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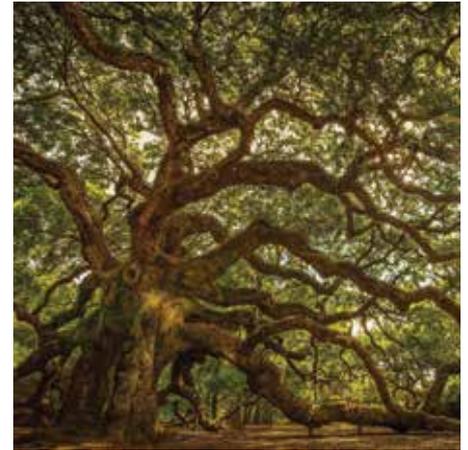
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Foreword



Following the advent of the New Year 2017, January is often thought of as the month of reflection. This is quite apt given that in ancient Rome, Janus was revered as the god of beginnings, transitions, and endings. With his two faces, one looking to the future and one to the past, he reminds us to reflect on the events of the past 12 months and to contemplate not only our goals but also challenges for the forthcoming year. Although not officially substantiated, many believe he has lent his name to what some consider the most important month of the year.

With this thought in mind, this edition of Performance has firmly positioned itself in looking forward to the brave new world that awaits the financial industry. Three topics particularly lend themselves to this cause: maintaining a sustainable impact investing strategy for hedge funds; the real possibility to the end of treaty benefits for funds following the introduction of the Base Erosion and Profit Shifting proposals; and trying to future-proof real estate investments against political uncertainty and the inevitable impact of blockchain.

One aspect we can never future-proof is the use of abbreviations, acronyms, and buzzwords; new ones appear with an

alarming frequency and this edition is no different. Have you heard about ESG and SRI in the context of social finance? What about CIVs, CoTRs, and LOB clauses in relation to BEPS? How about the potential technological disruptions linked to RPA? All is revealed herein.

Following in the footsteps of our regular travel feature, this time we head to Japan to gain insights on how to navigate the complex regulatory landscape of the Financial Instruments and Exchange Act. Learn how to determine the most appropriate offering methods for successfully raising capital in a growing market. As ever, our edition would not be complete without input from you, our illustrious readers, both as co-authors of several articles but also as interviewees. Find out how BNY Mellon is reacting to the continuing trends being experienced by the world of alternative investments.

We'd like to finish this short foreword by sending you and your families all our best wishes for 2017 and to making Performance the magazine you turn to when shaping your own and your organization's futures.

Vincent Gouverneur
EMEA Investment
Management Leader

Nick Sandall
EMEA Co-Leader
Financial Services Industry

Francisco Celma
EMEA Co-Leader
Financial Services Industry

Editorial

Dear Readers,

In this edition of Performance Magazine, we thought it would be interesting to take a closer look at some of the issues facing a sub-sector of the industry—the alternatives sector.

This sector has seen significant growth in AUM in recent years and is now recognized to be an important element of a balanced investment portfolio. In fact, when you consider that an accepted definition of alternative is “*an activity that departs from or challenges the traditional norms,*” and the fact that approximately 80 percent of institutional investors already have some level of exposure to Alternatives, you could argue that the term “alternative” is becoming outdated.

In many ways, the alternatives industry faces many of the same issues as those affecting the investment industry as a whole: regulation, changing distribution patterns and the impact of Millennials, the increase in ETFs, disruptive technologies such as Blockchain and Robotic Process Automation (RPA) to name but two, and that’s not to forget alpha generation.

As a whole, returns provided by the Hedge Fund sector in the recent past have fallen below expectations, and have led to closer scrutiny by investors, especially around fee models. Hedge Fund firms will need to continue to differentiate themselves and show added value. We explore one particular area where Hedge Fund firms might look to in the future—that of impact investing.



Simon Ramos
Editorialist



Brian Forrester
EMEA Hedge Funds Leader

We were fortunate to have Alan Flanagan, Global Head of Private Equity and Real Estate Fund Services at BNY Mellon give us his thoughts on the trends affecting private equity, real estate, and infrastructure. As well as responding to some of the challenges, Alan highlighted a number of opportunities for those firms to play a role in the financing of the services required due to the trend toward urbanization. Financing previously provided by governments or the banking sector may no longer be there, creating an opportunity for alternative sources of finance. Readers may want to read *Financing the Economy 2016*, released by AIMA, for more information on this.

The alternatives sector is composed of large-scale users of asset servicers—those who provide back- and middle-office services. It is important for asset servicers to stay abreast of developments also to optimize the services they provide, and we have analyzed the key disruptive technologies facing the asset servicer community.

