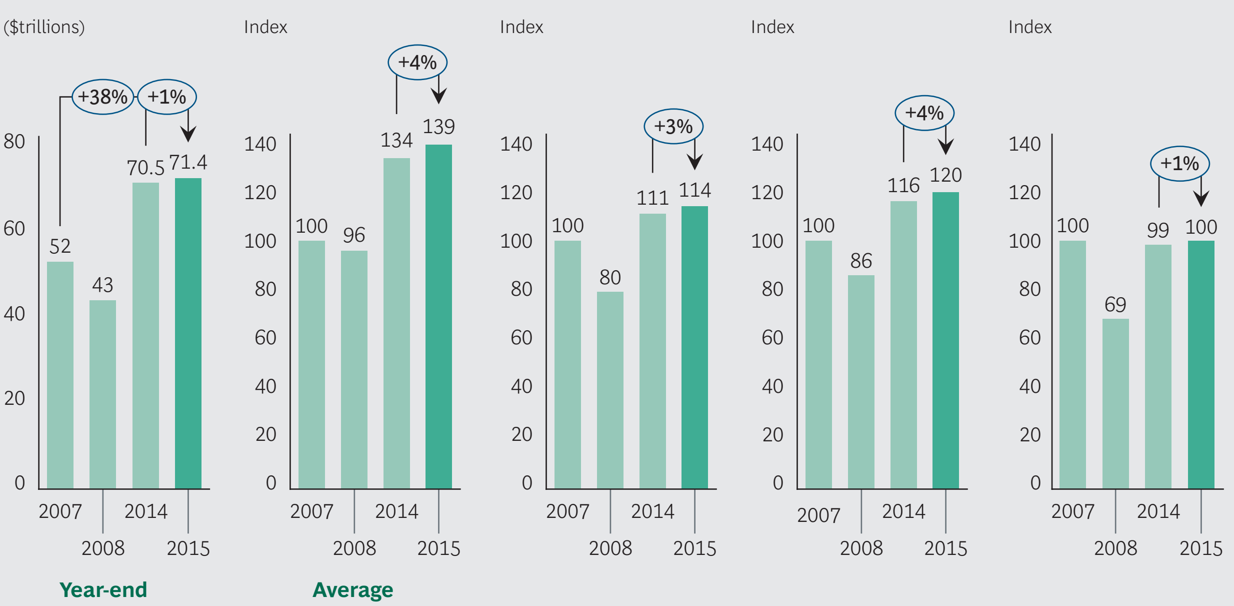
Net flows were the primary source of asset growth as markets, currencies, or both declined in many regions

Sources: BCG Global Asset Management Market-Sizing Database 2016; BCG Global Asset Management Benchmarking Database 2016.
Note: Sizing corresponds to AuM professionally managed in exchange for management fees; includes captive AuM of insurance groups or pension funds if those AuM are delegated to asset management entities with fees paid. Forty-three markets were covered globally, including offshore AuM. For all countries whose currency is not the US dollar, we applied the average 2015 US dollar exchange rate to all past years to synchronize current and historic data. AuM decreases shown for past years reflect the 2015 appreciation of the US dollar.

EXHIBIT 2 | The Global Profit Pool Remained Flat at the 2007 Level

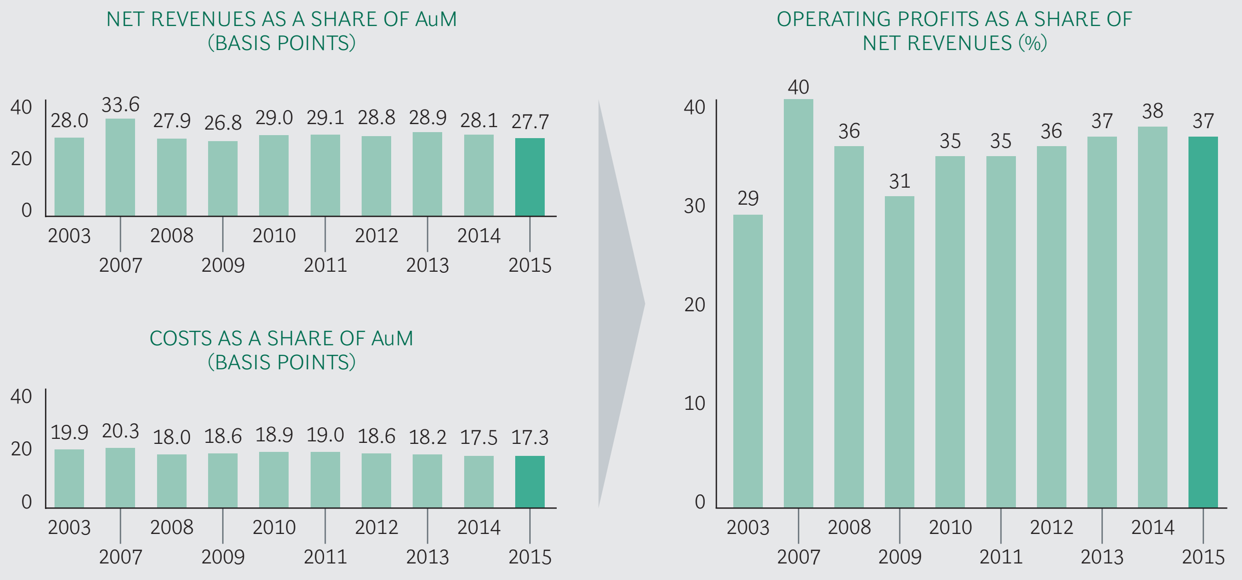
INDUSTRY COSTS GREW SLIGHTLY FASTER THAN NET REVENUES

GLOBAL MARKET AuM EVOLUTION | AVERAGE AuM | NET REVENUES[1] | COSTS | PROFIT POOL



Sources: BCG Global Asset Management Market-Sizing Database 2016; BCG Global Asset Management Benchmarking Database 2016.
Note: Values with fixed exchange rates, year-end 2015 rate. The average 2015 US dollar exchange rate has been applied to all past years to synchronize current and historic data.
[1]Management fees net of distribution costs.

Exhibit 3 | Profitability Remained at Near-Record Levels, While Net Revenues as a Share of AuM Continued to Decline



Cost margins declined more slowly than revenue margins

Source: BCG Global Asset Management Benchmarking Database 2016.
Note: Based on our benchmarking sample. Historic data has been restated to maintain consistency of past and current samples. Net revenues are management fees minus distribution costs.

The decline in revenue margins was visible across client segments. On the institutional side, the decline was driven by intense market competition and increasing vigilance by institutional investors over fees. On the retail side, distributors' growing power and regulators' push for fee transparency and fairness helped compress margins.

Notably, the net decline in revenue margins in 2015 was not the result of shifts in product mix, which historically have been the main source of decline. A decrease in active specialties and an increase in liability-driven investment and money market assets put downward pressure on revenue margins, but the pressure was offset by an increase in solutions and alternatives. Now, however, margin compression resulted from strong pressure on fees, which was particularly acute for most traditional asset managers.

The weak results in 2015 provided fresh evidence that the industry's business models are increasingly susceptible to long-term trends—a vulnerability that has been masked by the high profits earned by the industry and the historically strong growth of assets generated by strong capital markets globally.

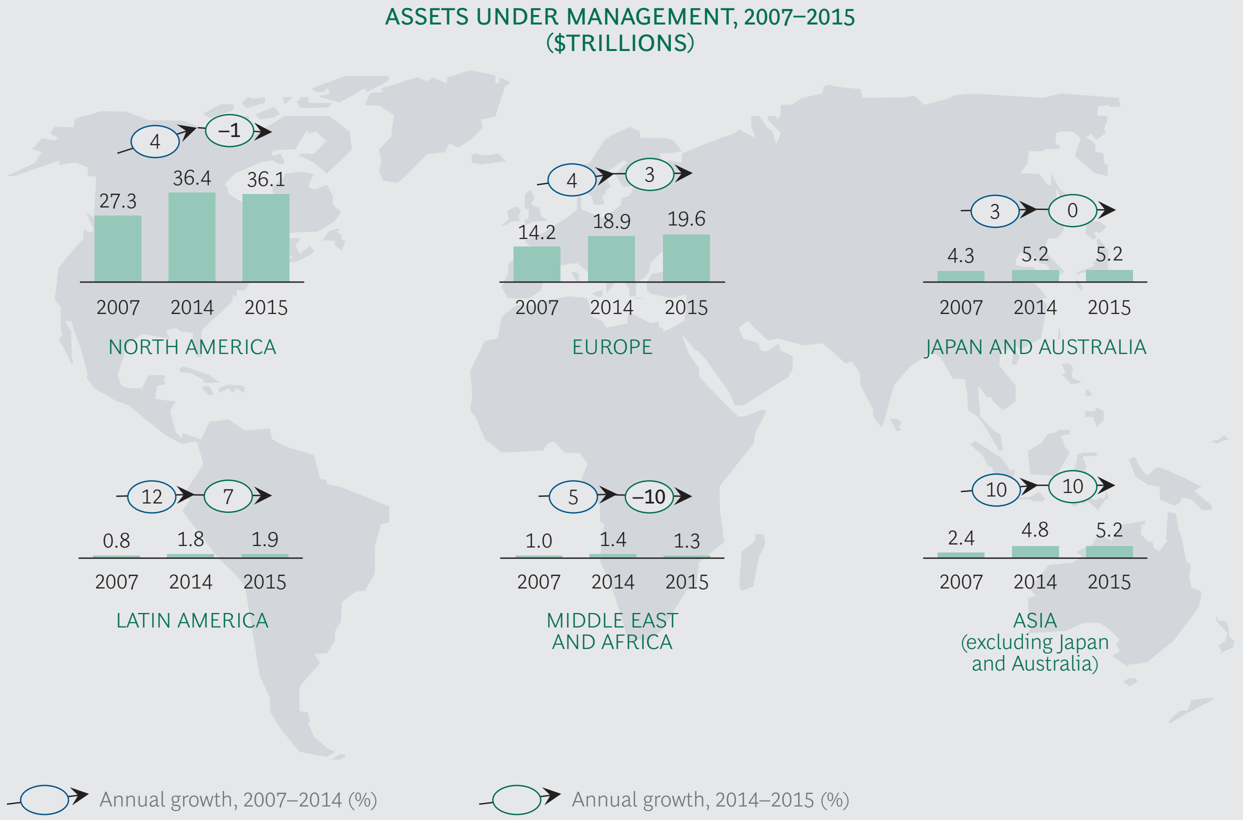
AuM Grows in Asia-Pacific, Europe, and Latin America

