IBM Global Business Services
Executive Report

Financial Markets

IBM Institute for Business Value

Alpha is dead, long live alpha!

A return to real wealth creation in financial markets

IBM Institute for Business Value

IBM Global Business Services, through the IBM Institute for Business Value, develops fact-based strategic insights for senior executives around critical public and private sector issues. This executive report is based on an in-depth study by the Institute's research team. It is part of an ongoing commitment by IBM Global Business Services to provide analysis and viewpoints that help companies realize business value. You may contact the authors or send an e-mail to *iibv@us.ibm.com* for more information. Additional studies from the IBM Institute for Business Value can be found at *ibm.com/iibv*

By Suzanne L. Duncan, David Notestein, Shanker Ramamurthy and Likhit Wagle

Inefficiency across the global financial markets industry consumes more than US$1.3 trillion of client and shareholder wealth each year – a staggering figure given the industry's expressed purpose as a value-added intermediary. With governmental involvement rising and clients squeezing out financial middlemen, the industry's current approach to making money is unsustainable. Based on input from more than 2,600 industry executives, we believe that future competitiveness depends on creating intelligent alphas, betas and organizations.

Executive summary

The financial markets industry is a significant contributor to the global economy. Each year, it injects an average of US$2.4 trillion into the worldwide gross domestic product.[1]

But the industry's institutional and retail clients are looking at their own financial situations – the value they see, the fees they have paid – and they have questions. Why are we paying so much for poor results? Are our providers good stewards of the capital we've entrusted to them?

As clients become more vocal and begin acting on these doubts, governments are chiming in as well, with more intense regulation. And financial markets firms are left earnestly wondering – do we create value that's commensurate with what we are paid?

To help answer this question, the IBM Institute for Business Value embarked on a year-long study, seeking input from more than 2,600 industry executives, interviewing more than 150 of these leaders at length, quantifying the actual value being created across the industry and forecasting what the financial markets will look like by the end of this decade.

What we found was sobering. Collectively, inefficiency – both in terms of how clients' money is managed and how financial markets firms operate – consumes more than US$1.3 trillion each year. Firms are charging clients for underperforming funds, excessive trading opacity and inaccurate research, and operating costs remain unnecessarily high.

Are financial markets firms creating value that is commensurate with what they are paid?

Our research makes another point exceedingly clear: many of the industry's current methods of making money are unsustainable. Governments and clients won't allow them. In most major markets, governments are already stepping in, attempting to force firms to act in the clients' best interest. Taking matters literally into their own hands, clients are becoming more self-sufficient and more demanding, rapidly reducing their dependence on "high-value" services.

So what does this mean for financial markets firms? How will they make money in this new world of heavy-handed regulators and sophisticated clients?

We believe the answer lies in learning to create intelligent alpha and beta – products and services that are customized based on a deep, factual understanding of the client, as opposed to generic market insights applied equally to all. To develop this capability, firms will need to make major changes in the way they operate – even their core incentives and organizational cultures.

The upside for those that can make this shift is significant. Right now, 87 percent of institutional and retail clients report no particular loyalty to their providers. If we extend this finding to the broader industry, that means there is more than US$102 trillion in assets under management – plus all of the transactions that are associated with those assets – that are up for grabs because the majority of clients would not hesitate to switch providers.[2] The critical question is: will your firm suffer or benefit from this wavering loyalty?

Study methodology

This study is based on input from 2,686 financial markets industry participants across three geographies – 36 percent from the Americas, 34 percent from Europe and 30 percent from Asia. The IBM Institute for Business Value obtained this input through an online survey of more than 2,500 executives, conducted in collaboration with the Chartered Financial Analyst (CFA) Institute. In addition, IBM leaders conducted face-to-face interviews with more than 150 executives between April 2010 and March 2011.

Our primary research incorporates views from a wide range of organizations:

- **Buy side (institutional and retail asset management organizations, hedge funds, private equity firms, wealth management organizations, defined benefit and defined contribution retirement plans, endowments and foundations, and sovereign wealth funds)**
- **Sell side (investment banking and capital markets organizations)**
- **Processors (global custodians, clearing firms, exchanges and alternative trading systems)**
- **Governments and regulatory bodies**
- **Other (academic institutes, think tanks and industry associations)**

Of those who work for financial markets firms, 86 percent are board-level executives, executive vice presidents or heads of divisions. The remainder includes directors, senior vice presidents or vice presidents.

As part of our analysis, we developed a series of quantitative models, based on both primary and secondary research, which aimed to answer the following questions:

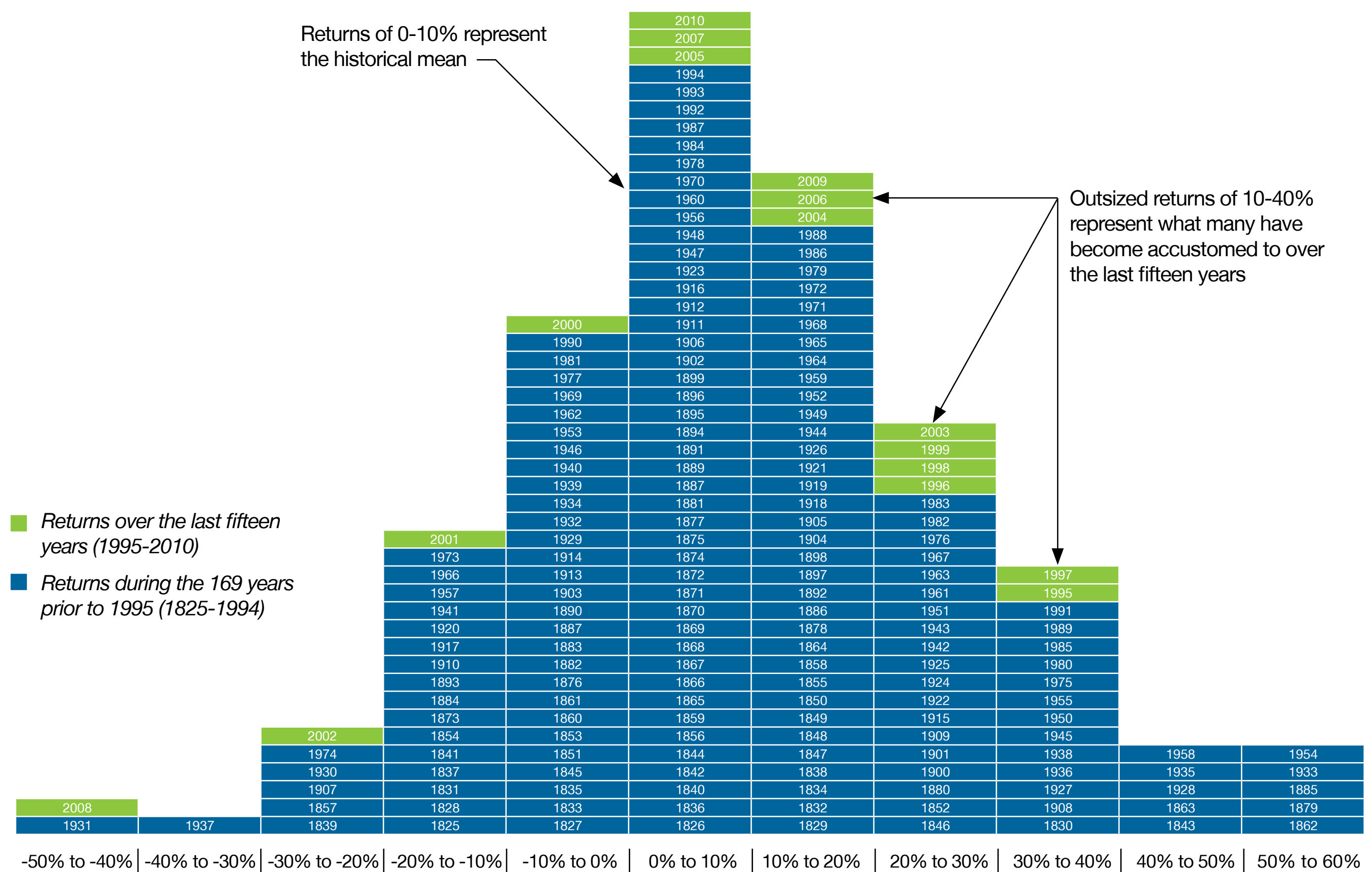
- **Where is value being added and destroyed in the financial markets?**
- **What will the industry look like in 2020?**
- **How can firms generate intelligent alpha?**

This study is part of a continuing research series on the financial markets, which began with "The trader is dead, long live the trader!" published in 2006. Please visit ibm.com/iibv to browse the full body of research available from the IBM Institute for Business Value.