In summary, like all parts of the investment industry, the alternatives sector faces a number of significant challenges—and opportunities. How long the sector continues to be considered “alternative” is a question for another day!



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Adapting to a brave new world

Deloitte: What are the key trends you are beginning to see in the sector?

Over the past ten years, the real estate, private equity and infrastructure industries have enjoyed exponential growth. But we believe the investment landscape for these alternative assets classes is poised for a more significant, long-term shift.

Between now and 2020, a number of seismic global trends will impact the alternative investments space. Fundamental demographic, environmental and macroeconomic shifts will create more demands for an investment well beyond the reach of government finances, creating more opportunities for alternative capital sources.



Alan Flanagan
Global Head of
Private Equity & Real
Estate Fund Services
BNY Mellon

Cormac Dinan, Director in Consulting at Deloitte had an interesting conversation with Alan Flanagan, Global Head of Private Equity & Real Estate Fund Services at BNY Mellon on the ever-changing landscape of private equity and real estate.





Between now and 2020, a number of seismic global trends will impact the alternative investments space.

Some of the key trends we expect to continue to affect the alternatives space over the coming years are:

- Over the last few years, absolute returns in traditional asset classes have been challenged. This, coupled with the need for diversification, will continue to drive investors to increase allocations to real assets.
- Greater urbanisation will increase pressure on transport, communication and social infrastructure as well as housing in all regions. The more rapid the growth, and the lower the existing levels of development, the greater the need for planning and investment.
- Population increases in Africa and parts of Asia will be a strong driver of growth, increasing demand for transport and communications infrastructure to support commerce. This in turn will drive up consumer spending. Population aging in all regions will affect medical and social infrastructure needs.
- In developed economies, the large millennial cohort will favour multifamily rental accommodation in thriving urban centres over traditional suburban home-ownership. This trend will also drive a radical repurposing of retail and office real estate (we see this in Dublin today).
- Institutional investors are seeking the premium returns associated with illiquid assets within liquid structures. Product development is at the forefront of managers thoughts as the competition for allocations heightens. The majority of new real estate funds are being structured as open ended funds. Private market funds are now being designed for defined contribution plans.
- Long-term shifts in public finances are not only creating a severe infrastructure funding gap, but are also providing a widening range of opportunities for private investment in energy—especially green initiatives, utilities, transport and communications infrastructures.

operating models. More and more, investors are looking to the alternatives sector to guide them through fast-changing and sometimes unfamiliar terrain, as well as to shed light on new opportunities that meet their investment criteria. Investment managers need to be focused more than ever on their core business of generating alpha, while also allowing greater transparency in terms of how they run their business. In case the challenge is not great enough; all this needs to be achieved in a fee compressed environment. Investors don't want their managers generating wealth on management fees. This has become a greater focus during pre-allocation due diligence. Like the rest of the financial industry, it's about doing more with less. Many managers are facing additional strain on their operating and technology platforms due to greater due diligence requests and ad hoc reporting requirements. Switching from a fixed cost back office to an outsourced variable model makes a lot of sense, particularly with more cyclical asset classes (like global core real estate).

While fee compression is affecting the whole industry, the costs associated with outsourcing can be borne by the fund, and many institutional investors expect to see these particular costs as a standard component of the total expense ratio. Furthermore, outsourcing will also allow managers to benefit from the latest technology investments that outsourcing providers are making. Consistent global reporting, best practice operating models and independent books and records go a long way toward institutional investors governance requirements for allocation decisions. ➔

Deloitte: What are the kinds of challenges your clients face in the market, and how do they potentially impact you?

To address major macro-economic shifts, alternative investment managers must adopt more flexible business and



Investment managers need to be focused more than ever on their core business of generating alpha, while also allowing greater transparency as to how they run their business.

Deloitte: What kinds of opportunities/sectors/markets are emerging for IM's in this industry?

Post-2007, higher-yielding US capital initially retreated back to the US and focused on core global cities. The gap this has left, has been bridged to a degree by the rise of Middle Eastern money, fueling investments such as the recently acquired stake by the Qatar Investment Authority in New York's Empire State Building. Investors chasing yield have also driven an increasing interest in secondary cities. While it's still very early days, initial indications look positive for the new US governmental regime and corporate America may rebound with opportunities.

We are seeing increasing demand driven within developed economies from the millennial generation.

Millennials make up around a quarter of the world's population and a large proportion prefers smaller, city centre, multi-occupier dwellings, which they currently rent in large numbers.

