Mutual Fund Administration

A tale of two systems

To what extent is there a common mutual fund investment chain in different European markets? What is the impact on efficiency and risk of new client demands, whether or not they are inspired by regulation?

When, on the rare occasions, portfolio managers and traders turn their attention to fund administration, they are no doubt grateful that there is at least a part of the industry that remains reliable and unexciting. It is also not an aspect of the market where change in relationships is particularly welcomed.

"Relationships with service providers tend to be long-term," says Paul Nathan, COO, Old Mutual Global Investors. "Most changes in provider are the result of changes in client requirements; for example, post-merger. Anecdotally, I'm not aware of any changes in the past few years resulting solely from poor quality service." Given the complexity of the relationship, says Nathan, fund managers



would much rather work through any problems they have together with the provider. "This is particularly so with the increase in middle office outsourcing to third parties," he adds. "On the one hand, it frees fund managers from resource-heavy administrative activities, but it at the same time, it increases reliance on your provider. Moving is not a trivial undertaking."

From a fund processing perspective, however, market requirements are anything but static. Europe has come to encompass two distinct approaches to post-trade architecture that must both be accommodated by providers of fund services across more than one market. "There is no single solution that fits everyone in all models; every setup has its advantages and disadvantages," says Sébastien Danloy, head, Continental Europe and Offshore, RBC. "If I look at countries such as France and Germany, where all the subscriptions and redemptions into investment funds are handled in the same way as an

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Paul Nathan, Old Mutual Global Advisors

investment in any other security through the central securities depository, there are obviously some advantages in terms of the delivery versus payment process and the ease of use," he says. "On the other hand, it makes it more complex to track who the beneficial owners are and to calculate retrocessions and trailer fees."

He cites Luxembourg as essentially the opposite. "There you have a register that holds the positions of all the underlying investors and therefore asset managers have a much better view of organisations and distributors that are selling their products and therefore of the beneficial owners," he says. "It makes it much easier to calculate commissions and trailer fees. On the other hand the settlement process is much more complex. In addition, when you start dealing with retail investors and small IFAs across the world, it is not that easy to automate all of these processes."

There is also the question of whether domestic and cross-border funds face the same processing challenges. "If we look at cross-border activity, there are, on the one hand, funds issued from domiciles like Luxembourg and Ireland that are designed to be distributed into multiple countries, both inside and outside Europe," explains Lieven Libbrecht, investment fund product manager, Euroclear. "That is a model that has come a long way and has reached a level of maturity, especially in terms of order flow and settlement of redemption and subscription orders." Nevertheless, says Libbrecht, "If you look at our Euroclear client base, which typically comprises international firms active across different markets, there is also a strong demand for funds from domestic markets. There are differences in the degree to which those markets have organised themselves."

The French market, where Euroclear France acts as the market CSD, there is, he suggests a fully-fledged fund infrastructure that covers routing, settlement and asset servicing." It's a different approach from Luxembourg as it's organised around the CSD model, and it works," he says. There are other markets where only particular aspects of the process have been automated by an infrastructure provider. In the German market, settlement and asset servicing are done within the CSD, Clearstream Frankfurt, but there is no market infrastructure for order routing. In Italy, the existing market infrastructure plays little role in funds processing.

Slow merger?

The gaps between the two models may be narrowing, suggests Bernard Tancré, executive director and head of business solutions, Clearstream. "CSD markets like France are introducing the tagging of orders to be able to provide distribution information," he says. "We are slowly merging into a model that would combine the best advantages of each."

For Libbrecht, the funds industry resembles more of a primary market with buyers on the one side and manufacturers and distributors on the other." It's not like the fixed income market where one day you're buying and another day you're selling," he says.

He nevertheless identifies a number of shifts that in due course may have an impact on the service provider landscape. "On the distribution side, these are driven mainly by regulation," he observes. "Distribution of third-party funds was traditionally driven by commissions. With RDR [Retail Distribution Review – see box] and MiFID, some providers will have to change their models, which will have repercussions for distributors."

"If you look at the sell-side – the manufacturers – there are already a number of different models," he points out. "There are asset managers that do almost everything in house from origination to transfer agency, while others have gone for a more outsourced model, particularly for transfer agency (TA) and fund accounting."

Retail distribution review

Strategic Insight (SI), a sister company of *Global Custodian*, is a provider of business intelligence to the mutual fund industry. Below is a summary of the implications of RDR drawn from its research.

In 2006, the UK's Financial Services Authority (FSA) embarked on a Retail Distribution Review (RDR) to increase the transparency and reliability of investment advice, reduce conflicts of interest in the distribution of investment products, and elevate the level of professionalism among financial advisers. It essentially removes the ability of fund providers to pay commissions to advisers, even if the adviser intends to rebate payments to investors. (This does not affect legacy business.)

Adviser-charging rules under RDR went into effect in the UK at the beginning of 2013, eliminating commissions paid by fund product providers to distributors (for example, trails, retrocessions, and payments from initial charges).

Financial advisers are now required to charge clients directly for advice through fees that they set – a transition that impacts not only fund pricing and fees, but also the nature of advice, client segments served, product choices, distribution strategies, industry structure, and competitive outcomes.

The shift away from commissions and toward fees for advice is an evolution occurring in several fund markets, with or without regulatory intervention. In addition to the UK, several other countries have decided to eliminate product-based commissions, including the Netherlands (for complex products). Europe's Markets in Financial Instruments Directive (MiFID II) include a ban on commissions to independent advisers, but not to other advisers, such as those at banks. However the proposals do permit member states to ban inducements for all advisers.

Many advisers may realise that revenues generated in recurring asset-based fee accounts could be significantly more stable and at times larger than those through initial charges. The shift to fees for advice from commissions could, however, result in higher total costs for many investors. "If over time advisers adapt from receiving 0.5% trail commissions to directly setting a 1% (or more) annual asset-based fee, total shareholder costs over the lifetime of an investment will tend to increase under a fee-for-advice model – since many investors no longer have the benefit of paying initial commissions once (amortised over the life of the investment). This has been the US experience in recent decades," says an SI report.

"In general, we are observing harmonisation around the world along the path towards asset-allocation 'solutions' and a 'fee-forservice' model, as suggested by the RDR in the UK," notes Avi Nachmany, EVP and director of research, Strategic Insight. "History suggests that the time to push for change in distributors' business model (from commissions to fee-for-service) is when markets and profits are good, and transition costs easier."



In recent years, Libbrecht suggests, there has been much industry discussion about how TAs how should reinvent themselves. "An increasing number are taking on a wider role in terms of distribution support, especially in a cross-border context where funds are being distributed actively into many jurisdictions," he says. "Whether there is going to be a broader shift, where the TA function moves into more of an infrastructure role, is probably going to be a question of maturity. The cross border space is still very fragmented."

From a pure industry efficiency perspective, he does not see the TA versus CSD model as a key issue. "I've always thought it was a false debate," he says. "There are grand schemes and there are pragmatic approaches. It's less glamorous, but true progress is made by grinding away at small changes."

Danloy at RBC, which has a large TA market share across several jurisdictions, takes a similar view. "As a service provider, the challenge is that no matter what the process in a specific country, you can accommodate it," he says. "Over time my expectation is that the two processes will merge to a degree,"

In addition, if regulators are placing increasing importance on managers having detailed information on their underlying investors, somebody along "Web business models have been priced according to the level of automation that was around five to 10 years ago. No one ever wants to cannibalise an existing business, so here is sometimes a bit of a lag in take-up."

Tony Klim, Bravura Solutions

the chain has to hold all those details. With its retail background, Danloy suggests that RBC is used to dealing with underlying retail investors. "It is easier for us to accommodate the regulatory constraints around transparency as we have millions and millions of underlying investor details in our register," he says. "When you look at the CSD model you will know who the owner of the shares is at the central securities depository level, but not necessarily who the underlying investors are. But that doesn't mean that it will not be possible down the road."

Transparency

Demands for increased transparency along the value chain do, however, pose additional challenges to all those engaged in post-trade processing of mutual funds.

"There is still a kind of schizophrenia in the market," says Tancré. He points to efforts to bring the same level of efficiency to funds at a street level as, for example, equities enjoy, such as price standardisation and delivery versus payment (DvP). On the other side of the trade is a growing desire for transparency in distribution. Omnibus accounts make the first of these aims easier. That creates a dilemma for the market. "The demand for transparency in the distribution chain, in my view, is primarily commercially driven though there is some overlap with compliance requirements for regulatory reporting. "We need to clarify how we can achieve both these aims - full segregation and omnibus accounting," says Tancré.

"We need to separate those flows of information. The custodians or the TA servicing the asset manager will have to segregate the flow of the transaction and position keeping data from the flow of additional information that is collected for the sake of providing the issuer with modern distribution support." There is a separate debate to be held around where and how to use omnibus accounts to greatest effect. "There is a view that the use of the omnibus account should be restricted to custody players, who have the commitment to providing the underlying information that is needed, while at the same time providing the efficiency and liquidity that the market needs.

"Today we deal with clients that distribute across over 90 countries and we are connected to over 10,000 distributors globally, never mind direct investors," says Danloy. "For us today the challenge is not so much around changing our operational processes, but more about how we work with these distributors to provide more information to our transfer agency clients. There is a role for intermediaries in providing those details."

Distribution channels and automation

Does the growth in online fund distribution platforms have any impact on the ease with which this growing information hunger can be sated? Not necessarily, suggests Old Mutual's Nathan. "Digital distribution is less of an immediate issue for us as most of our funds are not sold business-to-consumer but through intermediated channels," he says. "At Old Mutual Global Investors, we have sought to consolidate our distribution outside the UK and are now working with large global financial institutions in addition to individual domestic providers in each market."

For Jean-Marc Crepin, partner, BBH and head of the bank's Luxembourg office. TA continues to be the essence of service provision in the mutual funds arena. He does not predict an explosion in online distribution, such as countries like China have experienced. "Because of the crisis, not every global custodian has invested as much into TA, where investment in scale is proving crucial," he says. Regulation is having a significant impact on the pace of online interfaces to the end-client. "The need to identify a source of funds for every investor constrains the expansion of online funds products." Nevertheless, says Crepin, there is no doubt that the Internet and associated technologies will have an impact here too. "In Germany, for example, some online recognition tools had been accepted by the regulators, but it is early days. There is still a need for a traditional ability to identify investors."

Taking a longer term retrospective, automation has perhaps made more of an impact on mutual funds processing than is commonly acknowledged. "When I look at where we were several years ago and where we are today in terms of automation of the transfer agency business I would say there have been tremendous improvements," says Danloy. "That is important not only for ourselves but for the distributors, because we can reduce operational risk on "Given what asset managers have required from us as a TA over the years, there are no real standards in terms of how a TA operates for each client. Clients may have different products and each product is different from one TA to another. Each client may have a different distribution network so it is much more complex than a typical CSD environment."

Roman Lewszyk, Atlantic Fund Services and Moventum

both sides and provide leaner interactions between the two parties."

Such solutions cannot be imposed, however. In discussions with distributors, TAs can bring automation solutions to the table, but, Danloy points out, "at the end of the day, we don't have any direct legal relationship with the distributors and the distribution function still has its own way of operating." It then becomes a question of the distributor's priorities. "Investments from retail clients into investment funds are not going to be easily automated," he says. "Today many independent financial advisors (IFAs) operate in a framework that does not give them a strong incentive to automate. Volumes might not be large enough from their perspective."

RBC claims a 30% market share for transfer agency for Luxembourg domiciled funds and a combined share for Luxembourg and Ireland together of roughly 25%. "As a result," says Danloy, "we obviously have a lot of dayto-day relations with distributors, because we are the TA for many



of the fund managers whose products they distribute. The fact that we have that scale could allow them to reduce their manual workflows."

RBC is also working on a new tool that provides intelligent data, allowing asset managers to have a much more detailed view of their distribution channels. "They can see which distributors are providing which inflows and outflows to which types of funds and products," he says. "That's an area where a lot of work is being done right now, where service providers collectively can do much better. We are also providing aggregated data from across our client base so that asset managers can benchmark their own distribution strategies and channels against what is happening in the marketplace overall. So we are moving in the direction of exploiting big data more effectively."