Questioning the value proposition

The financial markets play an integral role in one of the most profitable sectors in recent history. Between 1980 and 2005, profit across all industries grew 250 percent; in financial services, bottom-line growth topped a staggering 800 percent.[3] At the peak of the market in 2005, financial services held the largest share of the market capitalization of the S&P Global 1200 at 26 percent, more than twice the size of any other sector.[4]

Conditioned by heady returns that have spanned much of their careers over the last fifteen years, many in the financial markets industry lost sight of what constitutes a "normal" return on investment (see Figure 1). However, they have now experienced a mean reversion in which investor returns, industry profits and the global economy at large have reverted back to historical norms. And even though markets have picked up recently, these market gyrations and continued uncertainty have severely shaken firms' sense of purpose, clarity of vision and confidence in their value proposition.



Sources: Goetzmann, William N., Roger G. Ibbotson and Liang Peng, "A new historical database for the NYSE 1815 to 1925: Performance and predictability," *Journal of Financial Markets*, Volume 4, Issue 1, January 2001, Pages 1-32; Value Square Asset Management; Plexus Asset Management; and IBM Institute for Business Value analysis.

Figure 1: **Although the industry may have recently become accustomed to outsized returns, these results fall outside the historical norm.**

Surrounded by uncertainty, IBM's financial markets clients have asked repeatedly – and more urgently over the last 12 months – for our help in piecing together a picture of the future financial markets industry. We are responding by offering a point of view on the financial markets circa 2020 based on input from more than 2,600 industry executives, including in-depth interviews with more than 150 of these leaders. Our goal is to bring greater clarity to the serious, introspective questions that financial market executives said they are grappling with: Have we lost sight of our purpose as an industry? Are we really adding value?

As articulated by the executives interviewed for this study, the reason the financial markets industry exists is to efficiently allocate capital from owners (those who have it) to users (those who need it). And in doing so, the financial markets industry generates considerable economic value – contributing US$2.4 trillion to worldwide GDP (3.9 percent of global annual per capita GDP).[5]

So the question is not really "Are the financial markets adding value?" but rather: Are they creating sustainable value? Are firms creating real long-term wealth for their clients and shareholders?

"The purpose of this industry is for people who have capital to give it to those that need it – not to siphon it out in fees."

Global head of equities, large investment bank, North America

At the same time, falling returns – especially in light of firms' historically high profits – have caused clients, shareholders and even financial markets executives themselves to question whether the industry is overpaid for the value it creates. How often does expected alpha actually materialize? How much potential wealth is consumed by inefficiency and misaligned incentives? In short, how much client and shareholder wealth is unnecessarily consumed by the financial markets industry?

The cost of inefficiency

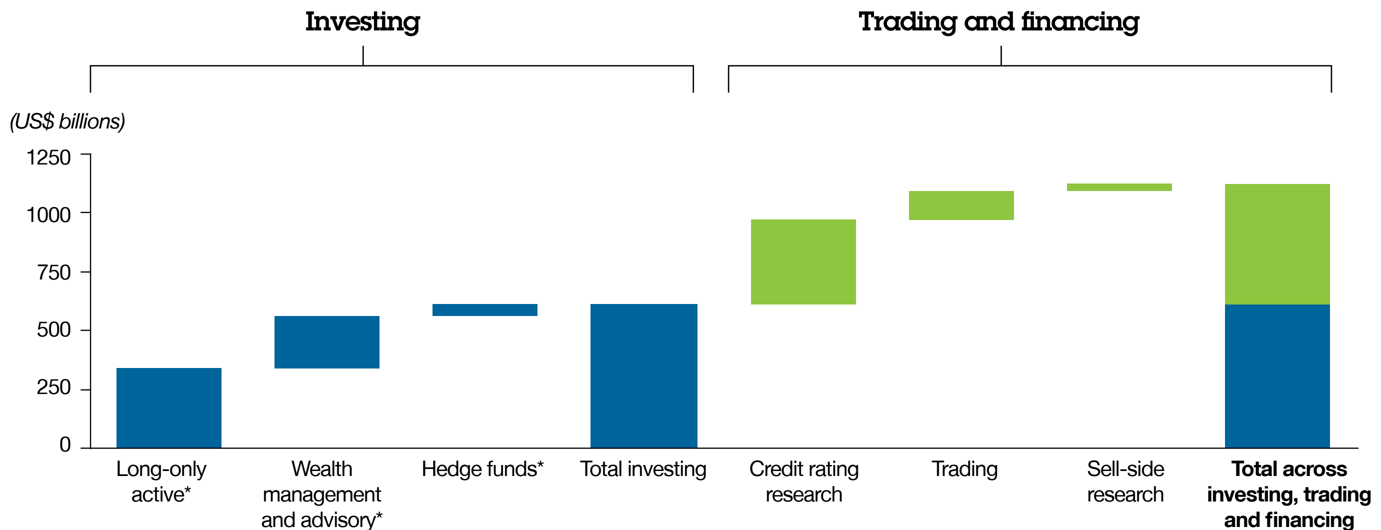
We asked industry executives to tell us what they believed were the largest areas of value creation and destruction within the financial markets. Our aim was to quantify the impact on both client and shareholder wealth in a sufficiently granular way to highlight specific areas of weakness and facilitate tangible improvement.

Impact on client wealth

In terms of institutional and retail client wealth, the executives participating in our study advised us to scrutinize several specific areas across investment management, trading and financing. Based on our analysis of these areas, we have concluded that US$1.1 trillion in client wealth is lost each year as a result of charging high fees for underperforming funds, trading opacity and inaccurate research (see Figure 2).

Through nine months of extensive investigation and modeling, we calculated the industry-wide impact to client wealth in the following areas:

Long-only active – Approximately 70 percent of the world's assets (US$71 trillion) are managed in these funds. By definition, all funds cannot outperform the market, but one could assume that 50 percent should outperform. However, in reality, 85 percent of long-only active funds fail to deliver above



Note: Categories were determined based on more than 150 primary interviews within which we asked for open-ended responses to: "Which are the largest areas of value add versus value destruction for clients?"; *Some degree of overlap exists among Long-only active, Wealth management and advisory, and Hedge funds.
Source: IBM Institute for Business Value analysis.

Figure 2: **$1.1 trillion in client wealth is lost each year across six key areas.**

benchmark returns, which means 35 percent are not contributing value that is commensurate with the fees being charged. Given average global fees of 1.37 percent, this means clients are paying more than **US$340 billion** for subpar results.[6]

Wealth management and advisory – Thirty-eight percent of global assets (US$39 trillion) are held in these funds (which totals over 100 percent given the overlap between long-only active and wealth management). An estimated 67 percent of these funds fail to deliver on their promises to clients as a result of an overemphasis on market outperformance versus asset liability management.[7] Firms charge an average of 2.22 percent in fees for separately managed accounts, of which 1.37 percent is typically attributed to long-only active management while 0.85 percent is attributed to wealth management. This equates to another **US$220 billion** lost.[8]

Hedge funds – Approximately 1.5 percent of the world's assets are found in these funds. Despite the high fees levied (an average of 3.8 percent), 80 percent of these funds fall short of their alpha objectives, subtracting another **US$50 billion**.[9]

"Does your company innovate to make money for your client or to make money from your client? This is a mindset, and we're still light-years behind."