This increased demand for city centre and periphery housing is already affecting the availability and value of rented apartments in thriving cities. Overall, multi-family construction now accounts for half of all US residential construction, which is a significant shift from historical norms. The rented apartment sector has grown from 20 percent to 45 percent of all new residential buildings in the US and we expect this demand to continue to remain strong.

Increasing urbanisation trends are putting more pressure on transport, communication and social infrastructure as well as housing in all regions. Rapid growth and low existing levels of development are increasing the need for planning and investment. Slowing fertility rates and advances in medical sciences, resulting in ageing populations in both developed and emerging economies are compounding the problem.

Population growth will inevitably bring greater pressure to bear on existing social and economic infrastructure.

In countries with rapidly ageing populations, especially those witnessing the phenomenon at scale for the first time, hospitals and other medical facilities will need to be expanded and upgraded, alongside residential property developments that cater for a wide range of care and dependence needs.

Deloitte: What impact is the recent upsurge in regulation having?

The post-crisis overhaul of the global market infrastructure around regulation can be broadly divided into two categories: investor protection and the creation of a safer market infrastructure. In the private market funds arena, regulatory regimes primarily focus on investor protection and alignment of interests.

A good example of this is AIFMD, where private market funds seeking pan European distribution now need to engage a depositary. While only a small proportion of managers active in the real asset space think that AIFMD regulations have a positive impact on their firm and industry, it cannot be ignored and is an additional cost and requirement on managers' infrastructure. While some of these costs can be borne by the fund, the vast majority of regulatory proposals tend to be supplemented by consultation papers and constant reviews. However, the number of new rules is not the only pressing issue for managers, investment organisations agree that the uncertainty surrounding most reforms is the biggest barrier for growth.

Deloitte: What is BNY Mellon doing to position itself to respond to these challenges and support its clients?

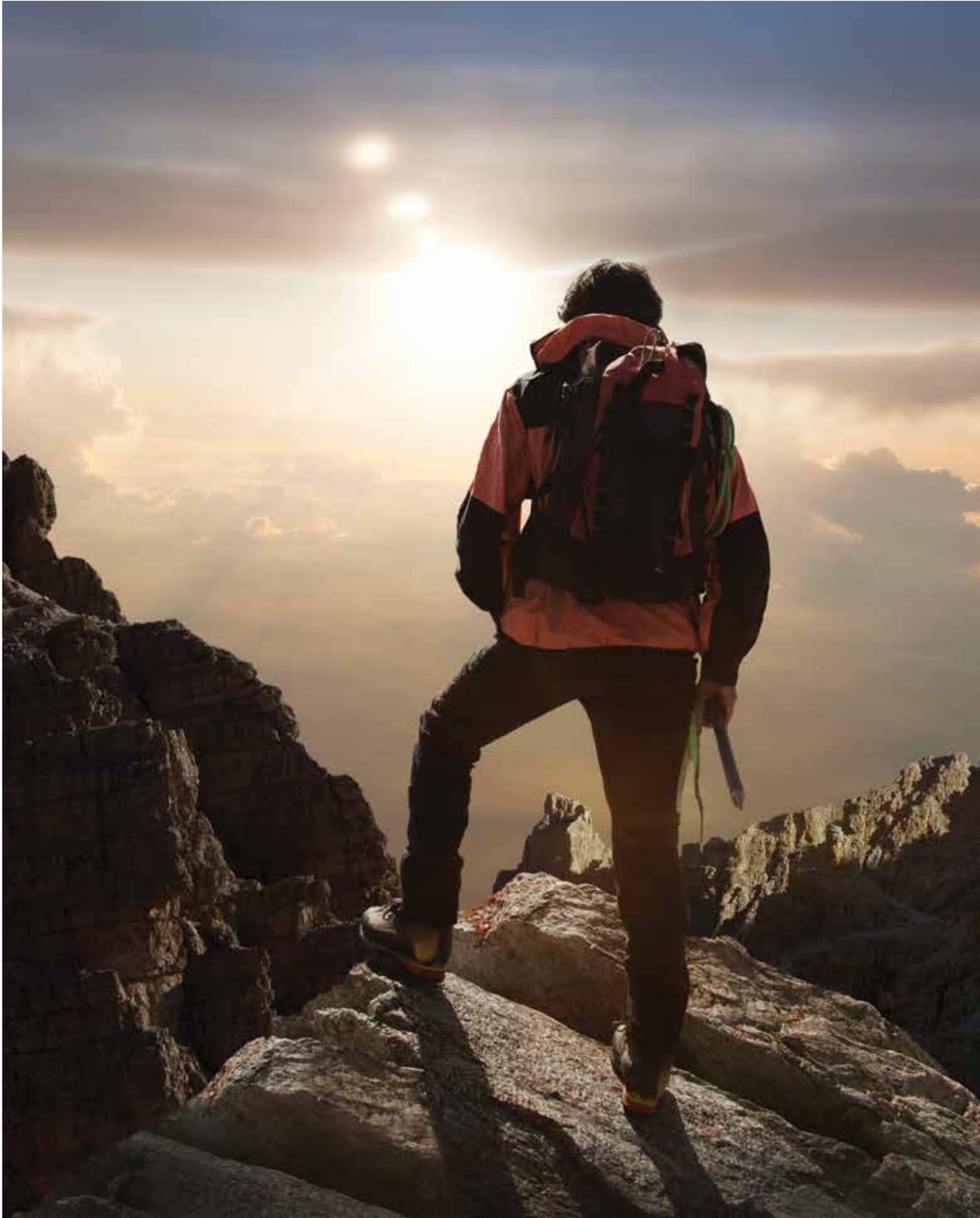
At BNY Mellon, we have invested in our infrastructure to support alternative asset managers focused on real assets. We have implemented global operating models, supplemented with purpose built best in class technology platforms dedicated to real assets. Our platform allows for greater transparency into underlying assets. We have invested in our regulatory reporting services including our depositary services offering across all major European domiciles.