Are IFA's still a weak link in the automation of the entire process? It depends, says Roman Lewszyk,, president, Atlantic Fund Services and CEO, Moventum – a Luxembourg-based internet-based



funds platform for IFAs, asset managers and trustees, acquired by Atlantic in late-2014. "We offer a facility for them to organise their client portfolios, we set up client accounts and provide a view to both the portfolio and trade. It is STP [straight through processing], of course, so that empowers the IFA."

All things being equal, Lewszyk believes the 'Anglo-Saxon' TA model provides a more client-friendly framework. "It caters to clients' specific needs more than the CSD model, but given what asset managers have required from us as a TA over the years, there are no real standards in terms of how a TA operates for each client. Clients may have different products and each product is different from one TA to another. Each client may have a different distribution network so it is much more complex than a typical CSD environment."

Lewszyk recognises that the traditional fund services space in which Atlantic has been active since the beginning of 1986 has become increasingly commoditised. "Having never been a custodian, we had to adopt different business models from the banks, for which in many cases fund administration originated in the banking and custodian relationship," he says. "I think for retail TA, in particular, certain markets have become saturated and we don't see many new entrants."

The situation has become much more competitive. "For TA providers like ourselves, who thrive on being flexible and customising to clients' needs, the acquisition of Moventum allows us to move the TA service to another level. Platform support for IFAs, coupled with traditional TA, is a more sophisticated offering to clients. I view this as a natural evolution of the TA product and services."

Expending the scope of automation is not necessarily

"Where all the subscriptions and redemptions into investment funds are handled...through the central securities depository, there are obviously some advantages in terms of the delivery versus payment process and the ease of use. On the other hand, it makes it more complex to track who the beneficial owners are and to calculate retrocessions and trailer fees." Sébastien Danloy, RBC

haphazard though. "As with any industry which moves from manual processes to more and more automation, it has to start somewhere," says Libbrecht. "The focus over the past few years has been very much on automating the primary order flow: money going into and out of funds. There we have come a long way, but there are other areas like transfers and reregistration, account opening and corporate actions, where automation is still in its early days. "

Regulation

While regulation is often seen as a catalyst to change in otherwise conservative areas of the industry, such as custody and fund administration, market participants tend to be reticent in expressing admiration for its impact, particularly in times when resource allocation is stretched. Crepin is more positive on this score. "As the head of BBH's Luxembourg office, my main job is fund administration and custody. Without these regulations, we [BBH] would not have a job," he says. "The UCITS framework, for example, provides a fantastic global platform."

He suggests that only two jurisdictions – Luxembourg and Ireland – were really awake at the wheel at the start in order to take advantage of the UCITS framework. "While a lot of people are talking about regulation tsunamis, new regulations are," says Crepin, "an opportunity for firms to present additional solutions." These do not necessarily include further outsourcing, however. "Some regulators seem to feel that asset managers are now too outsourced, asking them to prepare contingency plans in the event of an outsourcing failure," he says.

"In addition, large banking groups have recently been fined for activities that were not at all related to fund administration and custody, but which nevertheless have an impact on how much more responsibility they should take on. Banks these days are either perceived as policemen or criminals," he quips.

If there is one trend coming out of regulation, says Crepin, it is the need for greater transparency. "Providers that bundle services in a way that offers little transparency will come under pressure as the RDR approach expands across Europe; it's only a matter of time," he says. Asset managers will have to be more transparent about how they earn their fees. This, says Crepin, will bring a revolution in new product opportunities. He offers the example of securities lending from individual portfolios rather than pooled custody assets. "Nowadays lenders are looking for providers that offer more transparency into available revenue and control over the lending decision."

This does not necessarily spell the end for bundled services, however. "This is especially true since the crisis as regulation and operational costs have increased for both fund administration and custody, and providers have to stay focused on profitability," says Crepin. "We see a very limited number of 'fund accounting only' opportunities today."

Apart from the requisite foreign exchange for cross border investment, there is also the related cash activity. Fund administration on its own is a relatively predictable but static source of revenue based as its on a percentage of the asset base under administration. "If you're talking about fee levels in general we have come to an inflection point," says Crepin. "The prices providers are charging for services do not reflect the true cost of new products such as performance analysis. Before 2008, lowcost providers were in favour, but clients are happy to pay more in order to get higher quality. There is a simple rule that says an unhappy client is an expensive client. If you need to spend a lot of time on TA exceptions, custody can be very costly."

Despite these developments, Crepin actually sees mutual fund administrators as providing a very stable environment to their clients from an operational perspective. "If you look at Luxembourg and Dublin over the past 25 years or so, any incidents in the fund administration space have been generated by fraud rather than operational error. Even the Lehman collapse had a very limited impact on the funds industry," he says. "I continue to believe that the funds industry by being regulated has a structure that is still very strong. Having said that, I do welcome the fact that the co-mingling of assets is being looked at seriously by a number of regulators. It's important that providers are able to identify their client's assets at each subcustodian."

TA innovation

Wherever providers sit in terms of model preferences and services provided, there is a firm consensus that transfer agency is not going away. "The emergence of platforms in the UK has kept us extremely busy and that is where we are seeing the most growth at the moment," says Tony Klim, CEO, Bravura Solutions, a supplier of software and professional services for transfer agency and wealth management amongst other areas. "Today, a lot of retail investors will see a platform rather than a transfer agent. The perception for a platform end user of TA is now almost nil, but transfer agency remains an essential core service function," he says. If a fund manager wants more of a direct relationship with an end user, then the TA function needs to remain discreet. Effectively the platform model plays a disintermediating role, which, from an efficiency point of view, may be in everyone's interests but, says Klim, if the fund manager wants to retain a close relationship with his retail investors in particular, then transfer agencies deliver a critical function.

"We are seeing developments in that market with some of our transfer agency clients where they are now seeking to put in the technology that gives them direct consumer access to and from the transfer agency systems," says Klim. A lot of that is being driven by RDR and post-retirement products with the changes announced in the last UK budget. "There is a lot of automation available, but whether agents choose to implement the highest level of STP achievable is another question," he adds. "Web business models have been priced according to the level of automation that was around five to 10 years ago. No one ever wants to cannibalise an existing business, so there is sometimes a bit of a lag in take-up."

Technology, however, is not holding the industry back. If anything, says Klim, it is traditional business practices. "I think automation of the interface to consumers directly, rather than just to the traditional adviser base, is taking place slowly. That will start to be a hygiene factor amongst some of the fund managers," he suggests. "Once some of them have good consumertype offerings, the others will follow. The question is, how much of a market is there for fund managers to go direct to the end-consumers. Certainly bigger players will start to run their own platform type solutions, bringing more sophisticated services such as portfolio modelling."

Will TA continue to remain a discrete business function? "I think the core of fund administration will still be the ability to provide information to clients about their own distribution," says Crepin. The provision of distribution analytics has been absolutely critical for a large number of our clients. Providers are effectively an extension of their clients' relationship management function. If you have not been investing heavily in TA over the past few years, it will be very difficult to catch up."

The primacy of transfer agency among client priorities is born out by buy-side feedback. Asked to rank fund administration services in order of priority, for example, Corine Gerardy, COO, NN Investment Partners in



Luxembourg and a long time client of fund administration lists TA services and distribution support capabilities as equal priorities followed by fund accounting and valuation services. Costs clearly remain a concern, but rank behind the importance of these two requirements. Where she room for development is in MFAs is in being able to support clients' share class hedging activity.

Growth in client requirements is also driving developments in how processing is shared by infrastructure and commercial providers. All providers along the value chain, looking back at their original business models, would no doubt recognise functions they perform today, that were not originally part of the plan.

"What is different in terms of our current service scope is that functionality is much richer than at the outset," says Libbrecht. "We started out processing basic subscriptions and redemption orders for a limited set of markets. The number of markets we cover is much broader. But going back 10 years, the volume of transactions we handled on a manual basis was larger in terms of absolute numbers than it is today, even though the overall number of orders we handle has grown four or five times."

"In terms of the scope of what we

"Whether there is going to be a broader shift, where the TA function moves into more of an infrastructure role, is probably going to be a question of maturity. The cross border space is still very fragmented."

Lieven Libbrecht, Euroclear

do, we have expanded our offer into the hedge fund space," says Tancré of Clearstream. "We are doing that on the basis of a piece of infrastructure acquired from Citco. We know, however, that hedge funds will always have a separate distribution process, but the key objective here is to be able to offer a one-stop shop to our clients."

Remaining challenges

What are the remaining challenges, for which solutions are not already in train? One is the question of standardisation across different markets, says Libbrecht. "Even though we have had more than 10 years of ISO standards in the funds industry and now four to five years of XML standards, there is still a degree of message interpretation within those standards. The markets don't vet have harmonised market practices," he comments. "That remains a significant cost for the industry. The lack of standardisation causes a lot of exceptions in the automation chain and these exceptions account for the bulk of the cost."

He points out that there is a big difference between standardisation and harmonisation: "Because market practices remain unharmonised, standards come with different options. It's a bit of a chicken or egg situation. As an industry, we've taken a pragmatic approach, standardising where we can to improve automation. The situation is one of exception management today, but the 80:20 rule probably applies, with 20% of exceptions accounting for 80% of costs and risk." Klim is optimistic. "Operational efficiency is virtually there," he says. "I expect we'll start to see a potential convergence of platform technology with TA technology, but that's longer term." While acknowledging the scope for more automation at the advisory and customer ends of the business, he identifies other developments that will impact the market.

"The whole move towards low-cost and exchange-traded funds and tracker funds will act as catalyst for a shakeup in the market going forward," he says. "If one analyses the value chain overall using the UK as an example, the elephant in the room remains the fees that the asset managers are getting."

Bravura as a company is moving its platform model into Europe. One of the other big drivers he foresees is the development of 'Robo advice'. "We expect to see further developments in that space, though for the moment, people clearly remain worried about the regulatory attitude to giving advice electronically."

Is there any infrastructure still missing? "If automation has not been put in, there is no technology reason why it hasn't been," says Klim. Implementation of what is available is a different matter. "There is probably a way to promote more industry sharing of infrastructure. I came from the banking field, which wasn't great for sharing, but at least there is a lot more common technology sharing. There is probably a bit more that could happen in the funds arena. But I'd say it's more a case of tidying up."

The evolution of mutual fund distribution

Interview with Jeremy May, President of ALPS Fund Services Inc., on the evolution of mutual fund distribution over the past ten years.

How has mutual fund distribution changed in the past 10 years, in terms of changes in the nature and volume of intermediation?

Clearly, the role and influence of intermediaries has increased significantly over the last decade. While most industries have been actively cutting out the middleman and selling directly to consumers, the opposite has been true in the fund business – intermediaries have gained increasing influence over fund distribution with regard to what products and services get distributed where, at what price, and to whom. The rise of intermediaries has largely impacted fund flows, and managers will find greater distribution success if their products are aligned with the outcome-driven advice offered by intermediaries.

Additionally, the shift from fund companies selling directly to investors to focus more on the intermediary model reflects the rise in open architecture and "best in class" investing. Different from the days when investors kept all their investments with one fund family, now they can very easily diversify. Since communication paths flow indirectly through intermediaries, the dual challenge for fund companies is to establish closer working relationships with intermediaries while re-engineering shareholder contact.

How has client demand changed in this time, in terms of asset allocation and types of strategy?

This goes back to my point about open architecture. Firms and managers considered to be best in class gain a lot more attention as asset allocation models change and investors shift their assets to a broader array of investment strategies. An example includes institutional/alternative/hedge fund managers looking to bring their particular strategy to the retail marketplace.

A lot of these new offerings will find their way to wrap programmes or managed accounts, where a growing number of advisors are employing a "core/satellite" asset allocation model. Almost by definition, this shift from the old idea of a core investment to more diversified strategies that can be allocated to meet an individual investor's needs is requiring a whole new universe of products. It is an exciting time because there is more innovation now than I have seen in the 20 years I have been in the mutual fund industry. This has also resulted in the explosive growth of ETFs as asset allocators and advisors allocating to ETFs based on underlying needs of investors. We are also seeing greater demand for liquid alternative products that blur the line between hedge fund and mutual fund strategies.

How has technology evolved to help mutual fund vendors and their administrators adapt to the above?

Technology has evolved a lot over the last 10 years. The good news is that technology has allowed nearly all service providers to become more efficient and strengthen controls through automation. Overall, we're seeing fewer errors with lower cost of operations. Don't forget, 10 years ago some managers were still faxing us trade tickets that were entered

manually! That manual process posed significant potential risk to our business. That process is all automated now.