Growth as measured by AuM varied widely by region in 2015. AuM decreased in North America and the Middle East but rose elsewhere. Growth was modest in Europe and strong in Latin America and Asia, excluding Japan and Australia. (See Exhibit 4.)

The 10% growth of AuM in Asia was relatively robust, but it once again trailed the rapid expansion of the region's private wealth. (See *Global Wealth 2016: Navigating the New Client Landscape*, BCG report, June 2016.) Asset management's penetration of the wealth market in Asia continues to lag behind its penetration in other parts of the world, restraining the industry in the region that is setting the global pace of private-wealth expansion.

For global and regional asset managers, that disparity should signal a missed opportunity

Exhibit 4 | AuM Rose in Asia-Pacific, Europe, and Latin America but Declined in North America and the Middle East



Source: BCG Global Asset Management Market-Sizing Database 2016.
Note: Market sizing corresponds to AuM sourced from each region and professionally managed in exchange for management fees. AuM includes captive AuM of insurance groups or pension funds if those AuM are delegated to asset management entities with fees paid. Forty-three markets were covered globally, including offshore AuM. North America = Canada and the US; Europe = Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, and the UK; Asia = China, Hong Kong, India, Indonesia, Malaysia, Singapore, South Korea, Taiwan, and Thailand; Middle East and Africa = selected sovereign wealth funds of the region, Morocco, and South Africa; Latin America = Argentina, Brazil, Chile, Colombia, and Mexico. For all countries whose currency is not the US dollar, we applied the average 2015 exchange rate to all years. Some AuM numbers differ from those in prior reports owing to differences in the exchange rates and the 2015 appreciation of the US dollar.

in a region whose wealth is quickly gaining on Europe's.

The regional AuM results reflected, in part, the pattern of performance by global equity markets in 2015. Markets were largely positive in Europe—especially in France, Germany and Italy—and mostly negative elsewhere, especially in the US, the UK, China, Australia, and most emerging markets.

For fixed income, very low returns were ubiquitous globally in 2015—less than 1% on average and negative in some Asia-Pacific markets.

The US dollar's appreciation against other currencies in 2015 hurt results for international business, undercutting AuM in dollar terms. For some managers, the dollar's rise was the leading cause of declining AuM.

Net Flows Are Strong in Europe and Asia-Pacific

Net new flows of assets varied widely by region. Flows were robust in much of Europe and Asia-Pacific but tepid in the US. Flows in Europe and Asia-Pacific reached 2.5% and 3% of 2014 AuM, respectively, showing strength in most of those regions' markets. This performance marked a recovery of net flows in France, Benelux, and Eastern Europe. It reflected continued improvement in Germany, Spain, and Italy—where net flows were above 5%—as European banks resumed or accelerated mutual fund sales efforts that had been curtailed in recent years. In Asia-Pacific, China and India were among the markets where net flows exceeded 10% of prior-year AuM.

The UK was weak for a second consecutive year, with net flows at 0.4% of 2014 AuM. In the US, net flows slowed to about 1% of prior-year AuM, compared with 1.7% in 2014.

Retail's Performance Lead over Institutional Widens

The growth gap between the retail and institutional segments widened for the fourth year in a row. Retail AuM increased its share of global AuM to 40% at the end of 2015, compared with 37% at the end of 2011. The growing share reflects a significantly higher rate of net flows in the retail segment. The institutional segment attracted 2015 net inflows of only 0.3% of 2014 AuM, while the retail segment achieved 3.3%.

The retail segment continued to benefit from the worldwide rise in private wealth, although that growth slowed in nearly all regions in 2015. Overall, global wealth—led by Asia-Pacific—is expected to rise at a compound annual growth rate of 6% over the next five years, reaching $227 trillion in 2020.

Retail managers also benefited as long-term investments, such as insurance and retirement products, continued to increase their share of investors' overall savings.

The institutional segment's weak flows, in contrast, were the result of several factors. One was the "decumulation," or distribution, of both defined-benefit and defined-contribution pension plan assets. Another factor was the trend among pension funds to reduce costs by moving investment management in-house. This was especially the case for traditional products, as well as for new types of real assets—including alternatives such as infrastructure, real estate, and private debt—of the largest pension funds.

Continued flows out of sovereign wealth funds also weakened institutional performance, a reversal of the funds' recent record in attracting new money. Sovereign funds have now suffered significant outflows for two years owing to volatility in commodities—in particular, the sharp decline in oil prices.

We believe that the institutional trends described above will remain true for the medium term. These trends will benefit managers with strong access to retail and defined-contribution channels.

> The retail segment benefited from the worldwide rise in private wealth.

However, some institutional clients did generate positive net flows. Among them were European insurers that benefited from continued access to investment sales from their retail insurance clients. European insurers, separately, increasingly consider outsourcing to external investment managers to offset persistently low fixed-income yields through enhanced diversification of assets. (See the sidebar "US Insurers Consider the Alternatives.")

The Shift to Passives, Alternatives, Specialties, and Solutions Persists

Recent investment product trends accelerated in 2015 with a continuing shift from traditional active core products to passives, alternatives, specialties, and solutions. This was evident in the 2015 league tables for mutual fund flows domiciled by region. Still, the dynamics are at different maturity levels across regions. (See Exhibit 5.)

The trend to passives was particularly striking in the US, the most sophisticated and mature passive market. Of the top 15 mutual fund categories, by net flows, 8 were passive, with strength evident both in equity and fixed-income assets. Passive foreign large-blend equity was the top product category by net flows. It is interesting to note that passive is expanding beyond core asset classes into specialty asset classes.

In Europe, passives were not as strong but still showed solid growth with 5 of the top 15 mutual fund categories. This reflected inroads made by passive bond funds and also, notably, by passive specialty funds. European equities, the top equity category, attracted more net flows into passive funds than into active.

In Asia-Pacific, the shift to passives accelerated, representing 3 of the top 15 mutual fund categories. Net flows to those passive strategies nearly matched the flows to equivalent active strategies. The shift suggests that the region's investors have begun a strong swing to passives, similar to the trend in the US and Europe. Strong money market flows, particularly in China, reflect interest rate liberalization that is inducing investors to move funds out of bank deposits.

Specialties (including passively managed specialties) and solutions also remained key drivers of net flows, although less so than in recent years.

Alternatives were also among the top product categories in all three regions as the volatile

US INSURERS CONSIDER THE ALTERNATIVES

The quest to diversify assets as insurers hunt for higher returns in a low-interest-rate environment suggests that there might be a significant opportunity for asset managers—both independent and insurance owned—to curate and offer alternative investment products for small insurance companies in the US.

Although alternative investments have expanded quickly as an asset class among larger US insurers, relatively few small carriers have direct access to alternatives. That's because small players lack the scale and resources to properly assess and manage alternative providers and products—or to oversee the complex issues of diversification. A targeted offering from asset managers would allow small insurers to benefit from alternatives' potentially higher returns and greater diversification without having to allocate the billions of dollars in investments that are usually required.

Such third-party offerings could fit well with the recent trend among asset managers to profit by providing outsourced chief-investment-officer (oCIO) solutions for insurers. Instead of focusing on specific mandates within asset classes, oCIO solutions target all of an insurer's assets and liabilities and offer asset liability management and strategic asset allocation for their customers. In the case of alternatives, this would include determining the optimal exposure to alternatives—taking into account the structure of liabilities, risk, and capital allocation of the entire asset base.

For asset managers, offering oCIO services is an opportunity to monetize investments in data, analytics, and risk management capabilities that they already are undertaking on their own behalf.