CEO, wealth management, large universal bank, North America

Credit ratings research – There is a 50 percent accuracy rate for structured finance bonds applied to US$1 trillion of the US$4 trillion worth of bonds rated globally each year. To put this into perspective, what if 50 percent of corporate audits fail, how would the audit industry fare? What would happen to the pharmaceuticals industry if 50 percent of the drugs certified by the FDA turn out to be toxic? This inaccuracy of credit ratings research subtracts another **US$360 billion** each year. [10]

Trading – Based on the number of traders worldwide and the average annual cost per seat, the industry spends more than US$250 billion for traders. Given the viability of more automated transactions and rapid adoption rates of clearing in areas such as the over-the-counter derivatives market, clients are paying excess fees of 50 percent, or **US$125 billion** each year.[11]

Sell-side research – Between investment bank spending and soft-dollar commissions, the total annual cost for sell-side research is an estimated US$56 billion. Although clients derive many benefits from the transparency and advice associated with this research, sell-side forecasts are inaccurate 89 percent of the time. If we assume the research should be at least as accurate as throwing darts (50 percent), the cost borne for inaccurate research is over **US$30 billion** each year.[12]

The industry is not the only one contributing to these losses; in some ways, clients have also been complicit. For example, long-only active fees have fallen by only 1.9 percent compounded annually over the last nine years, suggesting minimal fee pressure. And hedge fund fees have actually increased by 1.1 percent compounded annually over the same period – evidence that clients have been willing to pay more despite results.[13] At the same time, credit ratings and sell-side research continue to be used by clients for the transparency they create despite their inaccuracy rates.

Impact on shareholder wealth

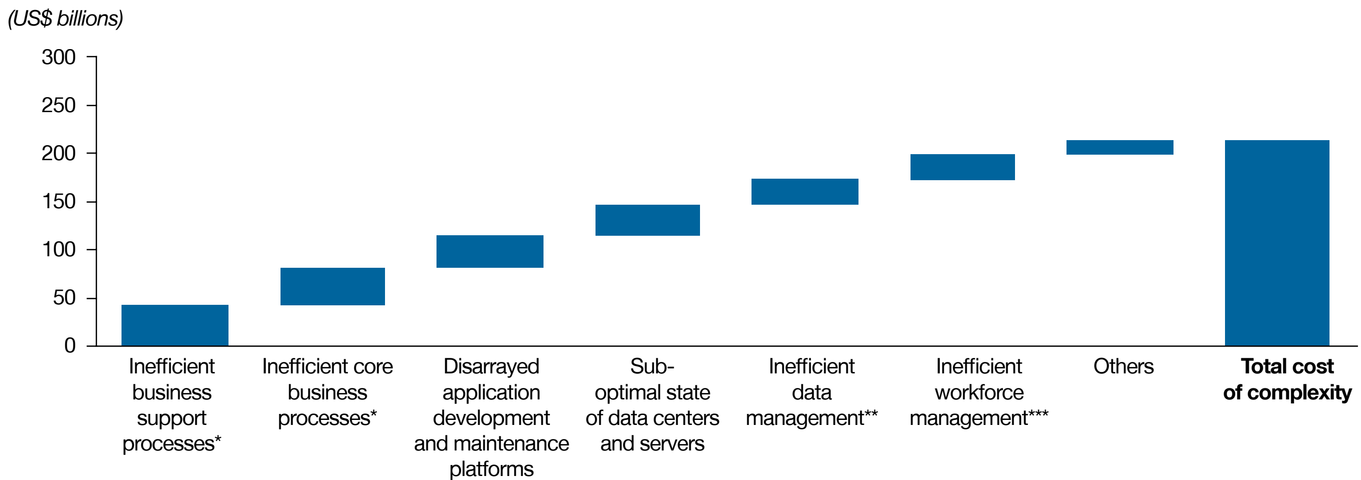
In addition to the client wealth lost, firms are also undercutting shareholder wealth as a result of organizational complexity. We estimate that between 15 and 20 percent of the US$1.3 trillion consumed annually as operational costs is wasted through inefficiency.[14]

Specifically, our analysis – across the most problematic areas identified by the executives we interviewed – showed that the financial markets industry is shorting shareholders over **US$200 billion** each year (see Figure 3). The largest areas of complexity cost are related to inefficient business support processes (functions such as finance and human resources) and inefficient core business processes (businesses such as back-office processing of derivatives). Within data and workforce management, the losses are smaller but still significant. Putting this in perspective, complexity is lowering the industry's return on equity by a disturbing 5.3 percent.[15]

Together, the losses in shareholder and client wealth total US$1.3 trillion each year.

"Our problem is that our industry doesn't make cost transparent enough to invest capital effectively."

COO, large global bank, Europe



Note: Categories were determined based on more than 150 primary interviews within which we asked for open-ended responses to: "Which are the largest areas of value add versus value destruction for clients?"; *Inefficient business support processes (e.g., Finance) and Inefficient core business processes (e.g., Processing derivatives) represent the operational costs associated with manual intervention; **Data management refers to market and reference data management; ***Inefficient workforce management represents inefficient use of skill sets and geographic locations.
Source: IBM Institute for Business Value analysis.

Figure 3: **Organizational complexity consumes more than $200 billion in shareholder value each year.**

Governments and clients revolt

This level of inefficiency is simply unsustainable. The industry's high cost of intermediation – combined with an inconsistent track record at delivering expected returns – is pushing governments and institutional and retail clients to act. As a result, by 2020, the industry will no longer be able to depend on today's dominant sources of revenue.

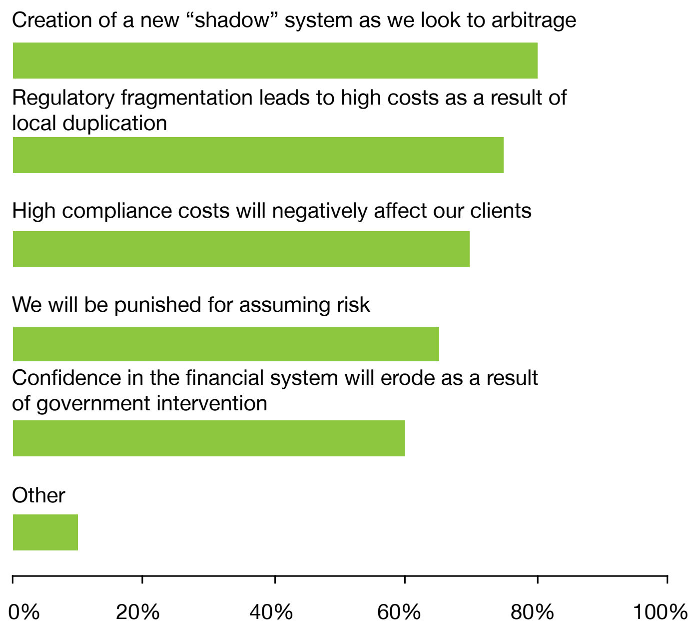
Revenue threats from regulatory reform

In our financial markets study, executives told us that government intervention in the areas of *acting in client's interest*, *capital / liquidity provisions* and *transparency* will have the most profound impact on their firms. We're already seeing new and pending regulations from the Dodd-Frank Act and Basel III that are eliminating or altering traditional sources of revenue – such as prohibiting proprietary trading, placing brokers in strictly fiduciary roles, mandating lower levels of risk and forcing greater transparency in markets and in fee composition.

"We hope the regulators can help us, but the financial industry has a short memory. It took twenty years for us to learn our lesson last time; this time it'll only take ten years before we cause chaos all over again."

Head of prime brokerage, large investment bank, North America

As regulation continues to escalate, the industry is becoming increasingly skeptical. According to the CFA Institute Financial Market Integrity Index, the perception of financial reform effectiveness is mediocre at best, with a ranking of less than 3 (on a scale of 1 to 5) across every category.[16] When asked about potential consequences of rising regulatory oversight, the executives in our study expressed grave concerns (see Figure 4). More than three-quarters fear creation of a new "shadow" system as firms continue to look for arbitrage opportunities, and many believe regulatory fragmentation may lead to more local duplication and thus higher costs.[17]



Note: n=103; Open-ended responses to: "What are your largest concerns regarding financial reform efforts?"
Source: IBM Institute for Business Value primary interviews; IBM Institute for Business Value analysis.