But, while better technology with stronger controls exists, the trend toward lower cost has been offset by more complex products, liquid alts for example, and increased regulation. As everything has become more automated and online, new threats have emerged that have created a greater need for more sophisticated data privacy and cyber security control. Accordingly, where we were focused on transactional data input errors in the past, we've moved a lot of that risk focus onto data privacy and cyber security controls.

What changes in regulation have driven the changes discussed, and how have regulators/legislators adapted to them?

The changes in intermediation and product development have not been driven by changes in regulation. Instead, regulations are heavily influenced by the way funds are distributed and how shareholders invest. You look back 10 years ago, and SEC Rule 38a-1 had just gone into effect. The Rule has had a huge impact on our industry. For example, we have substantially increased the number of people in our Compliance group since the Rule went into effect. Suffice it to say we've seen compliance officers take a larger role within fund firms and the overall compliance costs to firms rise.

On the plus side, at least from where I sit, the increase in regulation has led towards more outsourcing. As the complexity in the fund industry increases, fund groups are realising it's better to outsource certain functions. That's a trend from which my company has benefited. The other thing that has happened is that more product development is being driven through established series trusts, created by fund service providers. As managers come into the mutual fund industry and create products for the first time, they are now looking at this significant regulatory and compliance burden as part of their operations. Not surprisingly, they're deciding to go with established platforms that already include the required compliance infrastructure.

Overall, I think you can look back and say the mutual fund industry and its regulators have sought to protect investors, and that, with a few exceptions, the industry has been mostly free of significant issues and controversy. It's not too hard to argue that all the focus on regulation and compliance has been a good thing for the industry and it will continue to

evolve. Ultimately, it shows the industry's dedication to providing the best outcome for the end investor.





A decade of persistence

The North American mutual funds industry has grown persistently over the last decade. After a period of upheaval post-2008, the industry gradually recovered and has seen significant expansion over the last two years.

f all the changes in the investment company landscape in the last decade, those occurring in the North American mutual funds industry are amongst the most interesting. Following a period of persistent expansion until 2008, the industry saw two years of upheaval, a slow road to recovery and then rapid acceleration in the last two years. And the trends underlying that recent growth trajectory mean that the industry's expansion shows no sign of abating.

Aside from a growth pause during 2008 and early 2009, the industry globally has pulled in about a trillion dollars of additional net inflows each year. After 2008 and 2009, and the economic decline that resulted, the industry took some time to reset. "For a while we had two feet stuck in the mud; then we had one foot in the mud and finally in 2013 we took both feet our of the mud and things started to go up again," says Avi Nachmany, executive vice president and head of research at Strategic Insight – *Global Custodian*'s sister company. "Historically we used a year and a half as the distance from the crisis when we started to see significant recovery. This time around is much longer." The pace accelerated in 2013 (see table 1) and the industry was worth more than \$400 million at the end of the first quarter of 2015.

Clearly the mutual fund vehicles, including ETFs, pooled and registered investments are increasing in their acceptance in the world, with about \$40 trillion in assets under management globally. A little less than half of that is in the US.

Asset allocation

In addition to the growth, the second over-riding theme in the North American mutual fund industry over the last decade is the transition from buying a particular stock or fund towards asset allocation. The industry has seen an evolution towards buying a collection of funds with some form of asset allocation or a single fund that has imbedded asset allocation in it and the construction of that. This includes balanced investment, target date, fund of funds and global balanced funds.

"Here there is less focus on a particular style and more on an investors' exposure and the styles within that," says Nachmany. "The asset allocation framework, based on derivatives, deals with how active and passive are combined and how traditional strategies such as managed stocks and managed bond investments are combined with non-traditional strategies, such as liquid alternatives." (see table 2).

Linked to that, the commission model for financial advisers, who recommend companies' funds, has changed dramatically over the last decade. Starting with the US, there has been a transition from the commission model for those advisers at the point of sale to fees for services paid over time. That transition parallels the transition to asset allocation: selling and purchasing narrowly defined ideas and being compensated at that transaction, to developing a long-term investment portfolio that is angled around asset allocation, that has different strategies in it, and the benefits are accrued to the investor, whilst the fees are paid to the advisor incrementally over time.

"That transition in the US has accrued over a number of decades and has accelerated after the 2008 crisis. Today less than 10% of the US fund activity – that is, new fund sales to financial advisors – benefit the advisor through compensation that is done at point of sale," says Nachmany.

		μ.	40									
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Ytd-4/15	
Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
assets	assets	assets	assets	assets	assets	assets	assets	assets	assets	assets	assets	
731,791	868,120	1,117,150	1,421,029	1,106,540	1,540,508	1,937,744	2,053,140	2,549,353	3,295,080	3,900,351	4,160,724	
7,052,805	7,728,762	8,971,984	10,410,861	8,458,382	9,529,880	9,971,928	9,709,641	10,773,441	12,189,437	12,694,083	12,854,803	
7,784,596	8,596,882	10,089,134	11,831,890	9,564,922	11,070,388	11,909,672	11,762,781	13,322,795	15,484,517	16,594,434	17,015,526	
	2004 Total assets 731,791 7,052,805	2004 2005 Total Total assets assets 731,791 868,120 7,052,805 7,728,762	2004 2005 2006 Total Total Total assets assets assets 731,791 868,120 1,117,150 7,052,805 7,728,762 8,971,984	Total Total Total assets assets assets 731,791 868,120 1,117,150 1,421,029 7,052,805 7,28,762 8,971,984 10,410,861	2004 2005 2006 2007 2008 Total Total Total Total Total assets assets assets assets assets 731,791 868,120 1,117,150 1,421,029 1,106,540 7,052,805 7,728,762 8,971,984 10,410,861 8,458,382	Z004 Z005 Z006 Z007 Z008 Z009 Total Total Total Total Total Total assets assets assets assets assets assets 731,791 868,120 1,117,150 1,421,029 1,106,540 1,540,508 7,052,805 7,728,762 8,971,984 10,410,861 8,458,382 9,529,880	Z004 Z005 Z006 Z007 Z008 Z009 Z010 Total Total Total Total Total Total Total assets assets assets assets assets assets assets 731,791 868,120 1,117,150 1,421,029 1,106,540 1,540,508 1,937,744 7,052,805 7,728,762 8,971,984 10,410,861 8,458,382 9,529,880 9,971,928	2004 2005 2006 2007 2008 2009 2010 2011 Total	2004 2005 2006 2007 2008 2009 2010 2011 2012 Total	2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 Total	2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 Total	2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 Ytd-4/15 Total

Source: Strategic Insight, an Asset International company

Table 2: Index vs active (inc FTFs) \$bn

Portfolio construction

In addition to asset allocation, the mutual funds industry has evolved into investment companies that fit into a portfolio construction that is put together by third parties. The question thus is whether those investment companies have the ability to create this embedded asset allocation themselves, through balanced strategies, fund of funds, and something that they not just manage, but they also decide on the asset allocation and the rebalancing rules over time? "Most investment companies feel they are qualified to invest the money but they don't have the skill set to generally think about the asset allocation – especially globally," says Nachmany. "In the end they hire someone for the asset allocation function.

"But it's who is in charge of the asset allocation – is it Fidelity or Vanguard or is it BlackRock or someone outside or not linked to the investment management function at all?"

In essence what has changed is the transition to asset allocation and the responsibility of who manages and structures that allocation, that is: the selection and what is included in that; which active funds; which passive strategy; the combination of directionally traditional investing, fundamental stock investing, with non-directional investing, and alternative strategies, with traditional, fixed income investments.

This transition to asset allocation and away from compensation at point of transaction to fees for advice over time, the increasing use of active and passive and the increasing desire and acceptance of alternatives all accelerated after 2008. This is not US-specific. "The US is ahead of the rest – generally speaking we see the same themes in many other parts of the world, clearly a different magnitude, but the general conversation is very much the same," says Nachmany.

Diversification

The need for diversification in asset allocation has also become a clear path. "Over the last five or six years we have more than a trillion dollars invested in stocks, people living in America and investing in international stocks," says Nachmany. "This investing away from the home bias has added over \$1 trillion to stock funds over different parts of the world. You always have an idea about these home bias preferences existing but

Table 1: Investment company assets by type

	Mutual	Closed-end			
	funds	funds	ETFs	UITs	Total
2005	8,891	276	301	41	9,509
2006	10,398	297	423	50	11,168
2007	12,000	312	608	53	12,974
2008	9,603	184	531	29	10,347
2009	11,113	223	777	38	12,151
2010	11,833	238	992	51	13,113
2011	11,632	242	1,048	60	12,982
2012	13,052	264	1,337	72	14,725
2013	15,035	279	1,675	87	17,075
2014	15,852	289	1,974	101	18,217

Source: Investment Company Institue and Strategic Insight Simfund

slowly you see the realisation that prudence requires a higher allocation to non-home bias investments."

Another trend is the allocation to emerging wealth regions. "What we see in the US is that one fifth of the allocation to international investments is given to emerging wealth regions," says Nachmany. "That share has been very persistent over the last five years. So you have multiple years where the performance of emerging markets is significantly worse than developed capital markets, significantly worse than the US not only because of the stock market performance, but also the dollar depreciation."

But there was a long period of time that the emerging markets underperformed and yet there was a fairly steady allocation of new money invested there. "Clearly as a derivative of the active versus passive conversation you still see a significant search for actively managed strategies," says Nachmany. "But in order to be selective you have to demonstrate and there is declining tolerance for mediocrity in terms of selection actively managed funds. So there is still plenty of room for excellence, in terms of ability to grow your business but there is much less room for mediocrity in the selection of specific funds visa vie their piers."

Going forward, as the asset management industry continues to expand, the mutual funds industry faces an important public policy question: where can regulators participate in this

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Ytd-4/15
Ne	t new	Net new	Net new	Net new	Net new	Net new	Net new	Net new	Net new	Net new	Net new	Net new
	flows	flows	flows	flows	flows	flows	flows	flows	flows	flows	flows	flows
9	4,661	84,314	108,766	217,940	227,201	170,856	173,396	167,337	265,505	280,813	378,746	145,092
6	64,466	269,455	431,857	840,994	375,699	-198,072	-308,020	-111,180	177,005	173,482	30,086	-137,319
15	9,127	353,769	540,623	1,058,934	602,900	-27,216	-134,623	56,157	442,511	454,295	408,831	7,774

The rise of liquid alternatives

Changing attitudes towards investment types has resulted in a significant rise in the importance of alternative strategies and asset classes for fund managers.

In many ways since the financial crisis in 2008, investors have been encouraged to broaden their portfolios and lower the correlation of their investments with the market. Furthermore, with negative interest rates in Europe and low volatility in the US and European stock markets, established instruments such as bonds and equities are not bringing the desired returns.

According to a survey released by Deutsche Asset & Wealth Management (AWM) in December last year, investors are increasingly turning to alternatives, as importance on absolute returns is gradually being replaced by liquidity needs.

"Alternative investments have come into their own, taking a core position in an increasing number of portfolios," said Dario Schiraldi, head of global client group, Deutsche AWM. "More than half of the Deutsche AWM clients whom we surveyed plan to increase their portfolio exposure to these asset classes."

The survey found that liquid alternatives, multi-strategy hedge funds and private equity secondaries may command larger flows, as investors increasingly focus on pre-and posttrade factors.

The expansion in the use of alternative asset classes comes as a result of investors demanding instruments that provide liquidity benefits. For example, according to data compiled by the Investment Company Institute (ICI), assets in alternative strategies mutual funds reached \$170 billion at the end of 2014. Of which, 99% of those assets were invested in funds with equity exposures. Furthermore, since the start of 2007, the ICI found that alternative strategies mutual funds garnered \$124 billion in net new cash and reinvested dividends.

According to Peter Arnold, Citi's head of international fund distribution, '40 Act mutual funds have been the key driver in liquid alternative volumes in the US.

"The biggest driver we have seen in the liquid alts space is the '40 Act funds because of two main reasons: one, a low yield environment where the retail space is looking for new ways of seeking returns; and two, '40 Act fund strategies are usually distinct from the master fund," says Arnold.

An alternative '40 Act fund is a mutual fund offered by a registered investment company as defined in the 1940 Investment Companies Act. They comprise a number of traditional hedge fund strategies such as equity long/ short, global macro, etc, and can also include investing in commodities and currencies.