For some of these firms, whose back and middle office operations are deeply entrenched in their environment, the decision to outsource does not come easy, and it's critical that managers choose the right partner to guide them through the process. At BNY Mellon we have recent and relevant experience with large scale outsourcing transactions focused in real assets, and have conducted transactions covering multiple geographies and platforms. ●

The views expressed herein are those of the author only and may not reflect the views of BNY Mellon. This article does not constitute investment advice, or any other business or legal advice, and it should not be relied upon as such.

Fundamental demographic, environmental and macro-economic shifts will nurture demands for investment well beyond the reach of government finances, creating more opportunities for alternative capital sources.





Impact investing

A sustainable strategy for hedge funds

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Nearly a decade after its arrival on the social finance scene, impact investing is still growing in popularity.

Hedge fund managers have been slow to adopt the strategy, although other types of investment managers are already gathering assets in this space. Yet as the hedge fund industry continues to face performance headwinds, it may be time to take a closer look at how this type of sustainable investing may support alpha generation.

Defined as *“the intentional allocation of capital to generate a positive social or environmental impact that can be—and is—measured,”*¹ impact investing blends the earlier concepts of investment screens and social selection criteria with the newer enhancements of intentionality and impact metrics.

Two developments have supported the growth of social finance. These include the business megatrend toward sustainability² and the emergence of social metric reporting. These developments indicate that the times appear to be changing, putting financial companies and investors right in the middle of the social evolution. And, they are responding positively to the idea. ➤

1 Monitor Deloitte, www.deloitte.com/us/en/pages/operations/solutions/about-social-impact-consulting-services July 2016

2 David A. Lubin and Daniel C. Esty, “The Sustainability Imperative,” Harvard Business Review, May 2010.

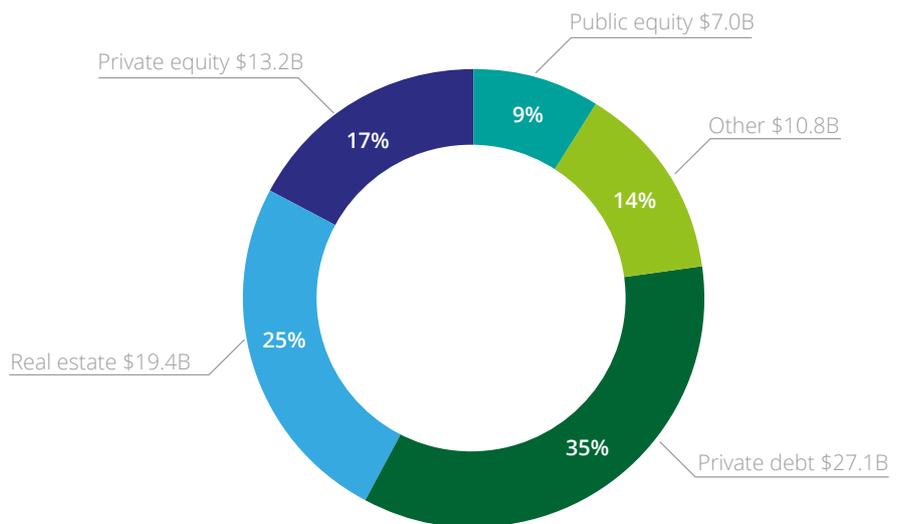


Social finance: An investment approach that blends social dividend and economic return objectives