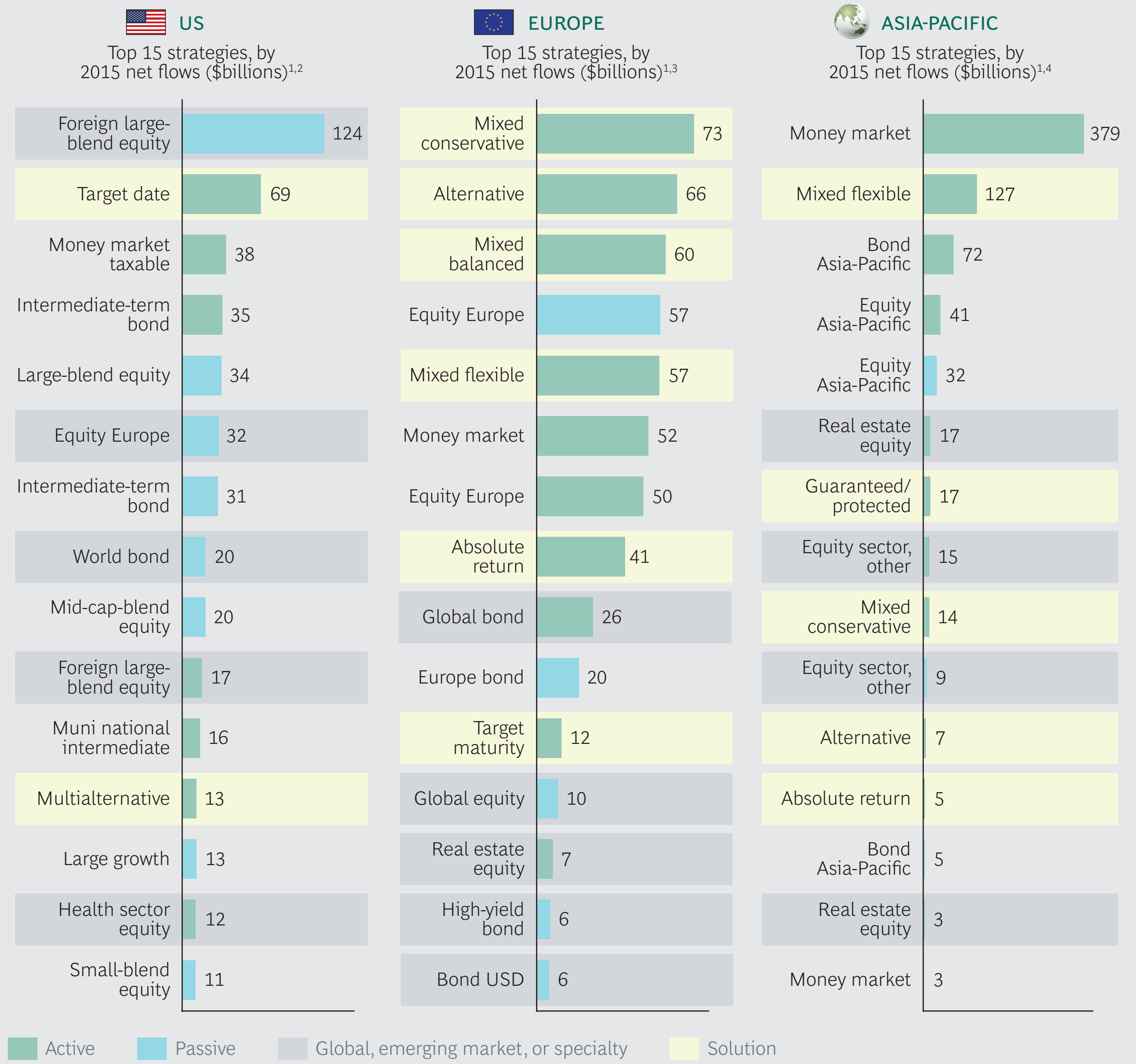
Alternative investments have grown significantly as an asset class among US insurance companies, increasing from 3.8% of insurers' general accounts in 2008 to 5.4% in 2014. That represents a net inflow of roughly $150 billion—nearly double the total value of alternatives held in 2008.

However, those alternative investments are heavily concentrated among the largest carriers. In life insurance, the five leading carriers of the roughly 800 US life insurers account for more than half of all alternative investments. In property and casualty, alternative investments are similarly concentrated among the largest carriers.

Whether or not large insurers are nearing a saturation point in alternatives, smaller insurers have ample room to expand their relatively modest allocations tremendously before reaching similar levels.

EXHIBIT 5 | Passives, Alternatives, Solutions, and Specialties Were the Leading Destinations for Mutual Fund Net Flows

IN THE US, 60% OF FLOWS TO THE TOP 15 STRATEGIES WERE PASSIVE;
IN OTHER REGIONS, ACTIVES WERE STILL FAVORED



Sources: Strategic Insight, BCG analysis.
[1]Mostly retail assets, based on mutual funds and exchange-traded funds and excluding mandates.
[2]Out of 104 strategies defined by SimFund database.
[3]Out of 28 strategies defined by SimFund database.
[4]Out of 27 strategies defined by SimFund database.

environment of 2015 pushed investors to diversify.[2] It is interesting that the alternatives world is not only growing but is also changing in composition. It is becoming less dominated by hedge funds, with the growth of investors' interest in private asset classes, including private equity, real estate, infrastructure, and private debt. Consistent with the long-term trend, alternatives and solutions were the categories that gained the most market share in 2015, while active specialties actually lost 1% in market share. The distinction between alternatives and active specialties will diminish over time, creating a combined category focused on generating alpha—superior returns relative to benchmarks—that will continue to attract strong flows at the expense of traditional core products.

The 2015 pause in the long-term growth of passives—which had increased from 8% of industry assets in 2003 to 15% in 2014—resulted largely from a decline in the assets of large passive mandates and non-exchange-traded funds (non-ETFs), from outflows at some large institutional segments such as sovereign wealth funds, and from market and currency impact. ETFs, however, continued to achieve unrelenting growth and gains in market share.

The shift in preferences to passives, solutions, specialties, and alternatives will continue.

Overall, we believe that the shift in investor preferences in recent years to passives, solutions, specialties, and alternatives will continue to squeeze the share of traditional active core products. (See Exhibit 6.)

The Range of Successful Business Models Will Narrow

On the basis of sustained industry trends and their underlying—macroeconomic, regulatory, technological, and investor—drivers, we have identified four business models that are best positioned for success in the future:

- Specialized alpha shops
- Beta factories
- Solution providers
- Distribution powerhouses

The sustained industry trends and expected slow growth will create specific challenges and opportunities for asset managers. Those that lack a sustained competitive advantage will be particularly challenged.

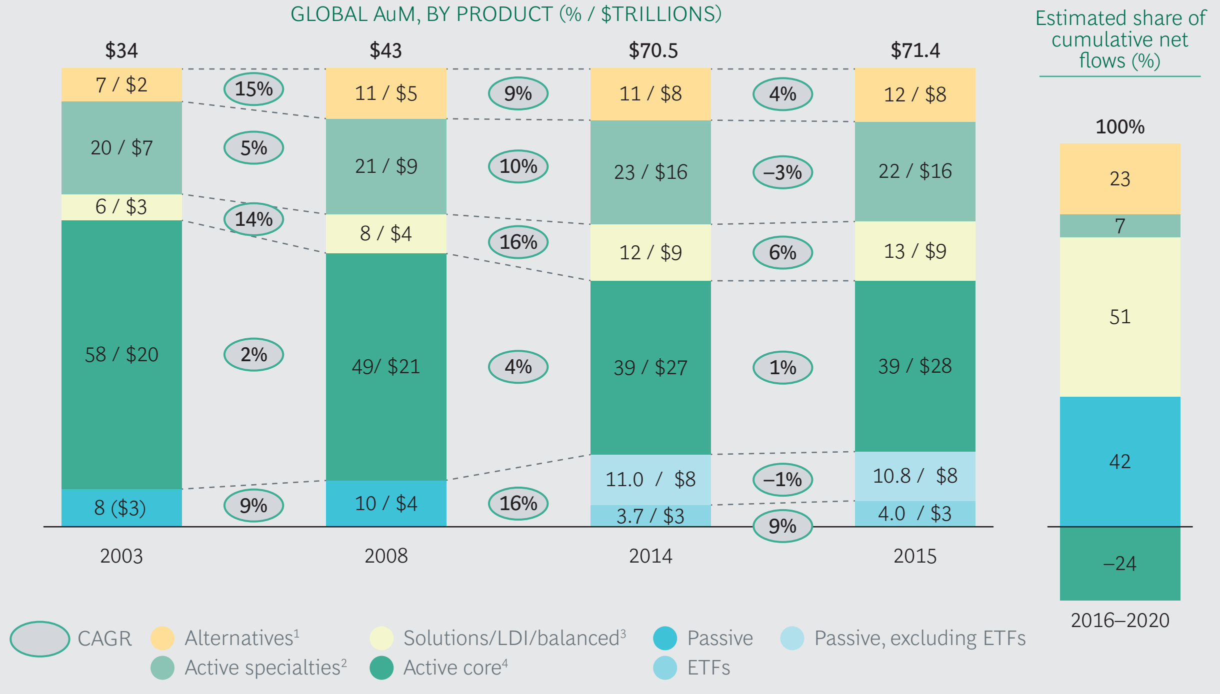
The four identified models for success are grounded in one or more clear, compelling, and sustainable sources of competitive advantage for asset managers. (See Exhibit 7.)