Figure 4: **Executives share some specific concerns about the impact of future financial reform.**

"I am afraid of unintended consequences creating a new and much larger shadow system; the painful result would be an even more severe boom and bust cycle."

CEO, large asset servicing firm, Asia Pacific

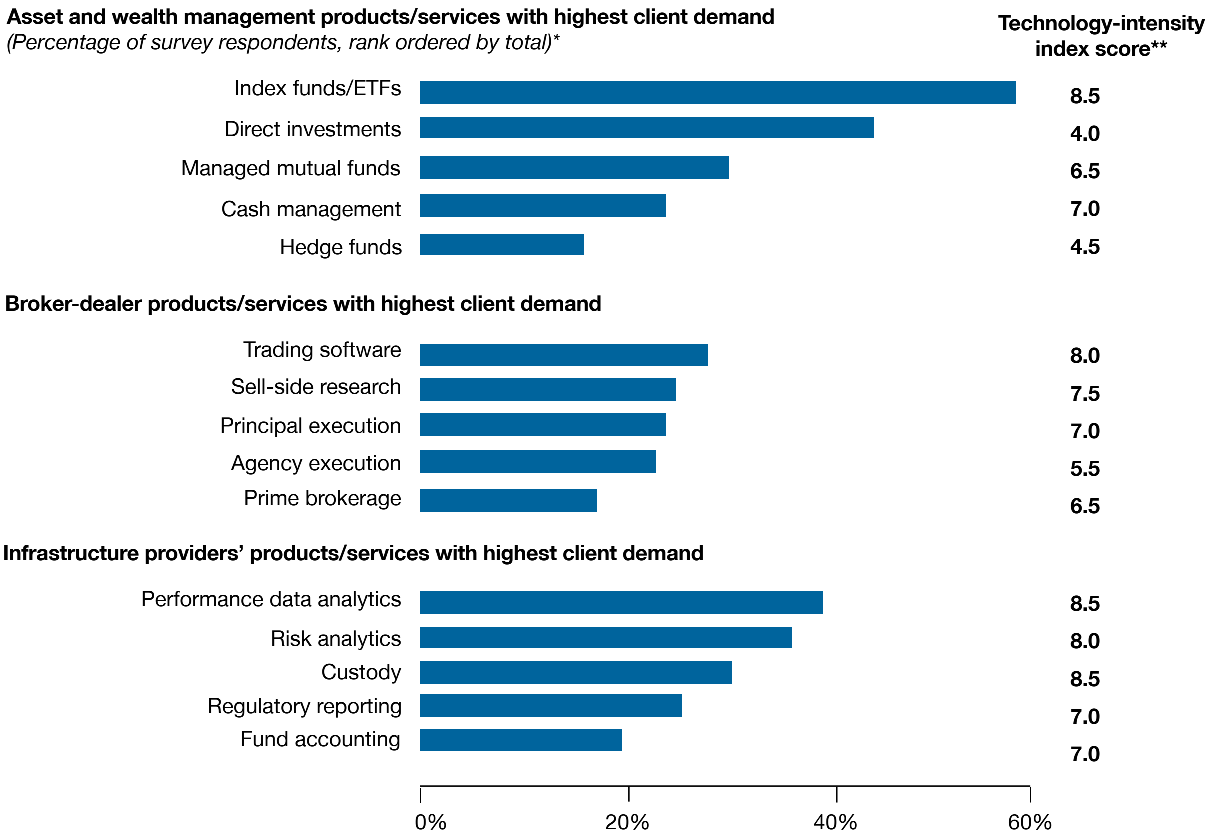
Top line also threatened by client shifts

Shocked into action by the recent economic crisis and empowered by access to increasing amounts of information, clients are changing course. Trust and belief that providers have their best interests at heart are waning. In this study, as well as our 2008 research, more than 60 percent of clients *strongly* agree that providers are more likely to offer products that are in the providers' best interests rather than the clients'.[18] As a result, 60 percent of institutional and retail clients said they are becoming more sophisticated and price sensitive and will demand greater value from providers.

In addition, our analysis indicates that as clients become more self-sufficient and more cognizant of the value they are – or are not – receiving from providers, they are increasingly interested in products and services that depend more on technology and less on people (see Figure 5).

"Clients are becoming very sophisticated – it is a dialog with an equal."

Chief Marketing Officer, universal bank, Europe



Note: n=1,822; *Question asked: "Which products and services will be increasingly important for your firm to meet its strategic company objectives over the next ten years? Please select two." **Technology-intensity index scores are out of 10; index components include technology depth, technology breadth and level of human capital intensity; a high rank implies optimal use of technology and minimal use of human capital.
Sources: IBM Institute for Business Value / CFA Institute Survey; IBM Institute for Business Value analysis.

Figure 5: **Client demand for technology-intensive products and services is rising, jeopardizing traditional revenue sources.**

This trend is evident in a variety of areas. For example, in asset management, the percentage share of global assets under passive management increased a full 10 percent between 2001 and 2009, almost all of this gain at the expense of long-only active's share.[19] Even in the over-the-counter derivative markets, where transactions historically have been executed dealer to dealer, a shift toward more standardization and

"Clients are also becoming more demanding – they are impatient, and we need to be right the first time, as we may not get a second chance."

Global head of fixed income, large investment bank, Europe

automated clearing is underway. Between 2000 and 2010, the number of registered derivative clearing organizations within the Commodity Futures Trading Commission more than doubled.[20] Globally, more than 22 derivative clearing organizations were active at the end of 2010.[21]

These shifts toward more technology-intensive products and services will not only change the way firms generate profits over the next decade but will also pose additional challenges in building client loyalty.

Financial markets in 2020

So what do these regulatory and client behavior changes mean for the industry, and how will it make money in 2020? Within both the buy and sell sides of the financial markets, we see the revenue pendulum swinging from products and services that are opaque and people-intensive, with commensurately high fees, to those that are more transparent and technology-enabled, which have much lower fees. This shift will not be subtle, nor will it be slow.

Our estimates suggest that, on the buy side, the current proportion of assets under management in long-only active funds will shrink from 70 percent to less than 50 percent over the next decade. By 2020, more than 40 percent of global assets will reside in beta funds. On the sell side over the next ten years, standardized agency trading will dwarf its customized principal counterpart, growing from 45 to more than 70 percent of sell-side revenue.[22]

"We have the opportunity to invent a business model with the appropriate return based on the risk – even though it's lower; 15 percent is not a bad return."