Institutional investors are increasing capital commitments to impact investments on an annual basis, while investment by high-net-worth individuals has grown over the past two years.³ Investment managers continue to launch new and innovative strategies, even as regulators, the media, and universities show support for impact-oriented themes. Social influence appears to be evolving on a global scale, indicating that impact investing may have sustainable, long-term appeal.

As the newest entrant to social finance, impact investing is still an emerging area. As of 2014, it represented a relatively small portion of the \$6.6 trillion held in sustainable assets.⁴ While it is challenging to calculate the current market size of impact investing, a partial glimpse is offered by the respondents to the annual survey conducted by the Global Impact Investing Network (GIIN). It reveals that, by instrument, the largest percentage of assets is held in private debt, real assets, and private equity, as illustrated in Figure 1. Together, private equity and

Figure 1: Breakdown of \$77.4 billion in impact investing assets



Source: Deloitte Center for Financial Services analysis of responses to the Annual Impact Investor Survey, 2016 by The Global Impact Investing Network: "Total AUM by Instrument (Full sample)." Numbers may not foot due to rounding.

3 Abhilash Mudaliar, Hannah Schiff, Rachel Bass, "Annual Impact Investor Survey, the Sixth Edition," Global Impact Investing Network (GIIN), May 2016; "U.S. Trust Insights on Wealth and Worth®: Impact Investing Highlights," U.S. Trust, 2016.

4 "Report on US Sustainable, Responsible and Impact Investing Trends 2014," US SIF Foundation, The Forum for Sustainable and Responsible Investment, 2014.



debt strategies comprise 52 percent of the assets identified as impact investments. Respondent assets under management (AUM) total \$77.4 billion across 156 entities, which include fund managers, foundations, banks, diversified financial institutions, family offices, and others (excluding retail investors).^{5,6}

As impact investing has grown, it has also gained definition as an investment style. Sonen Capital's Impact Investing Spectrum provides a useful conceptual tool, which investors and fund managers

may, for example, use to analyze their approaches to impact investing. In this six-part spectrum, shown in Figure 2, the investing world that is shown between Traditional Investing and Philanthropy describes a range of impact approaches and opportunities. The Sustainable Impact Investing and Thematic Impact Investing categories—which may be the sweet spot for hedge fund managers—suggest selecting targeted companies (Sustainable Impact Investing) and social and environmental themes (Thematic Impact Investing) while seeking

competitive financial returns. The Impact First Investing category targets both social and environmental issues where the impact takes precedence over financial returns. For reference, the first category, Traditional Investing, is solely designed to achieve financial returns while disregarding any social or environmental impact. The last category, Philanthropy, is designed to achieve a specific social or environmental outcome, while disregarding any financial return.⁷

Figure 2: Impact investing spectrum by Sonen Capital

| Traditional investing | Responsible impact investing | Sustainable impact investing | Thematic impact investing | Impact first investing | Philanthropy |
|---|--|---|---|---|--|
| Competitive returns | ESG risk management | ESG opportunities | Maximum-impact solutions | | |
| Seeks financial returns regardless of Environmental, Social or Governance (ESG) factors | Investments are screened out based on ESG risk | Sustainability factors and financial returns drive investment selection | Targeted themes and financial returns drive investment selection | Social and environmental considerations take precedence over financial returns | Financial returns disregarded in favor of social and environmental solutions |
| | Potential screens Tobacco Alcohol Weapons Gambling Pornography Nuclear energy | Factors considered Carbon footprint Resource use Waste reduction Compensation Product safety Gender equality | Solutions for Climate change Population growth Urbanization Water scarcity Food systems | Support for Innovation & risk taking Proof of concept/plots Enabling environments Commercial Capital leverage | |

Source: Sonen Capital, www.sonencapital.com/impact/methodology, © 2016.