- Capability to generate alpha grounded in deep investment expertise in specific asset classes and investment strategies, known as specific scale, and supported by experience curve benefits
- Operating-model efficiency and strong liquidity
- Capability to deliver solutions (for example, multiasset class portfolio construction, asset allocation, manager selection, and monitoring) to target investors
- Advantaged access to distribution

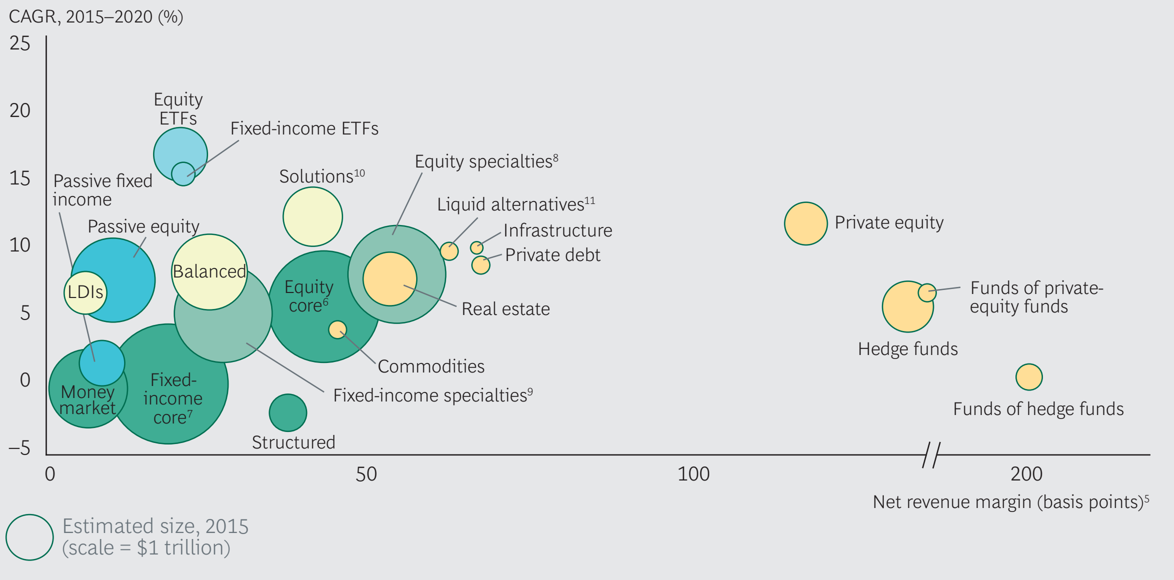
Specialized Alpha Shops. Active managers will nonetheless maintain a sizable AuM share and an even larger share of revenues despite the declining share of overall industry assets, as passive assets gain share. Specialized alpha shops will employ long-only strategies, leveraged strategies, or both, as the distinction between active management of traditional and alternative assets diminishes. Active management will continue to appeal to institutional investors (directly or through consultants) in the asset classes in which investors are willing to pay higher fees for the promise of alpha. In the retail market, however, specialized alpha shops will focus on financial advisors and private-wealth managers who seek to bring active management to their high-net-worth and sophisticated retail investors, either as standalone products or as a component of a multiasset class solution.

Successful alpha shops will differentiate themselves through deep investment expertise in a specific asset class or investment strategy in which their specific scale has allowed them to move farther up the experience curve than other managers. Experience curve benefits in a specific asset class or investment strategy far outweigh the efficiency benefits of firm-wide scale. Large alpha shops with scale in more than one specific asset class or investment strategy can be successful, but smaller managers are more likely to maintain the focus that is required to achieve specific scale. Larger managers benefit from brand spillover, their ability to support robust new-product-

Exhibit 6 | Passives, Solutions, and Alternatives Will Continue to Win a Disproportionate Share of Net Flows…



… Squeezing the Share of Traditional Active Core Products



Sources: BCG Global Asset Management Market-Sizing Database 2016; BCG Global Asset Management Benchmarking 2016; ICI; Preqin; HFR; Strategic Insight; BlackRock ETP report; IMA; OECD; Towers Watson; P&I; Lipper; BCG analysis.

Note: ETF = exchange-traded fund; LDI = liability-driven investment. Any apparent discrepancies in totals are due to rounding.

[1]Includes hedge funds, private equity, real estate, infrastructure, commodity funds, and liquid alternative mutual funds (absolute return, long and short, market neutral, and volatility).

[2]Includes equity specialties (foreign, global, emerging market, small and mid caps, and sector) and fixed-income specialties (emerging market, global, high yield, and convertible).

[3]Includes target-date, global asset allocation, flexible, income, liability-driven, and traditional balanced investments.

[4]Includes actively managed domestic large-cap equity, domestic government and corporate debt, money market and structured products.

[5]Management fees net of distribution costs.

[6]Includes actively managed domestic large-cap equity.

[7]Includes actively managed domestic government and corporate debt.

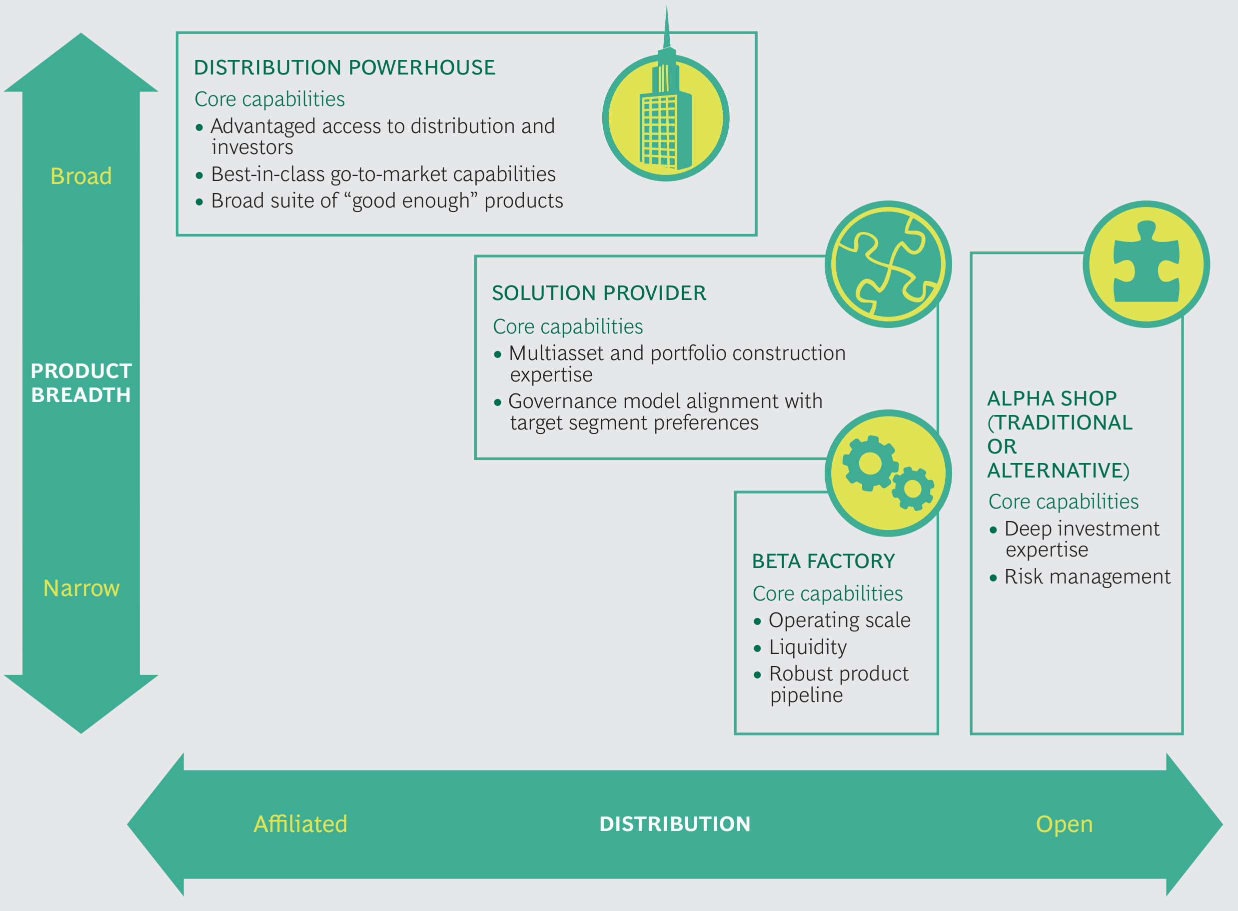
[8]Includes foreign, global, and emerging-market equities; small and mid caps; and sectors.

[9]Includes emerging-market and global debt, high-yield bonds, and convertibles.

[10]Includes target date, global asset allocation, flexible, and income funds.

[11]Includes absolute-return, long and short, market-neutral, and volatility mutual funds.