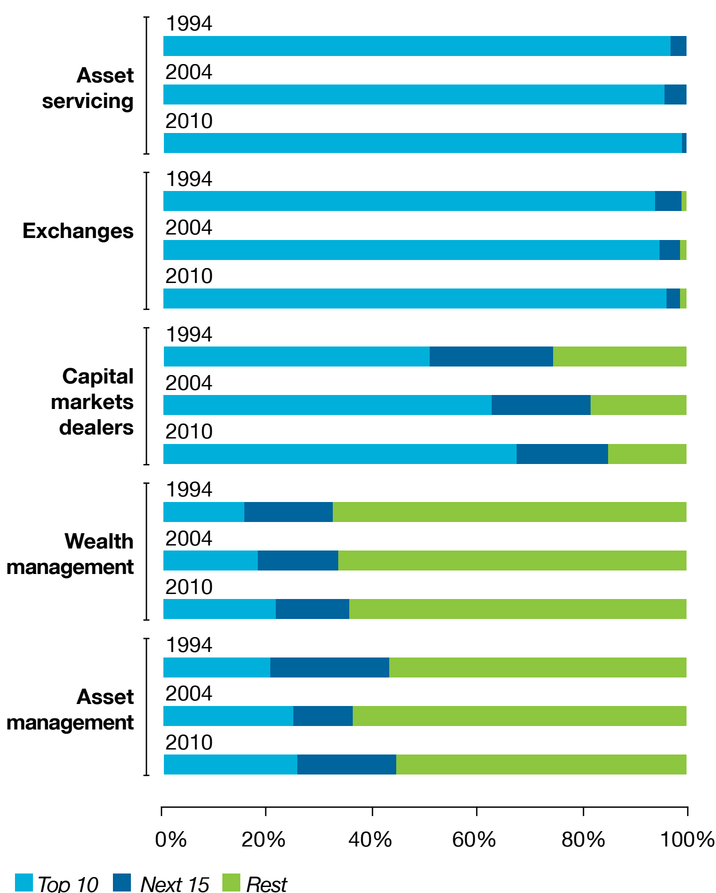
COO, large bank, North America

These shifts in revenue sources have profound implications for the financial markets industry in terms of future structure and investment. For example, the industry is consolidating. In the capital markets, the top ten dealers controlled just over half of the market in 1994 and now have well over two-thirds share (see Figure 6). In the historically fragmented wealth management segment, the market share controlled by the top ten firms grew by 3 percent in the decade leading up to 2004; it has increased another 3 percent in just the last six years. As revenues move toward beta funds and agency trading, this march toward industry consolidation will likely accelerate; too many providers will be vying for the same shrinking fee pool.

In addition, over the next decade, both clients and providers anticipate high levels of disintermediation in the financial markets. According to our study, clients believe as much as 45 percent of the resources currently devoted to sell-side research will no longer be needed, obviated by more passive forms of investing and buy-side research; providers agree there will be displacement, but put it closer to 28 percent.

Similarly, because clients are relying more often on their own credit research, they believe the industry will need 42 percent fewer credit-rating agency analysts; providers agree that this is a prime target for disintermediation and estimate a 35 percent reduction. Also high on their list, clients expect trading to become more standardized and automated, leading to a 40 percent reduction in traders; providers forecast a 34 percent decrease. And although the levels of displacement are somewhat lower, both clients and providers expect the number of advisors and portfolio managers to drop by roughly one-third.

Global levels of consolidation, 1994, 2004, 2010
*(Market share of largest firms)**



Note: *Asset servicing is based on share of assets under custody, exchanges is share of volume; capital markets dealers is based on share of revenue; wealth and asset management represent share of global assets under management.
Sources: IBM Institute for Business Value analysis; World Federation of Exchanges Statistics, http://world-exchanges.org/statistics; "Annual Money Manager Survey," Pensions & Investments, May 2010; "The Scorpio Partnership Private Banking Benchmark 2010," Scorpio Partnership, July 2010; company annual reports.

Figure 6: **Across all financial markets segments, dominant players are becoming even more dominant.**

The future of profit: Intelligent alphas, betas and organizations

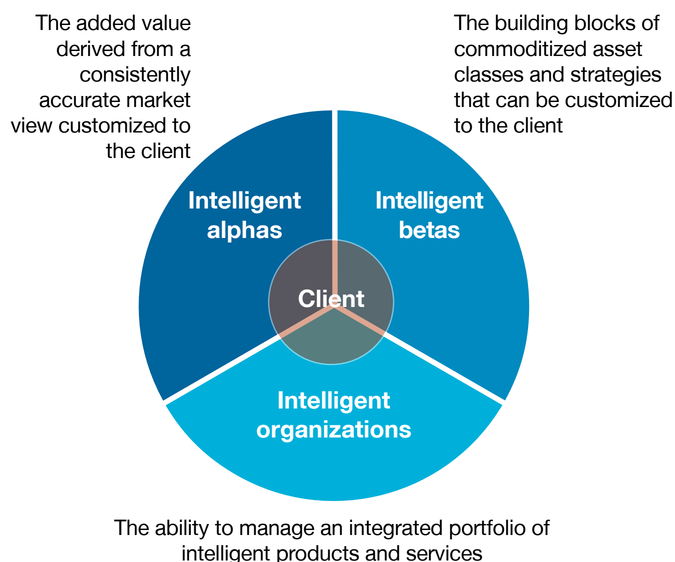
When asked about future profit margins, executives' views varied considerably – 37 percent think they will decrease over the next ten years, 30 percent say they will stay the same and 22 percent foresee an increase. Among those believing margins will fall, the average expected drop relative to pre-crisis levels is 23 percent; while those anticipating improvement suggest an average increase of 27 percent.

Clearly, there's no consensus view on where margins are headed. And in reality, individual firms may see margins at either end of this spectrum, depending on the specific actions each takes. But we believe profitable growth for the industry – regardless of its magnitude – will depend on firms producing sustainable returns for their clients and shareholders.

To do this, the industry must derive unique insights by putting the client at the center of its solutions. Firms need a deep, factual understanding of client needs and the ability to fulfill them (see Figure 7).

"I believe there is an enormous missed opportunity for our providers to make money for us. Only when that happens will they get paid."

Chief Investment Officer, large sovereign wealth fund, Middle East



Source: IBM Institute for Business Value.

Figure 7: **Client insight should drive creation of more intelligent products and services and dictate how organizations deliver them.**

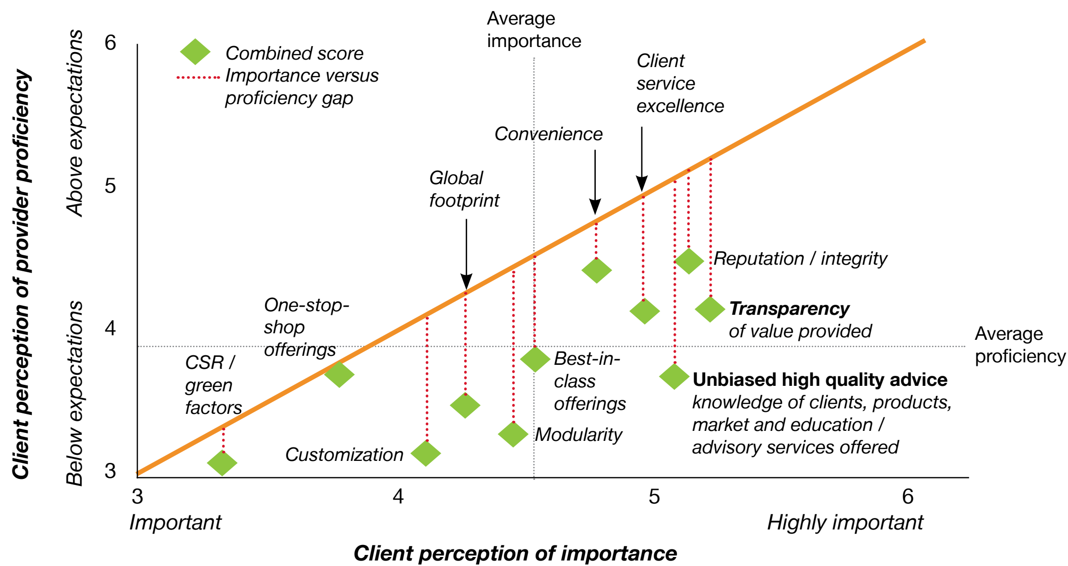
Making alpha and beta more intelligent

In terms of alpha generation, the industry's current track record needs improvement. Only 15 percent of traditional money managers outperform their stated benchmarks.[23] Hedge fund managers perform marginally better at 20 percent.[24] Half of all credit analyst research is inaccurate.[25] And only 11 percent of sell-side research accurately reflects actual long-term earnings.[26]

We believe one of the main contributors to this faltering performance is the industry's inclination to pursue alpha based primarily on market insight; providers seldom adapt their products and services based on a deep understanding of a client's balance sheet and profit and loss statement. For example, many portfolio construction and trading strategies are developed without taking into consideration the client's unique situation, thereby reducing the likelihood of achieving appropriate outcomes.

The flight from active to passive investing and from principal to agency trading also means that the industry needs to pay more attention to beta generation, replication and intermediation than it has in the past. What are now considered commoditized building blocks may very well be the main profit centers for the industry by 2020 – particularly if firms can make them more dynamic and customized to their institutional and retail clients. For example, cross-asset-class algorithms may be applied to varying segments of the equities and fixed income markets based on the individual client's situation, thereby resulting in greater trading loyalty.