In order to capitalise on this surge of activity, Citi Investor

30 25 20 15 10 5 ٥ Direct Fund-of-Listed Commingled Managed Senarate vehicle fund investment funds account account

Usage of liquid alternatives – past 5 years vs 2015

Source: Deutsche Asset & Wealth Management, "The Alternative Perspective: 2014 Global Survey of Investors in Alternatives", Dec 2014

Usage over past 5 years

Services went live with a new US mutual fund platform, named ALTMFX Trust, offering hedge fund managers alterative liquid strategies and enabling them to launch US '40 Act mutual funds.

Projected usage over 2015

Arnold sees the US '40 Act funds outpacing their European and Asian equivalents, but there are still opportunities for growth in those regions. "When you look at liquid New-CITS, which is the European equivalent to liquid alts in the US, we see that powering along but not at the same pace as the '40 Act liquid alts. But we have still seen year-on-year growth. This is being driven by the same reasons as in the US such as seeking absolute return in a low yield environment," he adds.

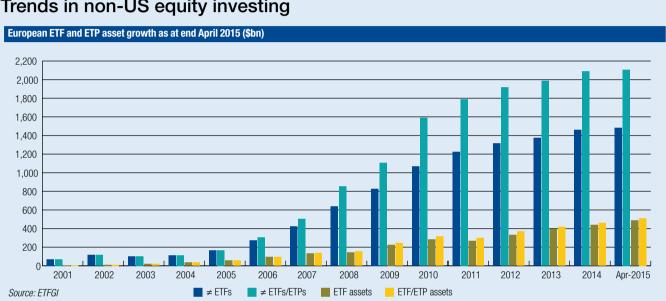
Furthermore, according to the Deutsche AWM survey, respondents from the Asia-Pacific region overwhelmingly said they are looking at investing in alternative asset classes to improve diversification.

The continued growth in the adoption of liquid alternatives will most likely remain with retail investors, whereas some of the larger institutional investors have remained distant.

"When you look at the overall volumes I wouldn't say that the institutional investors are the key drivers in Liquid Alts. There has been an increase of allocation but a lot of this is coming from Segregated managed account. They are increasing their exposure to absolute strategies, such as the hedge fund-like and credit strategies, but I am not sure that is coming through the mutual funds," says Arnold. conversation to enable continual further investment? Nachmany addressed this question with delegates at an IOSCO meeting on the mutual funds industry in May.

"What I'm trying to do is create a world where more people who want to invest for their personal future make choices that are reasonable and through those chooses participate in

the creation of wealth around the world," says Nachmany. "Clearly the industry will always look for growth but what is the public policy view on that? Always encourage prudence, disclosure, etc, but how far do you go to ensure there is a continuation of public participation in wealth creation around the world?"



Trends in non-US equity investing

Iobal demand for depository receipts has tripled year-on-year, as of December 2014, according to an annual BNY Mellon Greport. The statistics showed that investor demand across international securities pushed capital raising in depository receipts to \$38 billion globally. This represents the highest revenue since the financial crisis of 2008, and the rise can partly be attributed to new rules in Taiwan, India and Romania, which permitted the issue of new types of depository receipt programmes. BNY Mellon's depository receipts business forecasts that this upward trend will continue in the near future. "Investors continue to see DRs as a preferred option for portfolio diversification and cross-border investing, despite recent volatility in global stock markets," said Christopher Kearns, CEO of BNY Mellon's depository receipts business.

Across the Asia-Pacific region, a total of \$1,268 billion was invested in depository receipts in 2014, with the top sector for investment being Internet Software and Services (\$608.8). China received the largest share of total trades, both according to value (\$892 billion) traded and volume (26.7 billion trades from a total of 43.8 billion).

The EMEA region received a total annual investment value of \$1, 410 billion, of which the UK comprised \$431.7 billion, therefore representing the largest value of trades. Russia gained the largest volume of trades (26.7 billion from a total of 69.7 billion). The two most popular EMEA investment sectors were Pharmaceuticals (\$317.8 billion) and Oil, Gas and Consumable Foods (\$301.5 billion).

Within Latin America, \$601 billion was collectively invested in depository receipts. Brazil gained the largest share of total trades across Latin America, both in terms of value traded (\$444 billion) and volume (38 billion trades of a total of 46.1 billion). The top sector for investment was Oil, Gas and Consumable Foods (\$172.5 billion).

According to statistics released by EFTGI (as displayed in the chart above), the European ETF industry listings have continued to grow in volume Y-o-Y since 2001. The exception to this pattern occurred in 2003, when the number of European ETFs experienced a slight decline from 115 in the previous year, to 103. The same is true of ETF/ETP collective statistics. Furthermore, as seen in the chart, even in 2003 assets across European ETFs still continued to grow, increasing from US\$11 billion to US\$20 billion.

The five insider insights many liquid alts managers overlook

By Dave Carson, president of Ultimus Managers Trust



t seems like everyone is talking about liquid alternatives. If you read the news or listen to industry pundits, you can't help but hear about their momentum. While not everyone agrees on how big the market will be, there is a general consensus that liquid alts are one of the fastest growing asset classes in the industry. A recent survey

from Barclays showed that liquid alts grew at a significantly faster pace than hedge funds last year, and Barclays and Citi both project assets in the space will reach nearly \$1 trillion by 2018.

With more retail investors and retirement plans looking for the diversification benefits of alternative strategies with the safeguards of a '40 act structure, there doesn't seem to be any slowdown in sight. And while the demand is strong and seemingly only getting stronger, managers who think they can simply launch a fund and expect investors to come with assets in tow could be in for a rude awakening. Being in the space and being successful in the space are two different things altogether.

The reality is that a small number of funds are gathering the lion's share of the assets, while the overwhelming majority of funds are launching with limited success. In fact, according to Strategic Insight, 25 funds accounted for 71% of all inflows into the liquid alts space last year; another 36 funds accounted for 30% of inflows; and 438 funds accounted for just 6% of 2013 inflows. If those numbers seems off, it's because another 38 funds accounted for negative flows of 7%.

Based on the current asset flows, it's clear that success in the early stages of the liquid alts lifecycle has been defined by size, scale and distribution heft. While those elements will always be important, other success factors will emerge as the market matures. Things like operational excellence, investor education and service provider proficiency will be equally essential to success moving forward. To help managers looking to stand out and gather assets in the increasingly crowded liquid alts market, below is a set of critical but often overlooked insights necessary for achieving long-term success.

1. Education drives distribution

As the liquid alts market has developed, the role of distribution has evolved from sales to education. Given the increasing complexity and diversity of product options, the best liquid alts wholesalers are the ones who are the most financially savvy. In fact, more often than not they're CFAs who can talk about strategy, alpha, Sharpe ratios and other factors in terms that are understandable and meaningful to advisors and intermediaries alike. The managers who understand this changing distribution dynamic and identify partners that can educate their end audience about their offering and its advantages will be the ones who gain assets and traction in the maturing liquid alts landscape.

2. Dabblers don't succeed

Managers who think they can dip their toe into the liquid alts pool and succeed are sorely mistaken. Success requires dedication to the product, relationships with experienced business partners who understand the strategy, and a commitment of resources to build out the infrastructure it takes to meet regulatory requirements and investor expectations. Remember, the revenue and expenses will look much different because a performance fee is nearly impossible to achieve in a '40 Act structure. So commit to the strategy and fund the business because savvy investors can sniff out a dabbler miles away. There are too many options for an investor to commit their assets to a manager who won't commit themselves.

3. Illiquidity breeds complexity

Alternative managers invest in illiquid assets all the time, but when they move to the '40 Act world they have to deal with hard limits and reporting requirements that create levels of complexity they are not accustomed to performing. For example, a manager may have a \$200 million portfolio with \$30 million in illiquid assets. That's in line with the '40 Act's 15% illiquidity cap, but if there's a market selloff and that \$200 million declines to \$130 million with \$30 million in illiquid assets - there's a problem. Beyond that, basic alts strategies like shorting can create accounting and record keeping requirements that some systems or providers aren't equipped to handle. It's critical that liquid alts managers choose a service provider that has the expertise and the technologies to support their strategy and guide them through the process of meeting liquidity requirements. Managers who don't have a firm understanding of liquidity requirements will inevitably increase risk, increase cost and decrease the chances of success.

4. Some strategies are too costly

The first question managers need to ask is, "will my strategy work in a '40 Act structure?" If the answer to that is yes, the next question should be, "will it be viable from a cost standpoint?" That's where the process may get a bit more complicated. There are plenty of strategies that technically work in a mutual fund structure, but the operational needs and associated costs may make the fund's cost structure too high to be attractive to investors – and the more complex the strategy, often the more cost involved in executing. For instance, some multi-strategy funds require more extensive risk processes, demand multiple custodians or increased fund accounting needs. All those come with additional costs. Managers must consider costs, processes and resources in a competitive context because while some strategies may work in theory, they can be too expensive to gather assets in reality.

5. Successful managers think long-term

The most successful managers think not just about the needs of their fund today, but what their business will look like in the future. They take the time to understand their options and work with partners who can help them make smart decisions that align with their long-term business goals. For instance, if they are going to have a straightforward strategy, using a series trust to launch their fund will likely be fine. But if they are going to have multiple strategies or they need more flexibility or control, they will likely want to establish their own trust and their own board. If they're executing in a Master Limited Partnership strategy, it's important to work with a provider that has expertise with that structure. There are many options to consider from an operational standpoint, but the more a manager can think long-term the more likely they will be proactive in setting up the right partners and processes. Following through on that will lower costs and increase the chances of sustaining success over the long haul.

Closing thoughts

There's no question that the opportunities in the liquid alts market are abundant and are only going to become greater, but the competition is getting stiffer as well. As convergence takes hold, competition is ramping up and managers' margin for error is shrinking. The factors outlined above will likely be the difference between gathering assets or being left behind. Since 2000, Ultimus Fund Solutions has been working with liquid alts managers on a wide variety of strategies from long/short, to market neutral and managed futures. So take advantage of Ultimus' experienced insights to avoid what many new entrants to the retail space overlook and create a clear sight line to success in the booming liquid alts market.

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Dave Carson is VP and director of Client Strategies & president of Ultimus Managers Trust (UMT). As director of Client Strategies and president of UMT, Dave manages the series trust product line and provides expert assistance to investment managers considering starting a fund.

Ultimus Fund Solutions, based in Cincinnati, Ohio, is one of the largest independent providers of mutual fund services in the country. We provide fund organisational services, fund administration and distribution, fund accounting and financial reporting, plus transfer agent and shareholder services for open-end funds. Our experienced teams of Passionate Professionals create customised Smart Solutions to generate Remarkable Results for investment managers and their funds, which allows them to focus on growing assets and their investment strategies. For more information visit www.ultimusfundsoltuions.com.

Stability in a sea of change

The mutual fund industry has gone through much upheaval in the last decade. Survey results show how administrators have been an oasis of support in difficult times for asset managers.

he last decade can be divided into two clear periods. First was the run up to, experience of and recovery from the 2008 financial crisis. Overall assets managed by mutual funds (including ETFs, UITs and Closed end funds) peaked at just under \$13 trillion at end 2007 and took until the end of 2011 to recover to that level after plunging during the intervening years. The position for mutual funds alone showed a similar pattern but here it took until year end 2012 before assets under management got above the \$12 trillion seen at year end 2007. The difference in timing is explained by the startling growth in ETFs as the recovery took hold. Since 2011, the position has been one of very solid growth; ETF assets doubled, mutual fund assets are up by more than 30% and overall assets under management increased by more than 40%. The make-up of funds also posed a significant challenge to all parties. In 2006 and 2007 money market funds saw net new investment of more than \$1.25 trillion. The following two years saw money market funds see net outflows of more than \$1 trillion as record new monies flowed into equity and bond funds. This level of activity posed challenges for all industry participants not least administrators.

Some administrators did not survive the shake out. The 2006 Survey included BISYS, Investors Bank and Trust, Mellon Group and PFPC among the ranked providers. BISYS and IBTC were acquired in 2007 by Citi and State Street respectively. Mellon and PFPC remained independent a little longer but eventually became part of what is now known as BNY Mellon.

As a result only eight fund administrators stayed the course in such a way as to merit a full review as part of the 2015 decade in review survey. A further five have been involved for a long enough time and with sufficient distinction to also be reported on individually.