5 Mudaliar, Schiff, Bass, "Annual Impact Investor Survey, the Sixth Edition," GIIN, May 2016.

6 Mutual fund and exchange-traded impact investment funds have also been launched for retail investors.

7 Sonen Capital, Impact Investing Spectrum, www.sonencapital.com/impact/methodology.

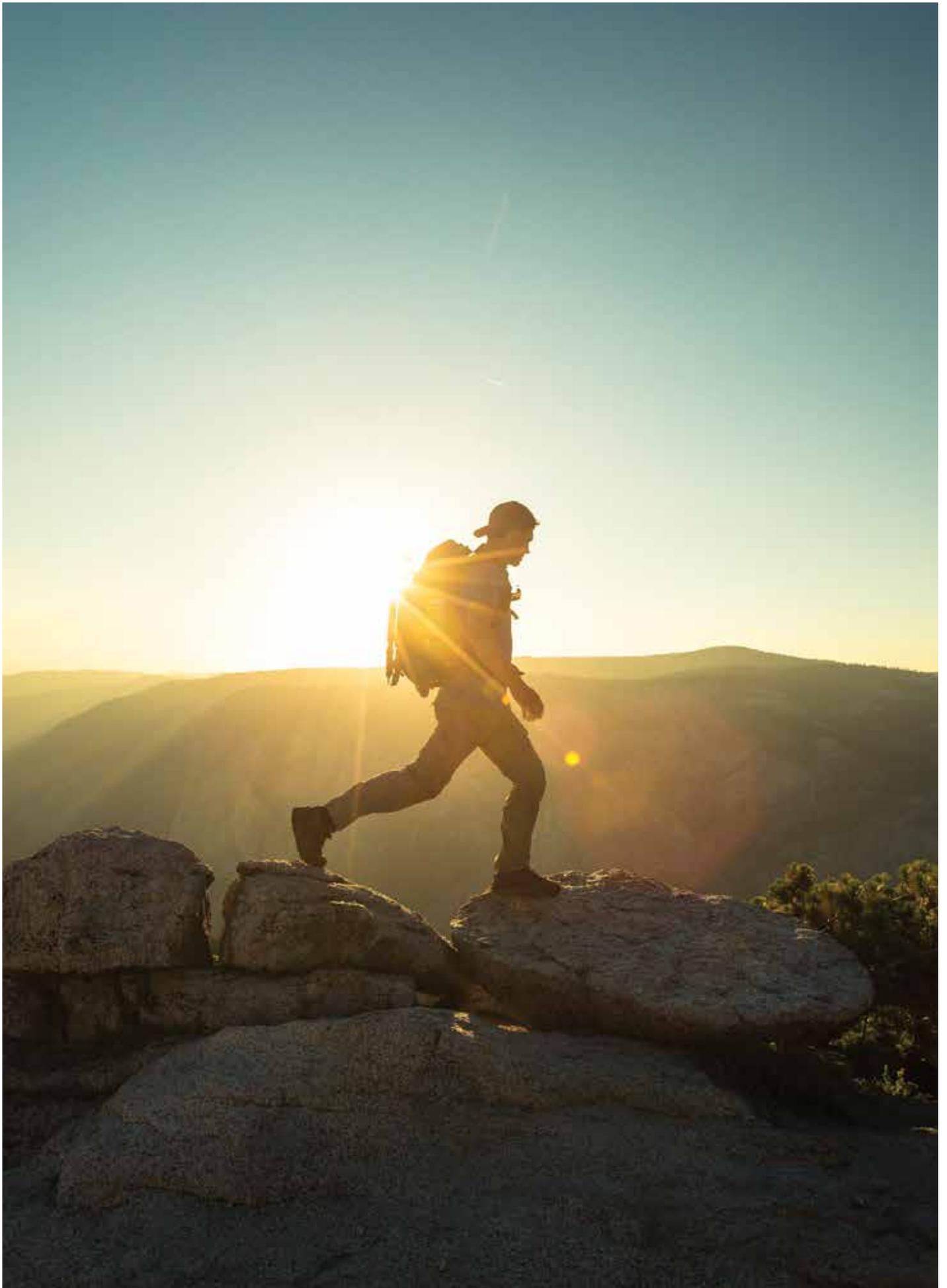
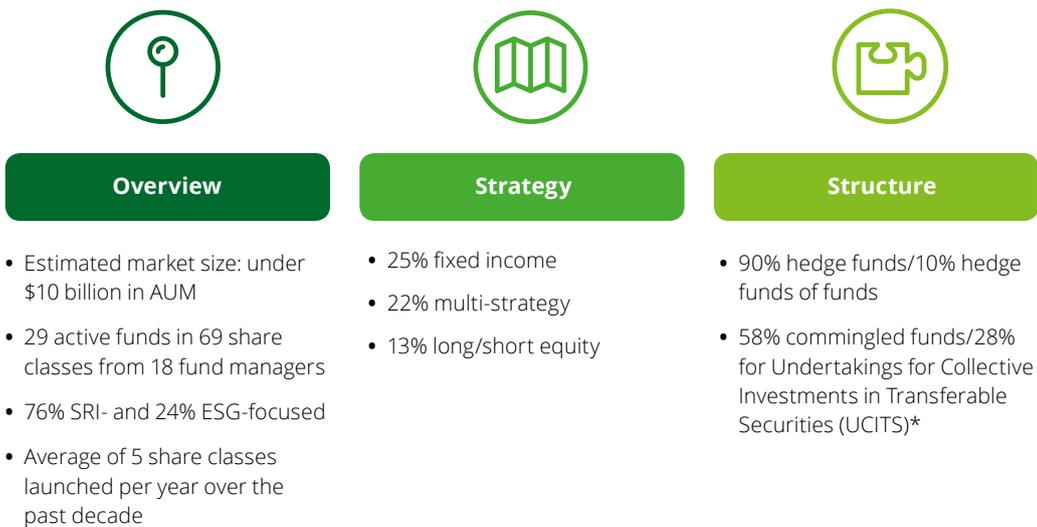