One of the largest challenges in producing more intelligent alpha and beta is that the financial markets industry's mindset and investments are not currently well aligned with what clients really want. More specifically, our research indicates that transparency and quality advice are highly valued by clients, and yet they represent some of the largest execution gaps for the industry (see Figure 8).

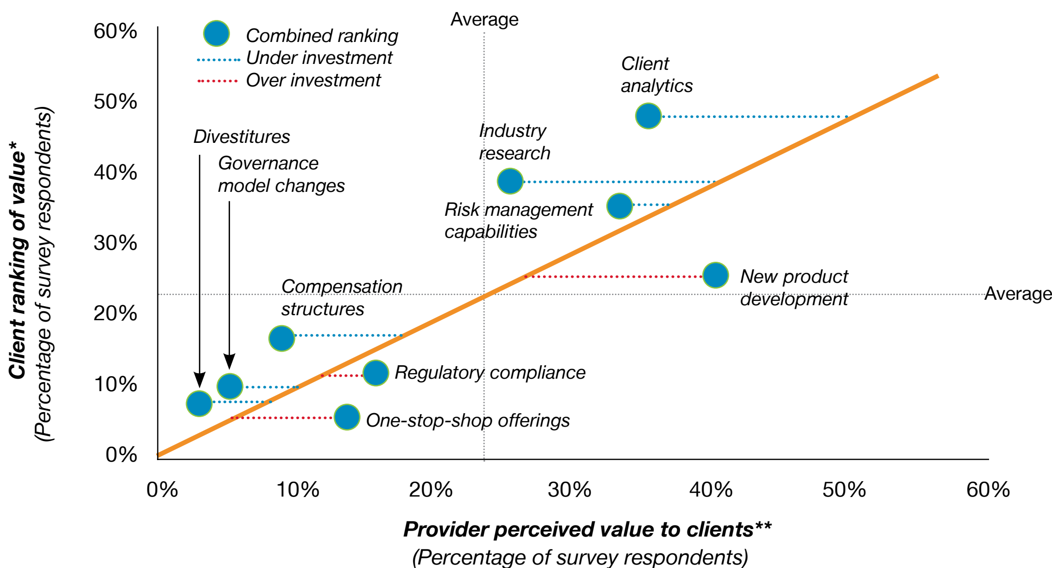


Note: For X-axis, n=1,250; for Y-axis, n=387; Question asked: "Will the following capabilities become increasingly important/less important to you over the next five years? Please rate factors on a scale of 1-6 where 1=Becoming less important and 6=Becoming more important; Based on your providers' current capabilities, which of the following areas represent the largest strengths and weaknesses? Please rate factors on a scale of 1-6 where 1=Weak and 6=Best in class."
Source: IBM Institute for Business Value / CFA Institute Survey; IBM Institute for Business Value analysis.

Figure 8: **Transparency and quality advice are critically important to clients – yet provider proficiency falls short.**

It is difficult for clients to believe that providers have their best interests at heart when they feel the firm doesn't really know their individual situations and needs. They are clamoring for providers to spend more on client analytics – it's their way of saying "understand me."

Meanwhile, companies are overinvesting in new product development and one-stop-shop offerings, which are far less important to their institutional and retail clients (see Figure 9).



Note: For X-axis, n = 1,220; for Y-axis, n=1,300; *Question asked: "In which areas would you like your investment provider to invest most heavily over the next five years? Please select two."; **Question asked: "In which areas would you like your provider to invest most heavily over the next five years? Please select two."
Source: IBM Institute for Business Value / CFA Institute Survey; Primary interviews; IBM Institute for Business Value analysis.

Figure 9: **With its product-focused mindset, the industry remains out of step with what clients want.**

Having a deeper and more dynamic view of the client is critically important, but it's not sufficient. Providers must also have an incentive to use it. In our study, clients rated "align compensation and incentives to client needs" as the top action firms could take to restore client trust.

To produce intelligent alpha and beta, a firm should be aiming for:

- **Deeper market insight** – Establishing more analytical rigor and a greater appetite for fact-based decision making to overcome the biases and assumptions that can pollute decisions. For example, a computer model of stock analysts' estimates of future returns is more accurate than the analysts themselves over 70 percent of the time.[27] Subjective changes analysts make to the input factors account for the majority of the difference.
- **Deeper cost insight** – Developing a thorough and granular understanding of enterprise costs to shrink exposed inefficiency and combat the tendency to turn to revenue as the primary path to greater profitability. Many executives indicated it is easier to repackage an offering than it is to identify unnecessary costs. Successful firms, however, will focus on both the top and the bottom lines to achieve sustainable growth.

- **Deeper client insight** – Building a more comprehensive, factual understanding of clients and their needs to guide more personalized product and service development and delivery. For example, on the institutional side, firms must understand not only their clients' unique behaviors and attitudes, but also those of their clients' clients and how they may change over time.
- **Flexible solution assembly** – Gaining the flexibility necessary to build, price and deliver solutions composed of existing and new products and services customized to client needs. Product silos such as equity and fixed income pose the most significant barrier and must be decomposed to enable solution assembly.
- **Greater speed** – Pursuing low-latency trading approaches as well as shorter product development cycles and more automated client segmentation, which make customization by client viable.

Toward intelligent pension management

Defined benefit (DB) pensions are often companies' and governments' largest balance sheet risk, making this a prime area for creating intelligent alpha and beta. Traditionally, pension plans have focused on managing investment risk. However, sponsors are becoming increasingly aware of the need to manage other key exposures related to interest rates, inflation, as well as rising longevity of plan members.

Currently, DB pension risk analysis is typically based on formal actuarial valuations conducted annually – or even triennially in regions where the minimum regulatory requirement is more lenient. These infrequent valuations leave sponsors and trustees to make pension management decisions based on outdated and inaccurate information. Making matters worse, decision makers lack granular data on plan liabilities (e.g., member-level liability values) to properly evaluate risk-transfer options, often resulting in unnecessary costs.

Recognizing the need for deeper insights, technology firms such as PensionsFirst have begun to offer risk management platforms that help sponsors better understand their plans' unique liability and investment positions. These platforms allow sponsors and trustees to more accurately model pension cash flows and test various macroeconomic and demographic variables, incorporating current data on equity prices, interest rates, inflation, and mortality expectations. Sophisticated analytics capabilities allow scenario testing down to the individual member or security level. And by bringing together asset and liability information, the models can consistently apply common risk factors like inflation and depict the full effect across the entire balance sheet.

Under increasing pressure from shareholders and analysts to disclose all risks, not just operational ones, CFOs and other finance leaders need to manage their pension risk exposures with the same rigor as all other corporate risks. By arming themselves with more accurate, realtime valuations rather than the year-old variety, sponsors and trustees are in a much better position to make prudent risk management decisions and take advantage of market opportunities when they arise.

Delivering through intelligent organizations

Today, many financial markets firms are locked into the status quo. Current operations demand the majority of their available technology budgets, leaving little for exploring new client solutions. Too often, it's their systems – not their strategies – that dictate how firms interact with clients.

Organizational constraints are also hampering firms' ability to develop a keener sense of their clients needs. The clients who participated in our study are clear not only about the need for providers to understand them better; they also voiced strong opinions about how to improve client insight. *Developing needs-based, cross-asset class product capabilities* and *integrating systems to have a more cohesive view of the client* are at the top of their list. For firms, integration across organizational silos must become a priority.

In addition, producing and applying client insight depends heavily on the organization's ability to manage data effectively. However, IBM's experience with clients suggests that companies typically devote 70 percent of their resources to simply collecting and validating data and only 30 percent to reporting on data, analyzing it to gain insights or acting on the resulting insights.[28]

"We are paralyzed by process – I can't implement enough value add. This is not sustainable, and we must become smarter about the way we do things."