Yet throughout a traumatic period in the market and a serious shake- out among providers, services have remained consistently well regarded taken across the industry as a whole. Table 1 shows the overall scores recorded across all responses in the years from 2006 to 2015. It is true that there was a dip in perceptions after 2006, with the average score going from 5.91 down to 5.59 in 2007 and only recovering its highest level in 2011, when the average was 6.01. There was then a steady improvement until 2014 when the record score of 6.28 seen in 2013 proved unsustainable. What follows is a summary of performance over the decade in each of the eight core areas of service.

Relationship management and client service

This category includes all the day-to-day aspects of client service, such as responsiveness and effectiveness of staff. It also incorporates elements of more strategic relationship management including understanding client needs and delivery of relevant new products and services. Over the years the category has consistently ranked in the top two categories as assessed by respondents. In 2015 it garnered a relative score of 8.50 in terms of priority, second only to Fund Accounting (see Table 2).

Table 1: Overall scores

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average
Relationship management and client service	5.93	5.67	5.63	5.83	5.95	6.15	6.14	6.31	6.06	6.01	5.97
Value delivered	5.57	5.38	5.43	5.55	5.74	5.85	5.92	6.13	5.79	5.66	5.70
Fund accounting	6.27	5.96	5.85	6.05	6.16	6.23	6.28	6.39	6.26	6.28	6.17
Fund administration and trustee	6.02	5.57	5.68	5.97	5.96	6.17	6.11	6.38	6.03	6.12	6.00
Distribution support	5.84	5.40	5.51	5.83	5.87	5.97	6.09	6.34	6.02	5.99	5.89
Operations and custody	5.91	5.55	5.48	5.72	5.68	5.73	5.95	6.20	5.97	6.03	5.82
Reporting	5.76	5.44	5.42	5.52	5.72	5.95	5.92	6.10	6.22	6.17	5.82
Compliance and regulation	5.85	5.60	5.63	5.78	5.89	6.03	6.05	6.38	6.05	5.99	5.93
Overall total	5.91	5.59	5.58	5.79	5.87	6.01	6.06	6.28	6.05	6.03	5.92

In terms of scoring it is worth comparing the scores for this category with scores achieved across the Survey as a whole. Interestingly the scores for Client Service exceeded the overall average in all of the ten years under review, except for the latest period (2015) where it fell just short. Given its importance to clients it is testimony to the effectiveness and focus of all participants that scores should be relatively good with such consistency. Throughout the period clients make reference particularly to the 'quality of client service personnel' and their responsiveness. More positive mention is made of the day-to-day staff in most years than relationship managers. But taking everything together it is clear that respondents are very satisfied. There are very few negative comments recorded even in situations where scores are not as high as might be expected for an individual provider.

In any ten year review it is almost impossible for a single provider to do well every year. However, as far as Client Service is concerned the performance of Brown Brothers Harriman has been consistently at a high level as has that of ALPS, albeit catering to a different client profile. Citi has also scored highly in this category in many of the years under review.

Value delivered

In terms of questions, Value Delivered has been the single most consistent category of the eight covered. The focus is on the level of fees being paid, the extent to which clients believe these deliver value for money and finally the level of transparency of fees charged. The latter has been a source of concern from time to time over the years, as invoicing was not always simple to review. In general respondents to surveys have tended to view fees as one area that they should 'mark down' in terms of scores. No-one typically wants to be seen as being happy with the level of fees they are being charged by providers. Similarly many respondents do not wish to be seen as being focused on fees in terms of priorities. As such the fact that this area is consistently in the top half of categories in terms of priorities, perhaps reflects the fact that for at least some clients, it is an important driving force. Whether these

Table 2: Relative priorities



clients regard administration as a commodity service is not clear. Given the relative lack of movement of clients from one provider to another that would seem unlikely.

In terms of actual scores, Value Delivered has been below the overall survey average every year in the last decade. As noted above this is not surprising. Though it has always been among the lower scoring areas it has not been the lowest scoring area in every year. Indeed in the years following the financial crisis, perhaps reflecting the stability being provided by administrators through a difficult period, scores in the category were more than satisfactory.

Some providers are unhappy to be seen to do well in this area, fearing that it suggests they may be under-pricing services. However, the good scores seen over a number of years by the likes of US Bancorp, Brown Brothers Harriman, State Street and RBC suggest that any reservations are probably misplaced.

Fund accounting

Fund accounting is the single most important aspect of service for North American clients based on responses received over the decade. Its relative rank this year was 9.70 well ahead of the second most important area. Over the years the number and nature of questions in this category evolved with the growing complexity of the business and between 2006 and 2013 the number of questions doubled. A number of emerging factors influenced the approach. These included the growing proportion of globally invested funds requiring accurate foreign exchange translation in the net asset value. More recently Liquid-Alt funds and ETFs have each posed particular challenges to providers.

What must be encouraging to the industry and what reflects very positively on administrators is the general excellence of scores seen in this core area of service. Every year in the last decade Fund Accounting has achieved the highest overall average score of any category. Although more recently scores in other areas have come close, this simply illustrates the gains in other aspects of service rather than any weakness in scores for Fund Accounting. Across the decade the average score for Fund Accounting has been better than 6.0 (very good), the only aspect of service to achieve this. Periodically a few negative comments have been made about handling of some more complex instruments, but overall the comments around the 'outstanding performance in meeting accuracy and timeliness' standards show just how well providers handle the core aspects of their business.

Given the scale of its business the scores achieved by State Street in this area during the period under review merit particular mention. In more recent years BNY Mellon, US Bancorp and Brown Brothers Harriman have also performed very strongly. However it should be noted that there are simply no weak performers in this category. This is not surprising as scoring poorly here would undermine a provider's entire business.

Fund administration

Fund administration has consistently included the largest number of questions within the Survey. However the relative importance of these services varies enormously from client to client. Traditionally they always ranked in the top three or four areas mentioned by clients. In 2015 they did so again, but it is worth noting that Compliance and Regulation are very close in overall importance and perhaps have a broader base of interest among clients. The areas covered here include among others trustee services and shareholder recordkeeping and the ability to handle spikes in volumes, whether seasonal or caused by other factors.

Performance over the decade has been very solid but not as consistent as Fund Accounting. The average across the years has been 6.00 which ranks second overall. While it has usually occupied a place in the top three aspects in terms of scores, it did slip in 2007 and 2008, perhaps affected by the consistent surge in business that needed to be handled. Interestingly in 2014 it ranked only fifth of eight despite achieving an average score of 6.03, though improvement was seen in 2015. Comments from respondents have also been somewhat more nuanced in their praise compared with other areas. Particular problems in some specialist areas, for example fund structures have occasionally been highlighted by clients.

Among service providers some such as BNY Mellon have seen a steady gain in scores over the period. Having started at an apparent disadvantage in 2006 they are now highly competitive in this area. By contrast J.P. Morgan has seen a fairly steady decline in scores over the years. Other providers have seen scores vary from year-to-year, again perhaps reflecting the challenges of business in particular periods as opposed to definite changes in their own performance or capabilities. Overall the picture is one of solidity, but with some lack of consistency compared with the other service areas covered in the Survey.

Distribution support

Distribution support is clearly of greater interest to some managers than others. In some cases these services are not required at all by clients. The areas covered in the Survey include the ability to support distribution by different means (e.g. electronic and via platforms), through different channels (e.g. IFAs) and in response to specific requests or requirements (e.g. mail shots). In earlier years some additional questions related to advise on particular markets were also included but these questions were ignored in the context of scoring for North American clients looking at services for North American funds.

As might be expected the average level of importance attached to these services was the lowest of the eight areas covered on a fairly consistent basis over the last decade. It also understandably saw a wider range across different respondents in terms of importance. In terms of scores achieved the results have been steady but not outstanding compared with the best. It has mainly been seen as being in the bottom half of the eight categories in terms of scores and in only three years has its score beaten the overall Survey average score for the year in question. Comments have rarely been strongly negative. However, a lack of positive comments relative to key areas is noticeable over the years as is a relative lack of 7.0 (excellent) scores among providers as a group. Interestingly scores in this area have shown some of the largest improvement over the course of the last three years. This trend is also noticeable among a number of providers including BNY Mellon and Citi. Other providers have seen more mixed results and in general scores are more volatile in this area than any other. Given the nature of usage this is perhaps to be expected.

Operations and custody

Operations and custody have always been included in the Survey either within a specific category or with questions incorporated within other categories. As recently as 2006 this was still an area of some differentiation among providers, especially in relation to funds with more complex investment strategies. In recent years however this has declined as an area of differentiation among the various major service providers and in terms of importance to clients. Table 2 highlights the fact that this is now next to last of the eight categories in terms of priority ranking.

Interestingly it is an area where scores are still relatively disappointing, especially compared with those for Fund Accounting and Client Service. The position has been one of steady if not spectacular decline in relative performance. The excellent scores recorded in 2013, an average of better than 6.0 (very good) appear to be an aberration rather than the start of a trend, though 2015 again saw a better relative result with the category ranked fourth out of eight. The area elicits few comments from clients in most years. As with some other aspects regarded as less important, Operations and Custody seems to inspire indifference rather than negative commentary.

The performance of different banks has also been more variable in this area than many others. Some such as State Street and US Bancorp have tended to score at solid and consistent levels, probably reflecting their scale of business and responses across the period. Others, including J.P. Morgan and RBC have seen significant variations between the best and worst years, while BNY Mellon has showed a fairly general progression towards better scores over the period. ALPS, whose client base is generally smaller has achieved an average score better than 6.0 (very good) in eight of the nine years in which it has been rated. This is a level of consistency well above anything recorded by other rated providers across the decade.

Reporting

The average score for Reporting across the ten years covered in the Survey was 5.82. This is only ahead of Value Delivered in terms of scores achieved. While some progress was noted from 2013 to 2015, scores in the previous seven years were rarely out of the bottom two positions and in 2008 ranked last. This is clearly an area where clients feel more could and should be achieved. This is also reflected in comments made about both the accuracy of reporting and its timeliness. This area covers all reporting except that related to Fund Accounting i.e. principally operational reporting. Though not as important as NAV calculation, the concerns about subjects such as compliance and risk control mean that clients are increasingly interested in making sure that core operations reporting is timely and accurate.

While importance does appear to have increased over the period of the review, it remains relatively limited for most clients even now. As Table 2 highlights it is only sixth of eight categories in 2015, well behind Fund Accounting for example.

Among the various providers, a number have performed relatively strongly in this area compared both to other categories and other providers. RBC and State Street have performed better in this area on a number of occasions, while ALPS and US Bancorp have seen services generally well regarded by clients. This is again an area where perceptions of performance may be affected by the complexity of assets being handled. So an administrator only responsible for US equity portfolios will find it easier to deliver good quality reporting than one looking after global portfolios and more complex products. To that extent credit is due to those providers who generate good scores across a broad range of more complex asset management clients.

Compliance and regulation

At the beginning of the period under review Compliance and Regulation were not considered that important in terms of service provision by administrators. Generally rules were well understood and helping clients stay compliant was relatively straightforward. In recent years by contrast new regulations have affected mutual funds in a variety of different ways, from risk management to dealing with clients. As such Compliance and Regulation was the fifth most important category for clients based on responses in 2015. Indeed it was very close to Fund Administration in terms of relevance to respondents.

Scores have generally followed the pattern of the overall Survey results. In general category scores have been very close to the Survey average, beating it in half of the ten years covered. Generally scores are good but not exceptional with declines in the last two years suggesting that the new challenges are not proving easy to meet. Also in recent years the range of scores from respondents has grown wider, perhaps reflecting the greater role in their overall business and therefore bringing administrator performance into sharper focus. Comments too have become more frequent and more specific over the last two years. For the most part clients express satisfaction with the support being offered in terms of helping managers understand the evolving rules and developing services that help them in achieving compliance.

Over the years the larger providers have tended towards slightly higher scores, relatively to other aspects of performance in this area. They have the greatest scope of demand as well as the greatest need to perform well. State Street and US Bancorp have over the years done well, as have Brown Brothers Harriman. Citi is less consistent but generally has also scored highly in this area.

Methodology

Over the last ten years of the Mutual Fund Administration Survey, respondents have been asked to provide a rating for each fund administrator on a numerical scale from "1" (very weak) to "7" (excellent), covering 8 distinct functional services. In general "5" (good) has been the 'default' low score of respondents. Until this year responses were received from individuals based in North America, Europe, Asia and the rest of the world. This approach provided a broad cross-section of respondents and providers. However that very heterogeneity meant that comparisons were impossible to be fairly applied leading to inconsistencies in presentation and approach. In 2015 we determined that it would be better to concentrate on North American respondents only (US and Canada). In our ten year review presented here the results for prior years reflect the responses from North American clients only, not those global results that were originally published in the magazine during the period.