EXHIBIT 7 | The Winning Asset Management Models of the Future



Source: BCG analysis.

development pipelines in the face of changing investor preferences, and their ability to coinvest when needed. Yet, even for small firms, climbing the experience curve is growing more challenging and complex. The emergence of increasingly sophisticated data and analytics capabilities is raising the bar for all asset managers. As more asset managers invest in advanced analytics, machine learning, and big data, these capabilities are becoming mainstream, making it more difficult for all managers to generate alpha. Successful alpha shops will be forced to adopt these capabilities, adapting their operating models to realize the benefits. (We address this need in the report's chapter "Doubling Down on Data with a Target Operating Model.")

Alternative and active specialty managers have already demonstrated their ability to attract flows and achieve growth rates well above the rest of the industry.

Beta Factories. Although passively managed assets represent less than 15% of industry assets, they are rapidly increasing their share, capturing the majority of net new flows into the industry. Passive products have become relevant to most investor segments and distribution channels. And asset managers are now using passive products for both tactical and strategic purposes.

While efficiency and liquidity provide sustainable advantage to the largest passive players, the growing revenue pool associated with passive exposure to new asset classes and with more innovative investment strategies—specifically smart beta—offers compelling revenue potential to attract small managers that are well positioned to drive innovation. The unique and evolving needs of individual investor segments will continue to encourage innovation efforts by passive managers.

The efficiency imperative in the beta factory model will drive efforts to digitize and automate operations, leveraging scale to justify these investments. The efficiency leaders will leverage their cost leadership to increase their flexibility on pricing and their ability to fund product innovation efforts to win in the market.

Solution Providers. Growing investor demand for outcome-oriented investment products will benefit asset managers that are skilled in multiasset class portfolio construction, as well as in manager selection and oversight in open markets such as the US.

Direct access to the end investor provides a unique advantage in bringing multiasset class solutions to the investor. In the retail mass-market and mass-affluent segments, in which more rudimentary multiasset class solutions are appropriate, providers with direct access to the end investor, as well as sufficient scale to support in-house asset allocation and packaging capabilities, will leverage their advantaged position with investors to bring multiasset class solutions to the market even if they do not have in-house or affiliated asset management capabilities. These providers will engage asset managers as parts providers.

However, asset managers are, and will continue to be, well positioned to bring multiasset class solutions to the following investor segments:

- Mass-market and mass-affluent investors being served by small providers, such as financial advisors, who lack sufficient scale to support in-house portfolio construction capabilities and look to asset managers to provide prepackaged multi-asset solutions or asset allocation and portfolio construction tools

- High-net-worth investors who seek more sophisticated and open-source, outcome-oriented solutions

- The institutional segment, including, defined-contribution-plan sponsors, pension plans, and endowments, that seek more diversified and customized multi-asset class solutions. (In this market, asset managers face the greatest competition from outsourced chief-investment-officer (oCIO) solutions and other more independent providers of investment solutions. Offering oCIO services of their own is an opportunity for managers to monetize investments in data, analytics, and risk management.)

Distribution Powerhouses. While regulatory efforts worldwide have pushed to strengthen the standard of advice offered to retail investors, distribution powerhouses will continue to retain some advantages over unaffiliated managers, allowing them to win in the mass-market, mass-affluent, and lower high-net-worth segments. Distribution powerhouses must continue to play a proactive and engaged role in the industry's regulation to ensure that their interests are represented on issues of investor protection and on other relevant regulatory topics. (We address this concern in this report's chapter "Getting Real with Risk Management.")

Distribution powerhouses must continue to play an engaged role in regulation.

Distribution powerhouses will go to market with a broad suite of "good enough" products and will differentiate themselves not on the basis of first-quartile performance but instead on their advantaged access to end investors and their favorable positioning with retail intermediaries in terms of branding, communication, digital distribution, and advisor practice support.

Investors of all kinds seek the guidance and endorsement of their advisors in selecting investment products. Institutional investors have high levels of investment acumen but still engage investment consultants. In the retail market, guidance and endorsement take multiple forms, typically linked to the distribution process. Examples include the affiliated branch distribution networks of a retail bank, the variable-annuity sales force of an insurer, an employer's selection and implicit endorsement of a defined-contribution record-keeping provider, and an independent advisor's endorsement of a particular manager or product. In all cases, advantaged or affiliated distribution provides a source of advantage.

Sophisticated analytics and big data capabilities provide additional competitive advantage in distribution. To win, distribution powerhouses need to employ leading-edge analytics to redefine their sales and marketing strategies. Sophisticated marketing analytics, superior knowledge of existing and prospective investors and their advisors, and influencers will expand sales opportunities while focusing managers' time and resources on the most promising opportunities and increasing the probability of winning new business.

Success will ultimately be most closely tied to one primary source of advantage.

Of course, successful managers may benefit from going to market with a model that draws on more than one enduring source of competitive advantage. But their success will ultimately be most closely tied to one primary source of advantage. We would expect successful managers—specialized alpha shops, beta factories, or distribution powerhouses—to employ some element of the solution provider model.

However, we do not expect the combination of a specialized alpha shop and a beta factory—unless they are run as largely independent businesses—to achieve success in the market.

Asset managers must evaluate where they fit into this framework and determine which model is best suited to supporting their success. Their capability-building efforts and investments should be aligned with their target model. For some, this may require a material change in mindset, culture, and approach.

For example, given the importance of specific scale and deep investment expertise to generating alpha, specialized alpha shops must focus their attention and efforts on managing money, risk, and clients. They should avoid distractions from noncore operational activities, such as those in the areas of finance, human resources, or technology infrastructure. A shared-service model with an outsourced partner would better position these managers to achieve sustained focus on most critical core activities.

Historical net flows confirm that the industry is migrating toward these distinct business models. The beta factories are well established and are most successful in terms of net flows. In fact, they are capturing an increasingly disproportionate share of the total market flows, accelerating the winner-take-all trend in the US, where they represent five of the top ten players. (See Exhibit 8.)

Capabilities in solutions and advantaged distribution can further bolster the success of the beta factory model. The distribution powerhouses can boost their own success by leveraging their ability to deliver solutions to their target investors (those for whom they have advantaged distribution access) rather than focusing on alpha generation. While alpha specialists overall struggle to achieve top standing in net flows and in revenue and profit growth, the strongest performers among them regularly rank high.

The situation is similar in Europe. Competitive advantage for successful managers there is based on the use of affiliated distribution networks, a focus on passive products or solutions, a differentiated offering with alpha performance, or some combination of all these approaches. This dynamic explains the strong concentration of net flows captured by just a few players. In the US, the top ten fund managers won 250% of the market's total net flows—taking into account outflows from other players. And the top ten accounted for 75% of the flows to players with positive flows, up significantly from 68% last year.

Concentration of flows increased in Europe as well. The top fund managers captured 47% of net flows and 35% of flows for players with

Exhibit 8 | The Winner-Take-All Trend Accelerated in the US and Held Steady in Europe

THE TOP TEN ASSET MANAGERS IN THE US, BY MUTUAL FUND FLOWS

ASSET MANAGER	2015 NET FLOWS ($BILLIONS)	CUMULATIVE SHARE OF TOTAL MARKET NET FLOWS (%)	CUMULATIVE SHARE OF NET FLOWS OF PLAYERS WITH POSITIVE NET FLOWS (%)	PASSIVE SHARE OF FLOWS PER FIRM (%)
Vanguard	230	128	38	97
BlackRock	106	187	56	96
TCW[1]	17	196	59	0
Dimensional Fund Advisors	16	205	62	–1
Edward Jones	15	214	64	0
Charles Schwab	14	222	67	105
DoubleLine	14	229	69	0
WisdomTree	14	237	71	103
JPMorgan	13	244	73	–2
Deutsche Asset Management	13	251	75	123
TOTAL US MARKET	180			
	2014 ratios:	121	68	

THE TOP TEN ASSET MANAGERS IN EUROPE, BY MUTUAL FUND FLOWS

ASSET MANAGER	2015 NET FLOWS ($BILLIONS)	CUMULATIVE SHARE OF TOTAL MARKET NET FLOWS (%)	CUMULATIVE SHARE OF NET FLOWS OF PLAYERS WITH POSITIVE NET FLOWS (%)	PASSIVE SHARE OF FLOWS PER FIRM (%)
BlackRock	65	13	10	56
Deutsche Asset Management	26	18	14	43
Eurizon Capital	22	23	17	0
UBS	20	27	20	42
Pioneer Investments	19	31	23	0
Credit Suisse	17	34	25	46
Nordea	16	37	28	4
Standard Life	16	41	30	0
Vanguard	16	44	33	100
Allianz Global Investors[2]	15	47	35	–1
TOTAL EUROPEAN MARKET	497			
	2014 ratios:	42	31	

xx = New player in the 2015 top-ten ranking, compared with 2014 rankings

Sources: Strategic Insight; BCG analysis.
Note: Analysis excluding money market funds.
[1]TCW includes Carlyle Group Funds.
[2]Excludes PIMCO.

positive flows—compared with 42% and 31%, respectively, last year. But net flows are less concentrated than in the US, owing to Europe's more fragmented market and regional and local differences in distribution structures. Nevertheless, the accelerating product trends in Europe will continue to push the concentration of flows higher.