CEO, large private bank, Europe

"There is more and more data every day – data that is more and more granular. We're not only trying to keep up, but also to sift through the noise to add value to our clients. It's difficult because it's like an avalanche."

COO, large investment bank, Asia Pacific

To deliver more intelligent products and services, firms should be working toward:

- **An enterprise-wide view of the client** – Integrating client information across product silos and developing an accurate assessment of risk-adjusted client profitability. For example, hedge funds are one of the most profitable client segments today, but will they continue to be in the future?
- **Integrated portfolio management** – Enabling cross-asset-class integration internally and through partnering. For example, firms today offer competing funds to investors via open architecture wealth management solutions, but many still push their own products. Firms that have demonstrated they are truly open have gained greater client loyalty.
- **Simplification** – Focusing on identifying and reducing organizational complexity, thereby improving speed and lowering costs. Simplification can also lead to increased loyalty as clients often complain of cumbersome interactions with "overly bureaucratic" providers.[29]
- **Client-focused culture** – Basing incentives on creation of long-term wealth for the client versus short-term returns for the industry. Investors, for example, could pay portfolio managers a base expense fee plus a performance fee when the fund outperforms its respective benchmark.

Financially committed to long-term wealth creation

Created in 1974 to manage the assets of Singapore's Ministry of Finance, Temasek Holdings operates as an independent investment house, with a portfolio valued at S$186 billion.[30] Among the top 50 sovereign wealth funds worldwide, it ranks number 11.[31] But what we find most interesting is the firm's unwavering focus on long-term wealth creation, which influences everything from investment decisions to employee incentives.

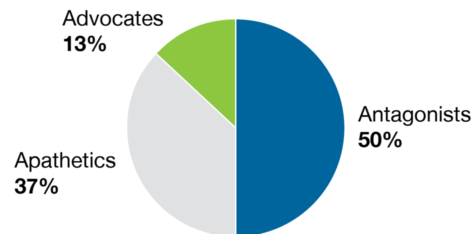
To instill an owner mindset among employees, Temasek's compensation plan includes an innovative scheme of risk-reward sharing based on Wealth Added (WA) – which is the return in excess of risk-adjusted cost of capital – and Total Shareholder Return (TSR).[32] In each year that the company achieves positive WA, a portion is deposited into employees' WA bonus bank accounts. However, a significant percentage (one-third for junior staff, two-thirds for senior managers) is deferred for 3 to 12 years – and is at risk of "clawbacks" if shareholder wealth is subsequently destroyed.

Temasek's novel compensation framework did not get much notoriety until it was tested by the fires of the latest downturn. In 2008, negative WA of S$6.3 billion resulted in first-ever clawbacks from staff's bonus bank balances.[33] Hit harder in 2009, negative WA of S$68.1 billion wiped out all remaining deferred bonuses, and excess negative allocations were aggregated at the company level to be recovered in future years. Fortunately, 2010 brought better company results, with one-year TSR rebounding from -30 percent to +42 percent.[34]

Despite the recent short-term pain, the organization remains committed to delivering long-term value to its shareholder – an objective against which it is clearly excelling. Since its inception, Temasek has generated a compound annual TSR of 17 percent.[35] As providers worldwide vie for a piece of Temasek's portfolio, they should also take note of its core commitment to sustainable wealth creation – and follow Temasek's lead.

Client loyalty up for grabs

Among the institutional and retail clients participating in our study, the number who were advocates of their providers was exceedingly low (see Figure 10).[36] Said more bluntly, more than 85 percent of clients see no reason to stick with their current providers.



How antagonists and advocates rate providers on key measures of trust and advice

Antagonists % agree	Trust attributes	Advocates % agree
14%	"I trust my provider to recommend products that meet my needs"	44%
12%	"I view my provider as a trusted advisor"	44%
	Advice attributes	
15%	"My provider has knowledgeable staff who offer me the best possible advice"	47%
17%	"Employees work effectively as a team to meet my needs"	46%
15%	"Employees listen proactively to understand my needs"	44%

Note: n=1,961; A statistical cluster analysis was performed to segment the respondents into advocates, apathetics and antagonists based on responses to three categories of questions: 1) loyalty to provider, e.g., going to provider first for product / service needs, 2) frequency of switching providers and 3) recommending provider to others.
Source: IBM Institute for Business Value / CFA Institute Survey; Primary interviews; IBM Institute for Business Value analysis.

Figure 10: **Only 13 percent of clients have any allegiance to their providers.**

> *"It is so easy for us to compare providers – they are no longer a black box, and it's very easy for us to switch."*
>
> CEO, large asset management firm, North America

The primary reasons revolve around issues of trust and advice. As Figure 10 shows, antagonistic and apathetic clients do not believe their providers are really listening and making client-focused recommendations. But even more surprising, less than half of the advocates expressed trust in their providers.

Although loyalty is shaky now, it could get even worse as demand shifts from actively to passively managed products and from principal to agency trading. This is precisely why financial markets firms must reorient their businesses around the client – changing the way they approach alpha and even beta generation, as well as how their organizations operate.

Even though this is disappointing news for the industry as a whole, it can bode well for individual firms. The upside is the tremendous market potential available to the providers who can cultivate a loyal following through client-tailored products and services delivered through a client-focused organizational model.

A return to real wealth creation

So what are some logical next steps for financial markets firms that are serious about closing client expectation gaps and building greater advocacy? How can firms unseat the prevailing concentration on short-term profits and instill a deeper focus on real, long-term wealth creation for clients, shareholders and themselves? Where should they start?

The following questions can help firms identify critical weaknesses and begin to formulate an action plan:

- How much wealth are we creating for our clients over the long term?
- How can we realign employee incentives toward long-term wealth creation?
- How much is our current complexity costing shareholders?
- Who should our most important clients be?
- Do we have the depth of client-based research and analytical capabilities necessary to determine what our target clients need?
- Do we have the organizational dexterity to respond to identified needs with customized products and services?

Clearly, the financial markets industry cannot ignore the impact of its inefficiency on client and shareholder wealth. Moreover, creating value for the firm does not have to be mutually exclusive with creating value for the client. The challenge lies in shifting the focus from benchmarks, league tables and relative industry standings to a more appropriate bar – the client. To know which firms will be at the top of the industry in 2020, look for those who are tying their own success to clients' success and reorienting their businesses around the long-term interests of their clients.

To learn more about this IBM Institute for Business Value study, please contact us at *iibv@us.ibm.com*. For a full catalog of our research, visit:

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Notes and references

1 Ranciere, Romain, Aaron Tornell and Frank Westermann, "Decomposing the effects of financial liberalization: Crises vs. growth," Journal of Banking & Finance, August 17, 2006, http://romainranciere.com/research/JBF.pdf; Philippon, Thomas, "The Evolution of the US Financial Industry from 1860 to 2007: Theory and Evidence," New York University, Stern School of Business, http://pages.stern.nyu.edu/~tphilipp/papers/finsize.pdf; IBM Institute for Business Value analysis.

2 Eighty-seven percent of the clients who participated in our study are classified as either apathetic or antagonistic toward their financial services providers (additional detail on this finding will be presented later in this report). Extending this 87 percent finding to assets under management industry-wide (based on "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010), we have estimated the potential impact of this lack of loyalty.

3 Kim, Joon Hee, "Financial Crisis: Through Various Perspectives," MIT Sloan School of Management, June 2010, http://dspace.mit.edu/bitstream/handle/1721.1/59137/659513788.pdf?sequence=1

4 IBM Institute for Business Value analysis of Standard & Poors data.

5 Ranciere, Romain, Aaron Tornell and Frank Westermann, "Decomposing the effects of financial liberalization: Crises vs. growth," Journal of Banking & Finance, August 17, 2006, http://romainranciere.com/research/JBF.pdf; Philippon, Thomas, "The Evolution of the US Financial Industry from 1860 to 2007: Theory and Evidence," New York University, Stern School of Business, http://pages.stern.nyu.edu/~tphilipp/papers/finsize.pdf; IBM Institute for Business Value analysis.