Figure 3: ESG and SRI strategies in hedge funds

Source: Deloitte analysis of Preqin, Ltd. hedge fund data, / www.preqin.com. © 2016

*Of reporting funds.

Hedge funds and social finance

Hedge fund managers have been active participants in social finance for a number of years. There are two funds with 1997 inception dates still in operation, with other more recent offerings available as well. Yet our research for this report uncovered no hedge funds that are currently self-identified as impact investments. Neither the ImpactBase managed by the GIIN nor the fund data provider Preqin Ltd. lists an impact-oriented hedge fund or fund of funds.⁸ This illustrates that in the impact space, specifically, hedge fund managers have opted for using impact investments as part of an investment approach, rather than launching a dedicated impact fund.

This signals that hedge fund participation in impact investments is largely at the overlay-manager level, with SRI— and ESG—labeled funds being selected by overlay impact managers as part of the client portfolio. In this case, the hedge fund manager may not be aware of the selection of their fund as an impact investment. Yet the impact manager, through the selection process and by quantifying the social impact of the portfolio, creates a client-level impact investment designed to generate alpha and social good.

A second method of involvement may be through behind-the-scenes influence. One fund manager we researched has worked for a number of years with the companies it is directly investing in to increase their social impact. While their hedge fund is designated by Preqin as an ESG fund, the manager considers itself as being in the impact space as well, through the social influence it exerts on private investments. This may mean that visible and measurable social finance participation by hedge funds is currently through ESG and SRI strategies. Since managers self-report designations to data providers, market sizing for these areas of social finance is relatively transparent.

Preqin data summarized in Figure 3 shows that 18 hedge fund managers offered 29 ESG or SRI funds to investors at midyear 2016. An average of five share classes has been launched per year over the last decade. Three quarters of share classes are aligned to an SRI strategy, and the remainder are ESG-focused.⁹

This is still a niche market, however. Deloitte calculates under \$10 billion in assets is held in these strategies, based on analysis of Preqin data supplemented by our research into publicly disclosing funds—as compared to the \$3.1 trillion in hedge fund assets under management.¹⁰



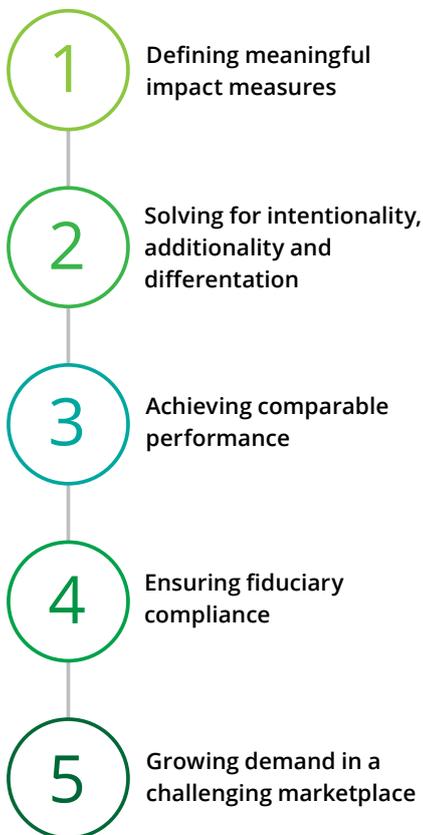
8 "ImpactBase Snapshot: An Analysis of 300+ Impact Investing Funds," GIIN, March 5, 2015; Preqin, Ltd. / www.preqin.com. © 2016