Each evaluation was weighted according to three characteristics of each respondent; their size, represented by the value of assets under management; the level of complexity of their business based on the range of services used; and the number of different administrators involved. In this way the evaluations of the largest and broadest users were assigned a weight of up to three times that of the smallest and least experienced respondent. In order to produce comparable data across the ten year period, the approach to assigning weight to each response was standardised. This means that the scores produced may differ from those recorded as being from North American clients in previously published versions of the survey.

Over the course of the period between 2006 and 2015 a number of changes were made to the individual questions posed, though some were consistently evaluated in all ten years. In the period from 2006 to 2009 the questionnaire remained the same. It was then progressively extended between 2010 and 2013 before being deliberately shortened for 2014 and made North America specific in 2015. To ensure consistency between the periods each category has retained the same weight in all years, with weights of individual questions adjusted depending on how many, and exactly what questions were in each years' questionnaire.

The result is that we have a consistent set of results across the ten years on which to base an overall assessment of progress and development within the industry. These consistent results are also presented in the profiles of various providers included in the Survey. The profiles themselves cover institutions who have been active throughout the period.

ALPS, a DST Company

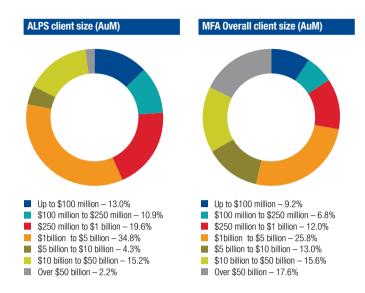
Throughout the nine years that ALPS has been rated within the Survey, its results have been consistently excellent. Since being acquired by DST in 2011, ALPS has operated in an autonomous manner and saw no downturn in scores either prior to or post-acquisition. ALPS' client base is dominated by managers at the smaller end of the spectrum. Over 90% of its clients have AuM of less than \$5 billion. That profile has been consistently reflected in the nature of responses received by the magazine. Even taking account of that element through use of the 'normalisation algorithm' the scores for ALPS are impressive.

Paralleling the Survey as a whole ALPS' scores have been consistently highest in Fund Accounting. Getting this core service right has been a mainstay of overall performance. Competitively ALPS has performed best in Reporting. This is an area where ALPS is the only provider to have recorded an average score of better than 6.0 (Very Good) throughout the period. This represents a significant competitive strength, especially for clients in its core market. Fund administration services are not used by all ALPS' clients. However, among those that do use them these services are very well-regarded.

Even better?

Within the generally excellent results, two aspects of scoring suggest that even ALPS can make further improvements. The first relates to some specific comments around the handling of more difficult to price assets. As fund manager portfolios generally become more complex, this is something that ALPS will have to deal with effectively if scores are to remain as high as they have been.

The second is the scores for Compliance and Regulation. These declined in 2015 to 5.79: equal to the score for Value Delivered and well down on those seen in prior years. As the regulatory burdens grow for its clients, they will no doubt expect support from their administrator. This is an especially important role for ALPS to play with smaller clients who may



not have the resources in-house to deal with everything that is required from them. While scores remain at elevated levels even allowing for the decline in 2015, this is one area where ALPS may be expected to focus in the coming twelve months. In this context it is perhaps interesting to note that ALPS' own Chief Compliance Officer has recently been appointed as COO within the firm, an illustration of intent in this area that clients should welcome.

The excellent scores seen over the years are attributable to two factors. The first is the fact that clients rarely resort to any score below 5.0 (Good). To some extent this may reflect the nature of the client base, but it is also a testimony to the ability to deal with any issues as they arise. Second, and perhaps more important in terms of its competitive position, ALPS manages to secure a high proportion of 7.0 (Excellent) scores each year. This suggests that a large proportion of clients are enthusiastic and feel very positively about the relationship they have with their administrator. This in turn helps ALPS achieve consistently strong results.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	5.9	5.9	9.9	7.6	10.8	8.5	11.4	11.7	19.2	12.85
Relationship management and client service	N/A	6.02	6.43	6.45	6.58	6.53	6.54	6.49	6.03	6.19
Value delivered	N/A	5.86	6.18	6.09	6.34	6.21	6.38	6.38	5.89	5.79
Fund accounting	N/A	6.26	6.67	6.56	6.72	6.69	6.71	6.74	6.35	6.69
Fund administration and trustee	N/A	6.23	6.44	6.44	6.51	6.42	6.64	6.54	6.13	6.29
Distribution support	N/A	6.16	6.22	6.11	6.45	6.27	6.67	6.45	6.40	6.05
Operations and custody	N/A	5.84	6.33	6.16	6.49	6.27	6.47	6.44	6.02	6.46
Reporting	N/A	6.13	6.33	6.08	6.54	6.34	6.45	6.37	6.46	6.38
Compliance and regulation	N/A	5.92	6.39	6.28	6.42	6.23	6.41	6.56	6.21	5.79
Global outperformer		Yes								

ALPS

BNY Mellon

NY Mellon began the last decade as the Bank of New York Group. Over the course of the last decade the bank has expanded its securities servicing businesses, including mutual fund administration, through a process of organic growth and acquisition. The latter presents a number of challenges, but BNY Mellon has consistently managed to deal with these successfully. The main acquisitions that impacted the fund administration businesses were that of Mellon Financial in 2007 (completed after the Survey that year), and that of PNC Global, previously known as PFPC in 2011. The former also brought into the group the CBIC Mellon joint venture in Canada, and with it that firm's business in Canadian mutual fund custody, which is the largest in that country. As a result the group as a whole now services hundreds of clients, producing thousands of NAV calculations daily and serving millions of individual shareholders across North America. As might be expected, the average fund size serviced in the US is higher than that in Canada, with 47% of assets managed by clients with more than \$100 billion AuM. Nonetheless, there are also a large number of smaller clients in the overall business portfolio.

Solid performance

Over the last decade BNY Mellon has seen solid rather than spectacular scores in the Survey. This applies both to the Canadian and the US business. In-line with the overall results, BNY Mellon's performance has been strongest in Fund Accounting, consistently achieving scores of around 6.0 (Very Good). The average of 5.98 across the decade reflects a downturn in scores in 2015 but nonetheless represents a very competitive performance. The most disappointing area, both in 2015 and across longer time periods is Reporting. Client scores are better than 5.0 (Good), and have improved steadily over the period. However they remain lower than many competitors. In 2015 clients noted that 'expense accrual reporting' could be more robust, and 'enhanced dividend reporting would be useful' in terms of areas where BNY

BNY Mellon client size (AuM) MFA Overall client size (AuM) ■ Up to \$100 million – 3.3% Up to \$100 million - 9.2% \$100 million to \$250 million - 4.5% \$100 million to \$250 million - 6.8% \$250 million to \$1 billion - 5.4% \$250 million to \$1 billion - 12 0% \$1 billion to \$5 billion - 26.8% \$1billion to \$5 billion - 25.8% \$5 billion to \$10 billion - 6.7% \$5 billion to \$10 billion - 13.0% \$10 billion to \$50 billion - 39 9% \$10 billion to \$50 billion - 15 6% Over \$50 billion – 13.3% Over \$50 hillion – 17 6%

Mellon could improve services. While clients are not genuinely dissatisfied with Reporting services, there is a general sense from both scores and comments over the years, that BNY Mellon could do more in this area. One area where scores are disappointing is Operations and Custody. Given the position of the group as the largest custodian bank in the world this should be an area of competitive strength. However client scores and comments would suggest that while it is perfectly satisfactory it is not as good as they might wish. Average scores declined for the second year in a row in 2015 after years of steady gains. As a result they are well below scores seen by many competitors, both large and small.

BNY Mellon has an important fund administration business, but perhaps not on the same scale as some of its major custody bank competitors, such as State Street. Over the last decade the reason that scores have sometimes failed to match those recorded by others is the relative lack of 7.0 (Excellent) scores. This apparent lack of enthusiasm among clients will make it harder to achieve organic growth in the business.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	5.52	8.70	8.48	8.78	15.24	14.74	11.02	6.18	7.73	6.36
Relationship management and client service	5.42	4.96	5.62	5.76	5.97	6.02	5.66	6.20	5.79	5.47
Value delivered	5.49	4.65	5.48	5.60	5.64	5.60	5.19	5.95	5.47	5.10
Fund accounting	5.78	5.67	6.04	5.99	6.04	6.20	6.13	6.13	6.23	5.54
Fund administration and trustee	4.94	4.85	5.86	5.62	5.68	5.94	5.59	5.96	5.96	5.79
Distribution support	N/A	4.78	6.24	5.64	5.58	5.86	5.35	5.96	5.80	6.00
Operations and custody	4.89	4.66	5.39	5.44	5.43	5.51	5.72	6.42	5.82	5.14
Reporting	4.51	4.93	5.31	5.26	5.55	5.81	5.37	5.69	5.69	5.45
Compliance and regulation	4.89	5.11	5.18	5.66	5.81	5.82	5.45	5.96	5.67	5.94

BNY Mellon

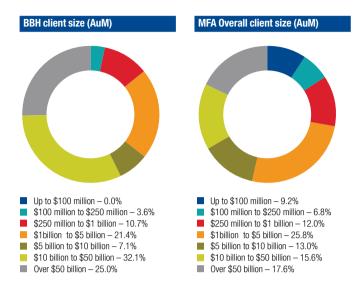
Brown Brothers Harriman

Brown Brothers Harriman (BBH) maintains a relatively small number of highly prestigious clients among US mutual fund managers. Throughout the period under review the bank has enjoyed a very strong level of support from some of the most demanding names in the business. It has also always been known for its ability to support clients as they expand, whether into new markets or new products. Its business in Europe, though not covered in this survey, is testimony to the benefits of servicing large and successful clients, enabling and facilitating its expansion. This strategy is not necessarily unique to BBH but their execution of it has been more successful than any of their competitors. It has allowed the bank to stay at the forefront of the industry globally as well as reinforcing its strong position in the US.

Of course dealing with complexity and growth as well as demanding and large clients, brings particular challenges in terms of technology and people. It also presents a disadvantage in terms of scoring achieved in the survey. BBH has important respondents, proportionally more so than those of any other provider. In any assessment of scores, application of the *Global Custodian* normalisation algorithm will result in a relative improvement in the position of BBH compared with most, if not all other providers. Any consideration of the raw scores presented within the survey needs to take this into account.

Consistent excellence

What is important to note within the scores for BBH is the level of consistency maintained across the various aspects of service from one year to the next. In five out of eight categories the average score seen by BBH across the decade under review is better than 6.0 (Very Good). Among providers dealing with large and sophisticated clients BBH is the only bank to achieve this level of consistency. In line with the overall results, BBH has scored best for Fund Accounting in nine of the ten years and with an average of 6.28 during the period, it is only surpassed by ALPS. The second area of highly competitive



performance is in Client Service and Relationship Management. Across all of its businesses BBH works hard to establish preeminence in terms of the level of client service that it delivers. In dealing with some of the largest fund complexes it is also required to maintain excellent relationship management at a senior level. Scores in this area have been good throughout the period. Interestingly they have been strongest in the most recent five years, averaging better than 6.35 during that period. Client comments have also consistently made reference to the quality and experience of personnel, the relative lack of turnover of staff, and in many cases have been willing to specifically commend named individuals. It is this approach that has enabled BBH to achieve scores of 7.0 (Excellent) across a relatively large number of questions.