6 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "Fund Expenses: A Transatlantic Study," Lipper, a Thomson Reuters company, September 2009; Morningstar fund research; "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010; Armstrong, David, "Why Active Equity Management Stinks," U.S. News and World Report, January 14, 2011, http://finance.yahoo.com/news/Why-Active-Equity-Management-usnews-1460826030.html?x=0&sec=topStories&pos=main&asset=&ccode= ; and primary interviews. The 85 percent figure is based on a statistical analysis of returns over both short- and long-term timeframes, including 3, 5, 10, 20, 30 and 40 years.

7 "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010. Asset liability management is defined as a customized risk management solution designed to earn an adequate return while maintaining a comfortable surplus of assets beyond liabilities. This solution emphasizes customized asset allocation and takes into consideration interest rates, earning power and degree of willingness to take on debt.

8 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010; and primary interviews.

9 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: Hedge Fund Intelligence, http://www.hedgefundintelligence.net; "Hedge Funds: The Fee Debate," Preqin Research, April 2010; Ibbotson, Roger, Peng Chen, and Kevin Zhu, "The ABCs of Hedge Funds: Alphas, Betas, and Costs," March 2010; and primary interviews.

10 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "The Performance of Structured Finance Ratings," Moody's Investor Service, 2009; "Moody's 2009 Annual Report," Moody's Corporation, 2009; and primary interviews. The 50 percent inaccuracy rate is based on structured finance bonds rated in 2009. To arrive at the US$360 billion figure, we applied an attenuation factor of 70 percent to compensate for the fact that the majority, but not all of this 50 percent, is considered toxic. The methodology we used for credit ratings agencies differs from the other methodologies in that it is capital driven versus fee driven.

11 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "Deutsche Bank Annual Report 2009," Page 22; "Credit Suisse Annual Report 2009," Page 24; "UBS Annual Report 2009," Page 95; "Global Investment Banks Quarterly," UBS Investment Research, May 28, 2010; Steil, Benn, David G. Victor and Richard R. Nelson, "Technological innovation and economic performance, " New Jersey: Princeton University Press, 2002, Page 317; and primary interviews.

12 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: Stevenson, Jamie, "Three simple steps to improve sell-side broker research," Responsible Investor, January 19, 2009; "Battle of the Bulge Bracket: The Changing Shape of the Capital Markets Industry," IBM Institute for Business Value, 2005; International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010; "Follow the Economy's Pulse: corporate earnings," MarketGrader.com; "Sell-Side Research Accuracy," Alpha Dinar, August 29, 2009; and primary interviews. The 89 percent figure represents the percentage of S&P 500 firms for which consensus estimates were missed in 2009.

13 "2010 Investment Company Fact Book," Investment Company Institute (ICI), 2010; "Hedge Funds: The Fee Debate," Preqin, April 2010; IBM Institute for Business Value analysis.

14 Operational costs were estimated based on: "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010; "Global Investment Banks Quarterly," UBS Investment Research, May 28, 2010; Duncan, Suzanne, Daniel Latimore and Shanker Ramamurthy, "Toward transparency and sustainability: Building a new financial order," IBM Institute for Business Value, April 2009; and IBM Institute for Business Value analysis. Inefficiency percentages are based on IBM Global Business Services' experience with more than 100 financial markets clients' improvement projects.

15 Ibid.

16 CFA Institute Financial Market Integrity Index. http://www.cfainstitute.org/ethics/topics/Pages/financial_market_integrity_index.aspx?intCamp=fmi_index

17 An example of emerging shadow systems is the growth of dark pools, which currently represent 10 percent of US equity trading volumes, 7 percent of European volumes and 1 percent of volumes in Asia Pacific. The number of active dark pools has nearly tripled from 10 in 2002 to 29 in 2009. Although dark pools reduce trading costs, executives are concerned about their opacity relative to their "lit" exchange counterparts. For more information, see: "Barclays Capital to launch dark pool for European equities," Finextra Research, June 14, 2010, http://www.finextra.com/news/fullstory.aspx?newsitemid=21490; Preece, Rhodri, "Shedding light on anonymous trading in dark pools," Financial Times, December 2, 2009, http://www.ft.com/cms/s/0/912c47c0-e128-11 de-af7a-00144feab49a.html#axzz1EXvUlvfC; Lim, Kevin and Adrian Bathgate, "ANALYSIS-Regulation may dim growth of 'dark pools' in Asia," Reuters, August 17, 2010, http://blogs.reuters.com/financial-regulatory-forum/2010/08/17/analysis-regulation-may-dim-growth-of-dark-pools-in-asia/

18 This percentage is based on those who answered "strongly agree" to the question: "To what extent would you agree or disagree with this statement in today's environment - Providers are most likely to offer products and services in the provider's own best interest." For more information on our 2008 research, see: Duncan, Suzanne, Daniel Latimore and Shanker Ramamurthy, "Toward transparency and sustainability: Building a new financial order," IBM Institute for Business Value, April 2009.

19 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010; "2010 Preqin Global Private Equity Report," Preqin, 2010; "2010 Investment Company Fact Book," Investment Company Institute (ICI), 2010.

20 U.S. Commodity Futures Trading Commission website. http://www.cftc.gov; "Finance Project: Clearing OTC Derivatives," The University of Utah, S.J. Quinney College of Law, http://www.clearingotcderivatives.com; IBM Institute for Business Value analysis.

21 Ibid.

22 IBM Institute for Business Value analysis.

23 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "Fund Expenses: A Transatlantic Study," Lipper, a Thomson Reuters company, September 2009; Morningstar fund research; "International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010. This percentage is based on a statistical analysis of returns over both short- and long-term timeframes, including 3, 5, 10, 20, 30 and 40 years.

24 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: Hedge Fund Intelligence, http://www.hedgefundintelligence.net; "Hedge Funds: The Fee Debate," Preqin Research, April 2010; Ibbotson, Roger, Peng Chen, and Kevin Zhu, "The ABCs of Hedge Funds: Alphas, Betas, and Costs," March 2010.

25 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: "The Performance of Structured Finance Ratings," Moody's Investor Service, 2009; "Moody's 2009 Annual Report," Moody's Corporation, 2009.

26 IBM Institute for Business Value analysis of a variety of sources, relying most heavily on: Stevenson, Jamie, "Three simple steps to improve sell-side broker research," Responsible Investor, January 19, 2009; "Battle of the Bulge Bracket: The Changing Shape of the Capital Markets Industry," IBM Institute of Business Value, 2005; International Financial Services London (IFSL): Fund Management 2010," TheCityUK, October 2010; "Follow the Economy's Pulse: corporate earnings," MarketGrader.com; "Sell-Side Research Accuracy," Alpha Dinar, August 29, 2009.

27 Zweig, Jason, "Making Sense of Market Forecasts," The Wall Street Journal, January 8, 2011, http://online.wsj.com/article/SB10001424052748703675904576064320900295678.html

28 IBM Global Business Services experience with clients.

29 IBM Institute for Business Value primary interviews.

30 "Frequently Asked Questions about Temasek Holdings," Temasek Holdings website, http://www.temasekholdings.com.sg/media_centre_faq.htm

31 "Sovereign Wealth Fund Rankings," SWI Institute, December 2010, http://www.swfinstitute.org/fund-rankings/

32 "Compensation Framework," Temasek Holdings, July 2010, http://www.temasekreport.com/2010/governance/compensation.html

33 Ibid.

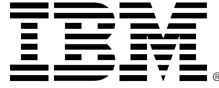
34 "Annual Report 2010 Overview," Temasek Holdings, July 2010. http://www.temasekreport.com/2010/documents/overview_section.pdf

35 Ibid.

36 When measuring client loyalty, IBM defines a firm's advocates as those who:

- Would go to their primary provider first if they needed a new service or product
- Would not likely switch if another provider offered competitive products or services
- Would recommend their primary provider to colleagues, peers, friends and family members.

37 The views and opinions expressed in this Executive Brief are those of the authors and do not necessarily represent the views of the CFA Institute or any of its affiliates.



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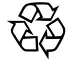

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