It is notable that the number of new asset managers in the top-ten ranking is significant in the US (five new managers among the top ten in 2015, four in the 2014 ranking). This demonstrates that success is not a question of legacy and existing scale. Instead, opportunities to succeed exist for asset managers regardless of their size or historic rankings. In some underserved markets, firms are gaining a disruptive advantage by building powerful distribution arms. This has been the case recently in China in particular.

Notes

1. Our research defines AuM as assets professionally managed in exchange for management fees, including captive assets of insurance groups and pension funds if delegated to asset management entities with fees paid. Our measurements cover assets in 43 markets globally, including offshore markets. For all countries whose currency is not the US dollar, we applied the average 2015 exchange rate to all past years to synchronize historic data. In some markets, historical AuM levels in this report may be lower than previously published levels as a result of the 2015 appreciation of the dollar.
2. The strong performance of alternatives, which are mostly institutional assets based on mandates, is not evident in Exhibit 5, which reflects mostly retail assets based on mutual funds and exchange-traded funds.

GETTING REAL WITH RISK MANAGEMENT

GLOBAL REGULATORS, STILL WORKING to address the legacy of the 2008 financial crisis, are slowly beginning to converge on risk management approaches in asset management. Worldwide, regulatory responses to the crisis have, until recently, taken different paths, with EU regulators going furthest in their rulemaking. Now, as international consensus is reached on many risk practices, processes, and governance, regulators in the US are shifting their focus toward potentially risky activities and products and away from an emphasis on designating individual asset management firms as systemically important, according to an April 2016 update by the Financial Stability Oversight Council.

Meanwhile, for the better part of a decade, asset managers have worked largely on their own to develop risk management policies and best practices. At industry forums, they have given voice to—and found consensus on—a number of risk management principles and priorities. As a result, managers are better positioned than in the past to voice support for regulatory initiatives aimed at enhancing stability, as well as protecting and serving the interests of investors.

Regulators' evolving views in the US and Europe appear increasingly close to those of asset managers. With the direction of the US Securities and Exchange Commission (SEC) and risk oversight becoming clearer and firmer, managers now have a clear path for future investments in risk management.

Managers Will Face Increased Regulatory Obligations

Prudent managers have little time to lose in moving forward. We believe that it is a matter of when—not whether—asset managers will face increased regulatory obligations, especially in the US, and increased obligations to support investor protection globally, with the EU already leading the way.

With basic risk management frameworks and governance now a norm, regulators and asset managers appear to be converging on the importance of managing liquidity risk, leverage obtained through derivatives, and operational risk. We also see increasing agreement on the importance of data and technology, as well as analytics and reporting platforms that enable integration of risk management and portfolio management.

Although risk management processes and methodologies continue to evolve, it is imperative that the risk function contribute more actively to investment processes, product development and approvals, and key transactions. This imperative is in alignment with the view of industry participants and regulatory agencies that key risks are embedded in products and activities rather than organizations.

In this year's benchmarking survey, asset managers identified their most important needs similarly, including a comprehensive risk management framework, liquidity risk management, and the ability to support new products. At the same time, managers acknowledged difficulty benchmarking the maturity of their processes and defining roadmaps to their goals. Managers may have to be patient if their roadmap is a global one.

Progress toward global harmonization of risk management regulations will pause briefly while agencies study the impact of asset management on financial stability. (See the sidebar "Progress on Global Risk Standards Hits Pause, but Not for Long.")

PROGRESS ON GLOBAL RISK STANDARDS HITS PAUSE, BUT NOT FOR LONG

Progress toward establishing global regulatory standards for risk management in asset management is expected to pause while global regulatory agencies reach a consensus on the potential impact of asset management, if any, on financial stability.

In March 2015, the Financial Stability Board (FSB), jointly with the International Organization of Securities Commissions (IOSCO), published a revised proposal for asset managers that would likely be designated global systemically important financial institutions (G-SIFIs). This proposal, if implemented, would set the stage for national regulators to propose home country asset managers for G-SIFI designation. However, both the FSB and the IOSCO concluded that a full review of asset management activities and products that could contribute to systemic risk should be completed before the finalization of any G-SIFI methodology.

In June 2016, the FSB followed up with an advisory document, "Proposed Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities," which should be finalized by the end of 2016. We expect this to catalyze national regulators to heighten standards for risk management.

The US Financial Stability Oversight Council (FSOC) has moved from designating asset managers as systemically important financial institutions (SIFIs) to evaluating the impact of their activities and products on financial stability. Similarly, the SIFI discussion seems to be off the table for now.

By signaling the importance of risk management, the FSOC has prompted the Securities and Exchange Commission (SEC) to expand its role in prudential regulation. For example, the SEC's 2016 exam priorities for asset expansion of management firms emphasized cyberrisk, liquidity risk, and anti-money-laundering activities and proposed rules on risk related to liquidity and use of derivatives.

The SEC has created the Office of Risk Assessment and Risk and Examinations Office to support the agency's rulemaking and monitoring of asset management activities. In the near term, we expect the SEC to continue to use its existing examination program and oversight authority and then to set a robust rulemaking agenda.

EU regulatory frameworks—already in place for some time—are markedly ahead of those in the US. The directive that covers investment funds—known as "Undertakings for Collective Investment in Transferable Securities"—requires a permanent risk management function, policies that address material risks, and a risk management process for funds that use derivatives. The more recent "Alternative Investment Fund Managers Directive" defines requirements for governance, risk measurement, and disclosure; mandates a separate risk management function; and sets capital and liquidity requirements.

Still Missing in Action: A Truly Comprehensive Framework

Although asset management regulators have progressively clarified their objectives, they have yet to formulate or propose a comprehensive risk management framework or set of benchmarks to guide managers. In the meantime, the industry itself, assisted by service providers, is working through industry forums such as the Global Association of Risk Professionals (GARP) to establish a common language and a set of principles that provide a development path for firms. In particular, the GARP Buy Side Risk Managers Forum (BSRMF) updated its Risk Principles for Asset Managers in September 2015, with a framework covering governance, investment risk, and operational risk.

These principles usefully clarify the importance of having clear segregation of functions and well-defined roles and responsibilities for managing risk. They also highlight the need for an independent risk management function and for tracking and understanding liquidity, capacity, issuer, counterparty, concentration risks, and risks related to leverage, for example, through derivatives. Given the SEC's recent focus on derivatives, such risks have fresh relevance in the US. In the EU, leverage through derivatives has been on the rule-making agenda since the 2001 Undertakings for Collective Investment in Transferable Securities, or UCITS, directive.

On the basis of discussions with managers and the results of our survey, we agree with GARP's observation that many firms have responded to the increasingly complex risk environment by establishing enterprise risk management functions. In our survey, 89% of our respondents reported the presence of a chief risk officer, and 94% reported that the scope of a risk function was well developed.

The priority of most firms, our survey found, has been to establish basic risk governance in core investment risk areas, including counterparty, credit, market, and liquidity risk. Other risk categories have appeared (to asset managers) as having lower priority, and consequently are less well developed. Those categories include model and valuation risk, IT risk and cybersecurity, other operational risks, corporate risk, anti-money-laundering activities, and portfolio construction support. (See Exhibit 9.)

In our view, the importance of measuring, monitoring, and managing these risks has now increased—not only because of greater regulatory scrutiny of the management of such risks, but also because of recent incidents at several financial institutions. We expect that asset managers will recognize, as regulators already do, the impact of low-frequency but high-severity events that may disproportionately threaten the risk profile, reputation, and even survival of firms.

> Managers will recognize the impact of low-frequency but high-severity events.

Furthermore, firms are involving risk functions in decision making, especially when approving new business or initiatives, but more progress is needed to ensure that risk functions are fully incorporated into the investment process.

Also, firms are more aware of the need to invest in enterprise enablers, such as analytics and reporting platforms, with one-third of our respondents seeking better consolidation in risk reporting and 40% saying that information systems need to be further developed.