One continuing challenge is to maintain technology at appropriate levels, and clients are becoming more demanding in this area. BBH's ability to rise to that challenge will help ensure it continues to maintain its reputation for excellence within the industry.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	2.34	8.82	12.32	8.89	9.09	7.49	11.80	16.85	10.54	14.12
Relationship management and client service	5.94	6.19	5.85	5.72	5.94	6.34	6.37	6.55	6.34	6.28
Value delivered	5.65	5.74	5.36	5.32	5.99	5.90	5.98	6.37	6.02	5.40
Fund accounting	6.35	6.08	5.92	6.03	6.13	6.34	6.25	6.68	6.48	6.50
Fund administration and trustee	5.95	5.78	5.14	6.29	5.54	6.22	5.74	6.52	6.65	5.90
Distribution support	5.89	5.58	4.83	5.97	5.69	5.85	5.46	6.42	6.81	5.89
Operations and custody	6.11	6.10	5.55	5.63	5.77	6.00	5.88	6.56	6.26	6.09
Reporting	6.21	6.07	5.65	5.39	5.79	5.96	6.04	6.39	6.36	6.13
Compliance and regulation	5.91	5.92	5.65	5.76	5.91	6.21	5.89	6.48	6.41	6.06
Global outperformer	Yes	Yes				Yes		Yes	Yes	Yes

Brown Brothers Harriman

Citi

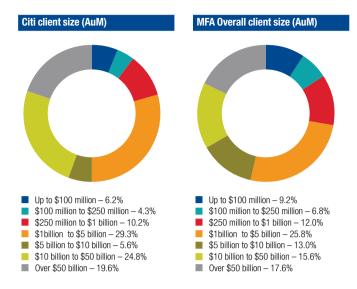
Giti's announcement of its intention to divest its hedge fund administration business may not be related to its continued commitment to either prime brokerage or more general mutual fund administration. However, the rapid growth in liquid alternative assets and structured products within the mutual fund arena, both in the US and globally, would suggest that now is an odd time to choose to eliminate an area of potential competitive advantage. Citi's hedge fund business is of course dwarfed by its mutual fund administration activities in terms of both AuM and number of clients served. The core mutual fund business has also been growing more quickly; over 20% in the last year. Citi remains a major player in North American mutual fund servicing, and while clients may ask questions about the bank's commitment to these kinds of administration businesses, they should be able to provide suitable reassurance.

Consistent enough

Over the course of the ten year review period Citi has been a regular and important provider in the Survey. Over the years, its performance has always been acceptable, without necessarily ever achieving the level of scores or relative position that it would aspire to reach. Over time the bank has achieved a score of 6.0 (Very Good) or better in Fund Accounting but not in any other aspect of service.

Nonetheless other categories have averaged a healthy 5.75 or more during the period, and Citi's scores have always been competitive when compared to other providers with a similar business profile. In terms of respondents the level of clients with more than \$10 billion of AuM is consistent with most major competitors. This works against it in terms of scoring but normalising the results for this does not make a significant difference to relative performance.

Citi is seen as doing a good job in Client Service and Relationship Management and this is one area where scores have been very consistent over time. Clients typically comment positively about personnel and the bank's ability to respond effectively to enquiries. They are also complimentary about



Citi's ability to keep them informed of changes, and to develop services that assist clients in meeting new regulatory challenges.

Where Citi has typically scored less consistently well is in Operations and Custody as well as core Reporting. Given the scale of operation that Citi runs, as well as the general level of activity in securities servicing, it is surprising that Citi attracts so few 7.0 (Excellent) responses from its clients. It is not that clients regard Citi services poorly in these areas, rather that they are not willing to award the very highest scores. This is the main reason why Citi has outperformed the Survey average in only four of the ten years under review. More disconcerting perhaps is the fact that Citi has failed to beat the overall score in any of the last four years. In an environment where clients are only likely to change providers for something clearly better, this lack of outstanding scores in core areas will make it hard for Citi to increase business from current levels. Clients will hope that a failure to grow the business does not result either in disinvestment or divestment.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	3.61	3.86	11.04	9.92	9.22	8.23	9.73	9.43	12.41	2.04
Relationship management and client service	6.08	6.17	5.20	6.14	5.72	6.00	6.06	5.95	5.75	5.84
Value delivered	5.59	5.73	5.14	5.77	5.76	5.79	5.85	5.79	5.27	5.24
Fund accounting	6.40	6.54	5.45	5.86	6.10	6.08	6.29	6.07	6.05	6.36
Fund administration and trustee	6.22	6.08	5.11	6.04	5.61	6.38	5.88	6.29	5.63	5.45
Distribution support	5.58	5.95	4.75	5.70	5.69	6.25	5.98	6.37	5.67	6.00
Operations and custody	6.07	5.97	5.06	5.81	5.50	5.81	5.68	5.52	5.73	4.53
Reporting	6.10	5.68	4.87	5.61	5.40	5.97	5.70	5.80	6.23	6.74
Compliance and regulation	6.16	5.88	5.34	5.92	5.70	5.92	6.06	6.58	5.66	5.16
Global outperformer	Yes	Yes		Yes		Yes				

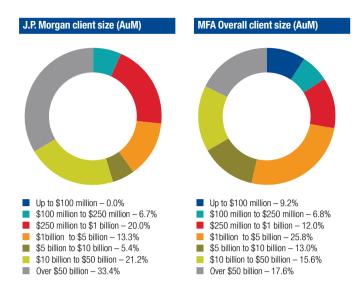
J.P. Morgan

rguably J.P. Morgan is still considered more of an expert in custody than in fund administration. However over the vears it has become a leader in fund administration as well as custody, and offers a complete service including compliance and administration from multiple global centres. It is also among the largest fund administrators for North America funds, working with and for, some of the largest names in the business. It has been a factor in the Survey in every year since its inception and particularly over the last decade as the industry has consolidated. Its leadership position is evidenced by the fact that among respondents typically more than one-third come from the very largest fund complexes and more than half of its clients have AuM in excess of \$10 billion. It also has a reputation of being able to service some of the most demanding clients in terms of investment strategies and product requirements. This group of clients always represent the most severe test in the context of the survey scores and J.P. Morgan's results need to be viewed against that background.

Penalty of success

Even allowing for the nature of J.P. Morgan's respondents, scores achieved by the bank over the last decade of the Survey are not as strong as might be hoped or expected by the bank. The best average score for all years has been in Fund Accounting, in-line with the Survey and other providers generally. In the case of J.P. Morgan, however, even here the average was only 5.78, behind most of the other providers, including those with equally challenging groups of respondents. In no category did J.P. Morgan manage to achieve an average above 6.0 (Very Good) and indeed with the exception of 2006 and 2007, the bank has only achieved a handful of category averages above that level in eight years.

It should, however be noted that the number of scores of 4.0 (Satisfactory) and below has been limited throughout the period. As such J.P. Morgan is not seen as seriously disappointing clients. However, neither is it seen as delivering



at the high levels that they expect consistently enough to merit being awarded scores of 7.0 (Excellent) more than occasionally.

The same applies to client comments. There has been little serious criticism of services over the years, but also relatively little high praise of the kind given to others. Even within Client Service and Relationship Management it has been rare that a J.P. Morgan staffer or group has been singled out for commendation by North America clients.

It is certainly the case that other providers work harder to engage clients in the Survey process than J.P. Morgan. However, given the scores and comments that have been received from those that have responded it is not obvious that there is room for complacency. Even after consolidation the industry boasts a significant number of capable providers, any one of who may be looking to win clients away from J.P. Morgan. While scores do not suggest major competitive vulnerability at this time, the future may see a different picture emerging.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	2.55	5.07	6.40	5.93	7.68	5.53	9.99	10.05	4.45	3.44
Relationship management and client service	5.80	5.67	4.67	5.22	5.49	5.20	5.71	5.65	4.47	4.00
Value delivered	6.00	5.14	5.04	4.74	5.22	5.15	5.83	5.90	5.59	5.76
Fund accounting	6.29	5.96	5.28	5.45	5.86	5.76	6.12	5.80	5.61	5.68
Fund administration and trustee	6.00	6.22	5.92	4.83	5.28	5.74	5.57	5.59	5.48	N/A
Distribution support	N/A	5.90	5.43	5.71	5.85	5.29	5.73	6.21	6.00	N/A
Operations and custody	5.92	5.44	4.74	5.05	5.07	4.74	5.83	6.13	5.14	6.00
Reporting	5.69	5.84	4.61	5.03	5.09	5.06	5.53	5.56	4.82	5.71
Compliance and regulation	6.00	6.01	5.08	4.98	5.15	5.32	5.83	6.25	5.59	5.69
Global outperformer	Yes	Yes								

J.P. Morgan

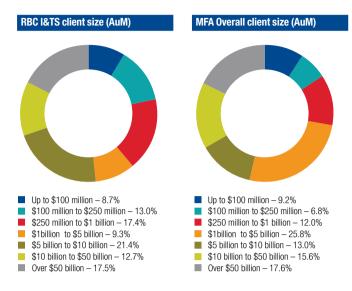
RBC Investor & Treasury Services

BC I&TS is the leading custodian bank in Canada and also a significant presence in the European market as a result of its acquisition of the whole of what was formerly known as RBC Dexia in 2012. Canadian mutual funds have a total of around US\$1 trillion of assets under administration, while those in Europe have many times that level. An emphasis by RBC I&TS on developments in the European market would be a natural consequence of the acquisition. Nonetheless the bank has been a consistent factor in the Survey based on clients in both Canada and Europe. It is, however noticeable that since 2012, the engagement of RBC I&TS with the Survey in terms of its Canadian clients has been greatly reduced. In addition Canadian clients tend to be smaller when measured in terms of AuM than clients in the US. Overall this has a limited impact on scoring but does affect the way that RBC I&TS might view its competitive position.

Not always consistent

Perhaps because its client base is Canadian rather than US based, the scores recorded by RBC I&TS in the Survey have tended to not quite follow the pattern of other providers. So although the average score for Fund Accounting has been a solid 5.68, it is in fact among the weaker scores seen by RBC I&TS compared with other categories. The bank's best scores have been reserved for Fund Administration and Trustee services, where scores have regularly exceeded 6.0 (Very Good) in the course of the Survey. RBC I&TS has also always maintained a very high standard when it comes to delivery of Client Service and Relationship Management. Its mutual fund administration business is no exception to this cultural strength.

Scores seen by the bank have also lacked the consistency that is a factor in scoring among some of the US focused providers. This is true across different categories and from one year to the next. In four years out of nine between 2006 and 2014, RBC I&TS managed to achieve a score sufficient to be a Global Outperformer. In other years scores have fallen some way short of that objective. In a core area such as Operations



and Custody, scores ranged from 5.17 in 2010 to 6.12 two years later, but then fell away sharply in 2013. To some extent the number and nature of respondents plays a role in creating more volatile scores. However, that does not explain changing scores from clients responding in consecutive years. The good news for clients and RBC I&TS is that the bank has demonstrated considerable potential to recover quickly from any setback in terms of client perception.

Clearly securities servicing is a major part of the business of the bank and its organisation structure and acquisition profile demonstrates this. It is also clear that the Canadian market is insufficient to support its ambitions and it has ventured to Europe rather than trying to progress in the US, which may serve to limit its North American business going forward, but not its overall scope and reputation.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	4.03	4.95	6.72	5.25	4.99	5.16	5.84	0.77	0.70	
Relationship management and client service	5.78	5.87	6.24	5.54	5.88	6.41	6.27	6.06	5.59	N/A
Value delivered	5.37	5.76	5.63	5.14	5.53	6.12	6.29	6.36	6.55	N/A
Fund accounting	5.64	5.85	5.79	5.70	5.79	5.90	6.10	6.00	4.33	N/A
Fund administration and trustee	5.94	6.07	6.05	5.50	6.12	6.13	6.05	N/A	N/A	N/A
Distribution support	5.14	6.14	5.34	5.43	5.64	6.30	6.04	N/A	N/A	N/A
Operations and custody	5.36	5.48	5.61	5.26	5.17	5.76	6.12	5.06	N/A	N/A
Reporting	5.07	5.49	5.53	5.18	5.65	5.97	5.95	5.73	7.00	N/A
Compliance and regulation	5.52	5.80	5.96	5.38	5.05	6.27	6.05	5.40	6.53	N/A
Global outperformer		Yes	Yes			Yes	Yes			

RBC Investor & Treasury Services

State Street

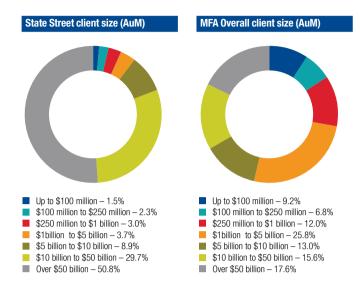
A mong the leading US mutual fund complexes, State Street leads the way in terms of providing fund administration services; a reputation and business built on many decades of activity supporting and enabling the growth of what is now an \$18 trillion AuM industry, serving more than 50 million US households and more than 90 million US individuals. The role of State Street in facilitating this growth cannot be overstated. They are a dominant service provider in terms of client numbers and individual funds that they service. They also have a major presence in the Canadian funds market.