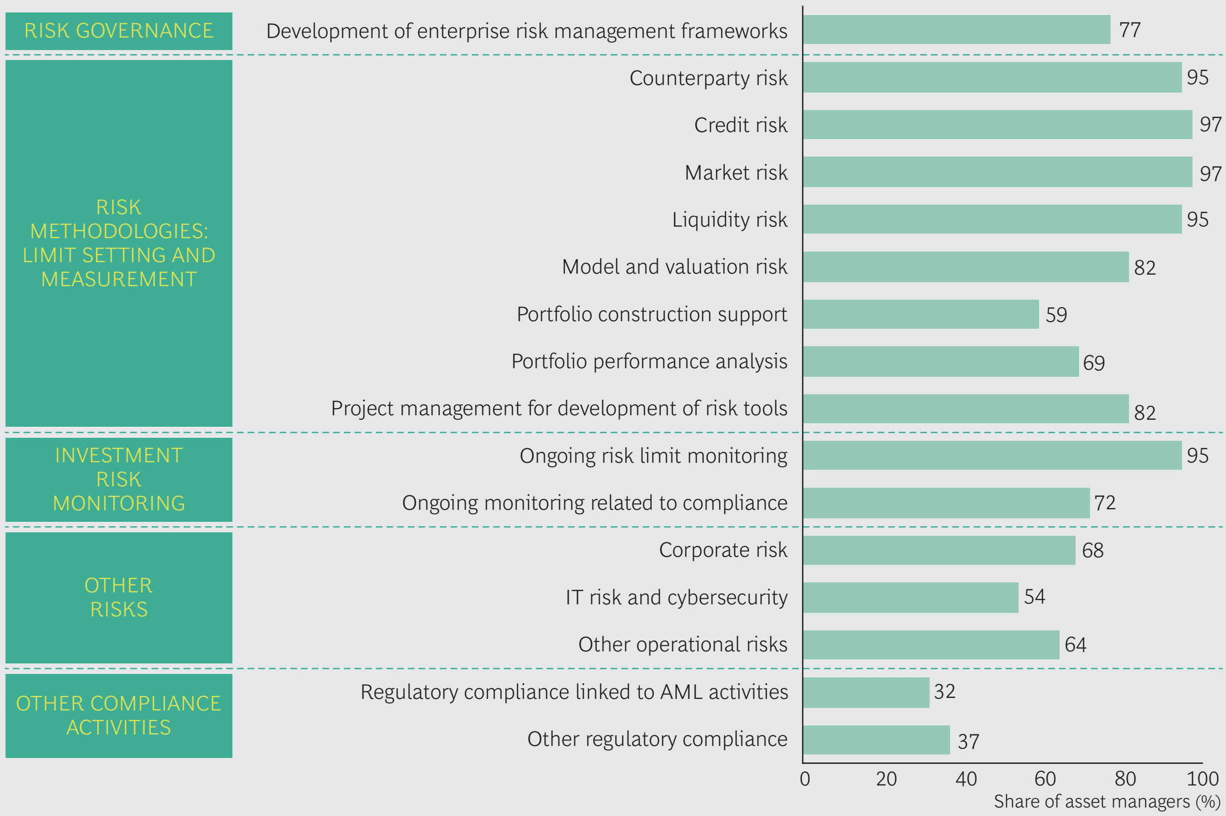
Priorities: Managing Regulatory Requirements and Liquidity Risk

Many firms have already begun to establish elements of a general risk management framework. Managing the evolving requirements of risk regulation was a top priority cited by our survey respondents. It's not surprising, therefore, that they have focused on developing a full framework, incorporating both governance and data and analytics—topics that will facilitate management of evolving regulatory measures.

Liquidity risk also ranked as a priority, which is not surprising given the recent regulatory

Exhibit 9 | Core Investment Risk Areas Are Well Covered by Managers; Other Categories Are Less Developed

SURVEY QUESTION: WHAT ACTIVITIES ARE INCLUDED IN YOUR FIRM'S RISK MANAGEMENT FUNCTION?



Sources: Surevy results. BCG Global Asset Management Benchmarking Database 2016.
Note: AML = anti-money-laundering.

focus. Another concern was the management of the risk and complexity of new products, which is driving further investment in the development of enhanced risk approval and governance processes.

Among risk categories in which firms are strengthening capabilities, credit risk was most frequently cited. We also found that firms increasingly take an enterprise-wide approach to risk—as opposed to managing risk in silos—and they are investing in reporting and consolidation capabilities across all risks. This indicates the industry's growing maturity and its intent to develop broad capabilities to capture and proactively manage emerging risks rather than retain a locked focus on well-known categories alone.

However, we discovered that many firms, while acknowledging principles such as those in the BSRMF framework, still found it difficult to assess the level of their own development, which they must do before creating a roadmap or framework for improvement. We believe that the next step for the industry—and for regulators—is to develop standards and benchmarks that help differentiate between mature and leading practices in each part of such a framework.

What Must Be Done Now

According to our survey results, most firms are taking the initiative to invest significantly in risk management. Still, we believe that more can be done.

As we noted above, it is imperative that risk management be active across the enterprise: in investment processes, product development, and approvals, as well as key transactions. Yet despite progress, risk management can often remain disconnected from the business—not just from new products but also, and more critically, from day-to-day investment decision making. To that, they could provide an independent risk-based perspective that could facilitate more informed decisions.

Many IT and risk platforms are falling behind the rapidly increasing complexity of products, systems, and organizations, making firms more vulnerable to new manifestations of risk. A wider lesson can be drawn from the pressing cybersecurity need to improve one's defenses against hackers and malware that now have the ability to quickly change attack vectors on the basis of both human and technical responses. This is just one example of how risk managers and IT systems need to keep investing and evolving ahead of a growing universe of potential challenges. Managers should prioritize investments in keeping IT systems harmonized and platforms up to date—particularly in integrating front and back offices.

The most prudent firms are preparing a foundation for tomorrow's regulatory moves, not just responding to those of the past. Best-in-class firms invest to accommodate emerging trends that affect investors well before regulators take action. Using stress-testing concepts in risk management, for example, would improve a firm's resilience to severe but plausible events—pleasing investors while preparing for unprecedented events—as the Financial Stability Board proposed in June 2016 to G20 authorities. Investors are increasingly aware of risk. They take a more favorable view of managers that exhibit foresight and a commitment to prudent practices, which lends competitive advantage.

DOUBLING DOWN ON DATA WITH A TARGET OPERATING MODEL

Asset managers today face a fundamental and indisputable fact: the world they are analyzing in order to make and execute investment decisions, is increasingly complex and rich in data. For some managers, this is a tremendous opportunity: more complex strategies can be supported.

However, for most firms, the ability to keep up, from an investment and trading standpoint, will require significant investment and material changes to almost all elements of the target operating model, the blueprint that governs nearly every component of the business. The alternative to adapting that model is to risk becoming less competitive in the ability to generate alpha.

Keeping up in this context requires significant investment in developing and maintaining advanced, digital data and analytics capabilities in support of the front office. Doing so isn't just a matter of technology. It requires a step change increase in capabilities related to process flows, work structure, roles, metrics, and talent.

Advanced Analytics and Data Go Mainstream

Historically the realm of a small subset of esoteric strategies, investment in advanced analytics, machine learning, big data, and other capabilities is on the verge of becoming mainstream. The enablement of investment decisions with any or all of these tools cannot be confined to just a few managers, nor can it be just something that IT can figure out on the firm's behalf.

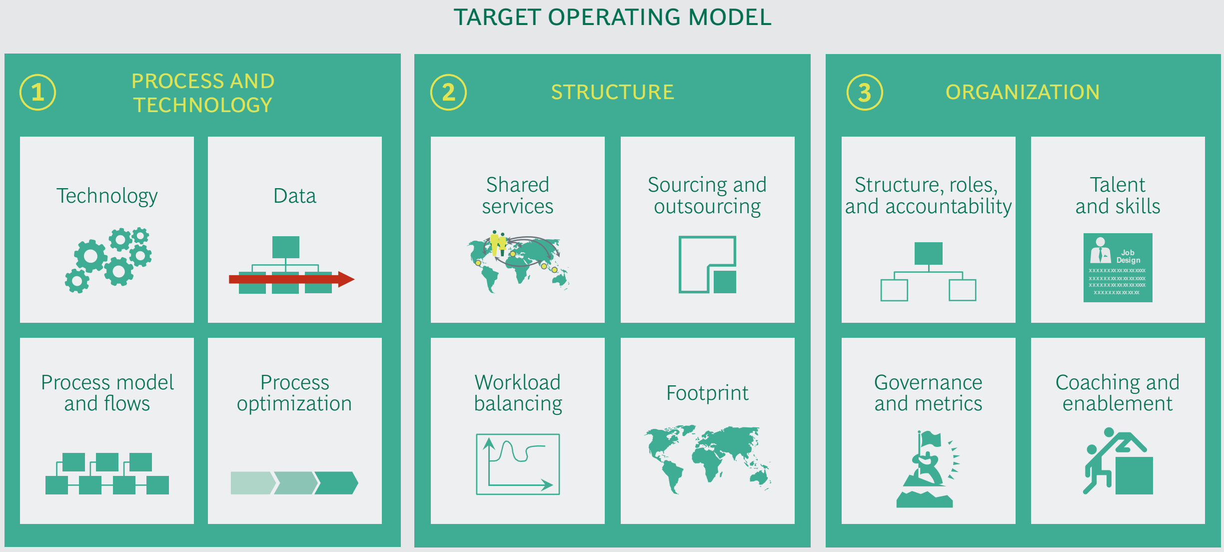
> Investment in advanced analytics is on the verge of becoming mainstream.

Embracing these capabilities will be central to the way many large investors make decisions—even those that have traditionally relied on human judgment—and go to market. It is therefore critical for all asset managers to reconsider their operating model to ensure that they are set up to deliver on these capabilities in the near term.

A target operating model, in BCG's view, is a framework with three primary components: process and technology, structure, and organization. (See Exhibit 10.) These three elements provide a blueprint for an asset manager's future state and translate into a series of business questions and decisions for front-, middle-, and back-office operations.

In recent years, many leading asset managers have pushed to better align their target oper-

EXHIBIT 10 | Three Elements of a Target Operating Model Provide the Blueprint for an Asset Manager's Future State



Source: BCG analysis.

ating model with their core business strategy. They are, for example, creating centers of operational excellence, evaluating alternative sourcing models, and adapting operational and technological skill sets to the structure of their business.