In the context of the Survey, the sheer size and scope of their clients' business means that they suffer a significant disadvantage from a scoring perspective. More than 80% of respondents are in the top two categories by size and more than half are in the largest group. While it might be an overstatement to suggest they are in a league of their own, any consideration of their performance in our or any other Survey needs to reflect the scale of their success and the nature of the challenges that success has brought with it.

Consistency the key

State Street may not always have received the greatest number of responses, but they have come from many of the largest fund complexes. There is a consistency among their respondents that reflects the continuity within their client base. Such loyalty is borne of generally high levels of satisfaction with services provided. However, it also means that it is hard for the bank to achieve a level of 7.0 (Excellent) scores that some other providers manage. The breadth of clients means that State Street has had to be at the forefront of handling of new products including liquid alt funds, ETFs and peerto-peer loan funds, as well as advising managers seeking to expand the extent of physical real estate assets within the confines of the 40 Act provisions. Meeting these kinds of challenges is what enables State Street to remain at the forefront of the industry.

In terms of service levels it is worth noting that across the



decade the scores recorded by State Street in Fund Accounting have averaged better than 6.0 (Very Good). Given the nature of the business this should be considered an extraordinary accomplishment. The bank has also done very well recently in the area of Compliance, and over the years has seen strong scores for Client Service and Relationship Management. In the latter case, the scale of business means that State Street cannot simply rely on having high quality people in place for long periods. Instead it has to be able to maintain a continuous stream of technically trained individuals regularly joining the business at the ground floor. The ability of the bank to maintain service levels in spite of what is inevitably more staff turnover than some competitors is one of many things enabling State Street to continue to maintain its competitive position.

Overall, the bank has done an excellent job in the last decade in extending, both through acquisition and more importantly through organic and customer growth, its leading industry role.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	9.55	12.32	17.92	25.77	21.90	19.04	19.07	18.39	12.88	9.41
Relationship management and client service	5.71	5.27	5.46	5.80	5.63	6.09	6.17	6.40	5.98	5.08
Value delivered	5.49	5.33	5.35	5.45	5.49	5.84	5.92	6.13	5.87	5.13
Fund accounting	6.01	5.71	5.75	6.15	6.02	6.23	6.29	6.44	6.34	5.82
Fund administration and trustee	5.50	5.48	5.68	5.84	5.96	5.92	6.14	6.26	5.57	5.08
Distribution support	6.13	5.27	5.58	5.76	5.08	5.46	5.87	6.67	4.00	7.00
Operations and custody	5.70	5.58	5.52	5.83	5.55	5.69	5.88	6.19	5.89	5.47
Reporting	5.71	5.44	5.46	5.53	5.57	5.96	6.00	6.16	5.87	5.85
Compliance and regulation	5.00	5.70	5.47	5.60	5.79	5.80	6.14	6.35	6.06	5.77
Global outperformer			Yes	Yes			Yes	Yes		

State Street

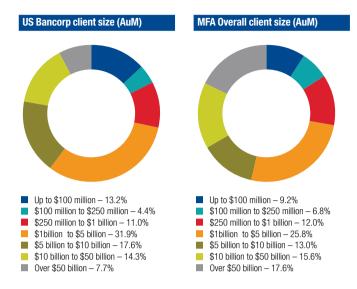
U.S. Bancorp Fund Services, LLC

S. Bancorp has been a permanent and highly successful participant in the Survey for more than the ten years covered here. It has a very strong book of business with more than 300 clients responsible for more than 2,000 funds. While not the biggest administrator covered within the Survey, it has enjoyed steady growth and has performed well in every year in the last decade. Indeed it has managed an uninterrupted run of global outperformance spanning the entire period, and is the only provider to have achieved this. In considering the scores it should be noted that less than 20% of its respondents fall into the largest size of client, with a higher proportion of smaller funds. This certainly helps when it comes to scoring in the Survey as the smaller clients are, as a general principle, more generous in their approach to scoring and overall have less complex demands. Nonetheless U.S. Bancorp has a breadth of clients that means it has seen a growth in alternative strategies and increased use of derivatives by its clients' funds, and therefore has to deal with similar challenges to those providers who have larger fund complexes as clients. In some cases this has caused clients to voice minor concerns, but these are more than outweighed by the high number of very positive comments

Consistent results

Two things stand out in terms of the performance of U.S. Bancorp over the course of the last ten years. The first is a consistency in excellent scores for Fund Accounting. With the exceptions of 2007 and 2008 the average score recorded by the bank in this area has been better than 6.0 (Very Good) every year. This has to be regarded as an excellent level of consistency in performance. Second is the noticeable improvement in scores for Client Service and Relationship Management, which has seen scores above 6.0 in each of the last five years, having previously been an area of relative disappointment.

Comments from clients around the quality of personnel have grown regularly and are now commonplace among



responses. The bank has also received good comments for the effectiveness of its technology. In the last twelve months the bank has invested in transfer agency and client portal applications and this may be expected to ensure that this aspect of service continues to be highly regarded by respondents.

One point to note is the decline in 2015, for the second year in succession, of scores for Compliance and Regulation, leaving the score in 2015 below 6.0 for the first time in a number of years. Clearly client sensitivity in this area as well as client expectations of providers have grown. Ensuring that clients are effectively supported in this area will likely become even more important in the next twelve months. U.S. Bancorp is clearly not alone in having to meet this challenge and is well placed to do so. Overall scores are better in 2015 than a year ago and a positive scoring trend is notable even as respondent numbers have increased. The implication must be that U.S. Bancorp is set to maintain the strong performance of the last decade well into the future.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted share (%)	10.19	11.35	10.24	10.38	8.19	15.85	10.77	15.92	17.80	33.31
Relationship management and client service	5.93	5.76	5.52	6.13	6.33	6.36	6.38	6.45	6.28	6.30
Value delivered	5.57	5.50	5.56	5.92	5.96	5.80	6.11	6.08	5.68	5.70
Fund accounting	6.21	6.03	5.69	6.14	6.51	6.23	6.57	6.55	6.11	6.22
Fund administration and trustee	6.36	5.71	5.93	6.23	6.27	6.26	6.53	6.49	6.23	6.18
Distribution support	5.94	5.36	5.95	6.10	6.00	6.00	6.64	6.29	5.81	6.03
Operations and custody	5.93	5.48	5.64	5.78	5.90	5.76	6.27	6.26	5.96	6.04
Reporting	5.94	5.23	5.64	5.70	6.09	5.99	6.37	6.16	6.26	6.07
Compliance and regulation	6.09	5.60	5.97	6.18	6.40	6.27	6.40	6.36	6.01	5.98
Global outperformer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

US Bancorp

Atlantic

A tlantic has been rated in the published Survey for a number of years. In comparison with some of the other profiled providers its business is relatively small both in terms of the number of clients, number of separate funds and the typical size of its clients. The latter factor has a positive impact on general scoring compared with some providers. Even allowing for this, however, the average scores achieved during the relevant years are very strong. Atlantic has outperformed the Survey average in every year that it has been rated. While clients are relatively small their demands are complex with Atlantic seeing much demand for Liquid Alt fund support, where they provide advice on structure as well as ensuring access to appropriate pricing sources.

Comments received have also been uniformly positive over the period. The firm is consistently praised for its professionalism and ability to meet client needs. Obviously this is somewhat easier to achieve when the number of clients is relatively small. Even so, the ability to perform at a high level as business grows is a key attribute in moving to the next stage of business development.

In terms of the different categories of service, Atlantic has regularly scored highest for Fund Accounting, in line with the overall results. In their case, however, the scores for Reporting and Fund Administration are very close to those seen in the

Atlantic - average scores



best performing category. As such they probably are a bigger factor in offering Atlantic a competitive edge compared to others. Reporting also has generated positive comments from individual clients who are very satisfied with its accuracy, timeliness and perhaps most importantly flexibility. Smaller clients also depend on Atlantic for support in dealing with new regulation and related compliance and reporting products, and Atlantic have scored well in this area as well.

Overall, the firm seems to have very satisfied clients with whom it can continue to grow further.

Gemini Fund Services

Gemini is one of a number of companies within the NorthStar Financial Services Group, which is itself now majority owned by TA Associates. NorthStar provides an array of services in the wealth management arena, and Gemini provides mutual fund administration to a growing number of smaller US asset managers. Client growth has been robust in the last twelve months with an increase of more than 15% in the number of funds being administered, while client numbers are now nearly 200. Clients are generally less mature funds. Indeed Gemini works actively at helping managers start new funds. As such, client assets are for the most part below \$5 billion.

The specific focus of Gemini in terms of its client base, means that it does not seek to compete with either very large or very international fund administrators. For that reason it was not engaged in the Survey until 2015, when the North America focus meant that its clients could contribute more meaningfully. Many of the providers who have been active with the Survey for some years would expect and did receive more responses than Gemini. As Gemini clients become more familiar with the Survey they will doubtless contribute in larger numbers.

In terms of scores there is obviously no historic track record against which to judge progress. Nor do most respondents for Gemini have any other providers to compare against.

Gemini Fund Services – average scores



As a result Gemini is assessed to some extent against the expectations that it establishes with clients. These focus on personalised attention to clients and cost effective solutions making use of best of breed technology solutions, aiming to deliver cost effective customised solutions. Overall scores are perhaps a little disappointing. Gemini scored strongly in Fund Accounting and Administration, but did less well in Distribution. Gemini is now seeing more investment from its affiliated distribution agent NorthLight. This should address any issues and allow Gemini to see improved scores. ■

SEI

SEI provides a very wide range of services to an array of different types of asset manager, including both hedge funds and mutual funds. As such it has been a rated participant in a number of different *Global Custodian* surveys over many years. In terms of business and technology leverage, the range of services offers SEI a number of advantages compared with smaller providers. While it may never expect to compete with the very largest market participants, there is no doubt that it has carved out a valuable market share and market position. Sustaining a successful mid-sized business does, however require a sharp focus. SEI's participation in the Mutual Fund Administration Survey has not always been as focused as some other providers. That has resulted in a more variable performance in terms of scores.

What SEI has done well in terms of scoring is achieve excellent results in two core areas of service. Across the period under review SEI has averaged a score of 6.24 for Fund Administration and Trustee Services. Fund Accounting has averaged a marginally weaker 6.23 over the same period. Clearly in its core business processes SEI is doing very well. This is backed up by comments over many years that have been very positive about administration services in particular. The excellent scores in these two areas cast something of a

SEI – average scores



shadow over other areas. Here scores over time have been very solid but not as good. Compliance and Regulation scores are the third best area, and this suggests that SEI is well positioned to benefit from an increasing focus on these areas by all asset managers.

However, Relationship Management and Client Service have been more variable, both in terms of scores and comments than would be desirable. It is not that clients are especially critical, simply that they are not moved to give the very highest scores to SEI in these aspects of service.

Ultimus Fund Solutions

Ultimus, based on clients' size and numbers, is a boutique provider of fund administration services to generally, but not exclusively, smaller fund management companies. It seeks to use its smaller size as a competitive advantage against what it sees are commoditised offerings from the larger providers. To do this effectively requires innovation, technology and cost control and some specific feature of service which is attractive to the target clients. In the case of Ultimus, the concentration has been on support for innovative fund structures and a long standing commitment to assisting their clients in the area of distribution. The latter was a clear point of differentiation as far as scoring in the Survey is concerned. The average score of 6.91 is excellent by any measure, but in comparison with other providers it is exceptional.

It must be noted, however that this is the first year that Ultimus has participated in the Survey and hence it is hard to assess how clients see service progression. Clients also typically have a close and concentrated relationship with the firm, which undoubtedly helps in terms of scores. The fact that clients are smaller works to the advantage of Ultimus in scoring generally not just in this particular area of focus. The key question is the extent to which the very high levels of service can be sustained as the business grows. New clients are always demanding and

Ultimus Fund Solutions – average scores



to get to the next level Ultimus will have to ensure that not only its technology, but also its management and process are genuinely scalable.

Whatever the future holds however, there is no doubt that Ultimus has joined the Survey and made an immediate impact. The number of 7.0 (Excellent) scores is higher than any other provider, even those with a similar demographic in terms of clients and organisations of similar size. Overall, this represents an exceptional debut in the Survey and promises a successful future if sustained.