Such changes have helped firms scale their businesses more effectively, accelerate new-product speed to market, trade in new asset classes and markets, and operate more efficiently.

BCG's 2016 Global Asset Management Benchmarking Survey uncovered a number of significant operating model changes that originate directly in the front office and that are impelled by the analytical and data-driven challenges described above. Some forward-thinking firms are adapting their target operating model in ways we believe are relevant to all asset managers. Their efforts focus in particular on adapting technology and data infrastructure to handle these changes by building excellence in data management and honing capabilities to use a rapidly expanding set of technology tools.

Front-Office Trends That Drive Operating Model Changes

An evolving data landscape is not a new phenomenon for asset managers, but the pace of change today and the breadth of opportunity it has created represents a significant step forward. The scope of change increasingly touches multiple elements of the target operating model.

We believe that of all the changes, advanced analytics, portfolio order and execution management capabilities, innovation in trading, and data in the front office have the greatest potential for profound impact.

Advanced Analytics. There is rapidly rising interest in the potential of advanced digital technologies and techniques to provide competitive advantage in investment management processes and elsewhere. Technologies that push the boundaries of traditional analytics—such as machine learning, data visualization, artificial intelligence, natural-language processing, and predictive reasoning—were once the province of a small set of alternative managers. Now they are becoming mainstream, sometimes yielding highly targeted investment insights with unprecedented speed.

Portfolio Order and Execution Management Capabilities. Managers looking to take on more-complicated investment strategies, trade at higher volumes, and execute more efficiently are adopting technology tools that can help them. The technology providers of these products are building progressively more sophisticated tools across asset classes.

The most frequently integrated new tools fall into three front-office functions:

- Portfolio management tools can help portfolio managers and analysts view their positions and exposures, develop and test strategies, construct model portfolios, and perform scenario analysis.
- Order management and compliance tools can help firms enter orders for execution, check for compliance or rule violations, and route orders to trading.
- Execution management tools can help traders route trades, access pools of liquidity, and execute market transactions more effectively.

A single source of truth is vital for risk organizations.

The reevaluation of front-office tools requires significant work operationally, as well as the technology and data to handle that complexity. As tools have evolved, vendors have begun to look for opportunities to integrate them across functions and asset classes. Most managers, however, focus on developing or procuring best-of-breed solutions.

Innovation in Trading. A number of factors now disrupt the trading space: near-real-time technology, access to liquidity, strategic ability to pick a trade's timing and exchange market, cost minimization, and ability to obfuscate trades. At high-frequency-trading firms, much in-house technology focuses on the ability to beat the market. Other pressures for change include the sometimes-disruptive financial-technology innovations of fintech firms, as well as constantly changing regulation.

Data in the Front Office. Some investment managers still view advanced analytical tools and sophisticated front-office IT as secondary to sound investment process and are, therefore, not adding resources in those areas. Still, despite a range of views, almost every investment manager we have encountered has identified improvements to the governance, quality, availability, and breadth of data as priorities for the front office and the risk management organization.

Data initiatives are being launched in three areas, each of which creates very specific business value for managers:

- **A Single Source of Truth.** Maintaining the flow of consistent and accurate data throughout the organization is critical, especially as portfolio management systems become more common and strategies grow more complex. A single source of truth is vital for risk organizations as they take a more active role in monitoring areas such as liquidity and counterparty exposure.
- **Real-Time or Near-Real-Time Data in the Front Office.** For some investment strategies, having start-of-day positions is adequate. Increasingly, however, investment managers want the ability to look at positions, cash, and open orders in near-real time. The ability to do this while maintaining data accuracy (for example, recording details of corporate activity) is behind the concept of providing an investment book of record (IBOR), which has become the North Star of data for many managers.
- **Focus on Data Quality and Governance.** Managers seek to achieve excellent data quality and effective governance in various ways but almost always with significant implications for the operating model.

Implications for the Operating Model and Investment Process

Every trend affecting the front office affects one or more of the target operating model's three elements. There are implications for each element, and we see leading firms making some changes as they invest in the front office.

Process and Technology. Technology and data, in our experience, receive the most investment and will continue to attract the keenest focus of managers' time and resources. Firms are emphasizing investments in core platforms and related workflows and building two-speed technology platforms for experimenting and learning in more agile ways:

- **Core Platform Technology.** Investments in core-platform technology include implementing new front-office backbones, such as portfolio or order management systems, and new data infrastructure. Many of these investments are multiyear programs that require significant commitment. But they do improve the alignment of technology with firm-wide investment goals, such as the ability to operate in a truly multiasset class environment. Alternatively, some managers focus efforts on incremental standardization of investment tools to mitigate risk and improve scalability across the front office. Another area of increasing opportunity is the development of portfolio management collaboration tools and technology that allow managers to work together across traditionally siloed investment activities.

- **Delivery Model Technology.** The premise of a two-speed technology is critical for firms experimenting with advanced analytics and machine learning tools. The most innovative firms are investing in building "sandbox" environments for testing tools and evaluating potential technology partners more quickly than otherwise possible. Highly innovative firms are creating joint business and technology teams that operate in an agile way, disconnected from the broader workflow and operations.

Data Architecture and Big Data. To support advanced analytics and promote evolution of the investment process, it is critical to obtain the right high-quality data in a timely way. Leading asset managers' efforts to modernize data architecture have taken different forms. For many firms, the right first step along a data modernization path is to evaluate and rethink their data-warehousing strategy, creating a more cohesive architecture for delivering data in a more consistent and timely way. Other firms have invested in building big data architecture, bringing in new tool sets that allow them to maximize value derived from the structured and unstructured data that they bring into the firm and that they create.

Innovative firms are investing in building "sandbox" environments for testing tools.

In many cases, investments in data are made in conjunction with a broader front-office effort, such as portfolio management and order management replatforming:

- **Data Sources.** The breadth of both traditional quantitative structured data, as well as unstructured data that many investment professionals want to capture, is rapidly growing. Social data, such as Twitter feeds, can provide insight but only if it is made available to investment professionals in a timely and digestible way. Leading technology organizations are partnering with investment professionals to enhance their understanding of current and future data needs and the architecture required to import that data.

- **Data and the Investment Book of Record.** Historically, a firm's portfolio management system and models were fed data in an overnight batch process that reflected the day's transaction activity, any corporate actions that happened over the course of the day, and updated cash positions. For many firms, however, a more systematic IBOR solution is now required to track those changes throughout the day—owing to the high volume of transactions, frequent changes in cash, the breadth of their positions, or complicated trading strategies. These tools pull data from order management and trading systems, as well as accounting systems, to give full intraday views of a manager's positions and to help support ever-advancing analytical activities.

Work Structure. Shared services, organization structure, and resourcing are all areas in which the evolving dynamics in the front office affect the operating model:

- **Shared Services.** One critical first step in building an organization that is proactively able to meet front-office analytical and data needs is the identification and prioritization of the right use cases. Relying on inadequately trained and focused people to do this work has been a stumbling block for many firms. Many innovative firms are creating a dedicated organization to build capabilities for data and analytics. These groups are centralized to allow access by all investment groups and to keep them focused and prepared in deploying and developing their analytical and technical skills, as well as to keep them in touch with the rapidly evolving vendor landscape.

- **Sourcing and Outsourcing.** The landscape of new vendors offering fresh data and analytical capabilities is evolving rapidly and has the potential to disrupt many parts of the investment process. Some managers are focusing on building partnership models to evaluate different potentially disruptive technology partners. For a few leading firms, this has meant creating investment vehicles, using firm assets to take venture stakes in exciting technologies. For others, it has been far simpler: staying abreast of new ventures and bringing them in for proof-of-concept assessment when new analytical questions arise. Either way, firms that are pulling ahead are highly reliant on partners to help deliver capabilities. They are building their organization and processes to fully support that model.

Organization. The ability to tackle and deal effectively with any and all of these trends can place significant stress on the organization. Processes and tools change, creating the need for significant change management. It is crucial to identify and hire new talent, and that requires competing in a variety of talent pools. Competition is steep for data scientists, architects, and governance professionals—and not just with other buy-side institutions but also with the sell side and leading technology companies. Bringing new people into the investment group and into IT requires viable career paths and career development expectations.

FOR FURTHER READING

The Boston Consulting Group has published other reports and articles that may be of interest to senior financial executives. Recent examples include those listed here.

Global Wealth 2016: Navigating the New Client Landscape
A report by The Boston Consulting Group, June 2016

How Digitized Customer Journeys Can Help Banks Win Hearts, Minds, and Profits
An article by The Boston Consulting Group, June 2016

Corporate Treasury Insights 2016: It's All About Security and Client Experience
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Global Capital Markets 2016: The Value Migration
A report by The Boston Consulting Group, May 2016

Global Retail Banking 2016: Banking on Digital Simplicity
A report by The Boston Consulting Group, May 2016

How to Reap a Pricing Windfall in Retail Banking
An article by The Boston Consulting Group, February 2016

Global Asset Management 2015: Sparking Growth with Go-to-Market Excellence
A report by The Boston Consulting Group, July 2015

NOTE TO THE READER

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