9 Preqin, Ltd. / www.preqin.com. © 2016

10 Based on Deloitte Center for Financial Services analysis of Preqin data as of June 2016; Preqin, Ltd. / www.preqin.com © 2016

Key considerations for impact investing by hedge funds

The lack of a clear hedge fund leader in impact investing suggests there may be open space for early movers to gain a competitive advantage. The biggest value proposition for this strategy is that a growing class of investors wants to see these types of products within their suite of investment options. The value-add to managers is not only about interest in a specific fund, but also about how this creates opportunity to bring in new clients and deepen relationships with existing clients. Competition is fierce and any opportunity to show responsiveness to investor demands while being first in an untapped market is key. For managers taking a closer look at impact investing, and others already in the social space, we suggest the five following considerations.



Source: Deloitte Center for Financial Services analysis

1. Defining meaningful impact measures.

The lack of standardization for impact performance measures is a key challenge for impact investment managers. While traditional metrics are measured in dollars of currency, social and environmental metrics vary in unit of measure according to the desired goal, such as energy consumption, carbon emissions, and employment generation.¹¹ The wide range of impact measurement practices and metrics makes it difficult for investment managers to efficiently integrate impact measures into investment decision making. As transparency around impact measurement and reporting increases, a growing evidence base of impact disclosure will better enable the market to evaluate impact investment as an investment strategy. Key questions managers may ask include: What is our impact objective? What are we measuring and why? And how should that inform what we're trying to accomplish from an investment perspective?

2. Solving for intentionality, additionality, and differentiation.

Hedge fund managers may have a few more hoops to jump through, conceptually, than other types of investment managers, before actively engaging in impact investing. While a full discussion of these is beyond the scope of this report, three elements are notable:

- *Intentionality.* This practice means that a portfolio manager's intention toward the positive, whether social or environmental, sets impact investing apart from other strategies that may measure performance only after the fact. It may be more difficult for hedge fund managers to embrace intentionality and an investment philosophy that includes social impact, as they are traditionally known for targeting short-term financial returns.

- *Additionality.*

Another metric for success, viewed outside the category frameworks, is that an investment needs to create measurable social impact. But for this investment, as it were, there may not be any additional value-add or impact beyond what previously existed. There is ongoing debate about additionality as it pertains to impact investing and the public markets, yet it may be achieved in a couple ways by hedge fund managers. One is through influencing direct investments toward impact-oriented practices, and another approach is through investing in firms that are already socially focused.

The lack of a clear hedge fund leader in impact investing suggests there may be an open space for early movers to gain a competitive advantage.

- *Differentiation.*

As the market matures, participating fund managers will want to create differentiation around their approaches. These include unique processes to inform effective decision making, and how a manager showcases the value of the algorithms and trading/investing philosophies that support impact investment. With less transparency in the hedge fund market in terms of disclosure of investment processes, this undertaking may also be more challenging than for other types of investment managers.

3. Achieving comparable performance.

Investors will want to measure the performance of impact investing versus established benchmarks, and weigh it against the opportunity cost of other investments not selected. In one solution, Cambridge Associates (CA) and the GIIN jointly launched an impact investing benchmark in 2015, which assesses the performance of 51 private investments. Initial results have been

The lack of a clear hedge fund leader in impact investing suggests there may be an open space for early movers to gain a competitive advantage.



encouraging. Across all vintage years, funds in the Impact Investing Benchmark posted a 6.3 percent internal rate of return, versus the 8.6 percent returns of funds in the comparative universe.¹² These early findings illustrate that achieving comparable performance—or at least attaining returns which may be close enough to satisfy regulatory guidelines for institutional investing by foundations—may be a reasonable anticipation for impact investments. Hedge funds were not represented in the benchmark, yet managers considering entry into the market may find these results promising.

4. Ensuring fiduciary compliance. Recent ERISA (Employee Retirement Income Security Act) guidance may help pave the way for greater adoption of social strategies, including impact investments. In essence, a 2015 Department of Labor bulletin clarified that plan fiduciaries may invest in socially oriented funds so long as the investment is “economically equivalent—with respect to return and risk to beneficiaries in the appropriate time horizon—to investments without such collateral benefits.”¹³ As the market matures it will be vital for fund managers to ensure that their investment strategies and disclosures continue to keep pace with the evolution in regulatory oversight.

5. Growing demand in a challenging marketplace. This may be the sticking point when it comes to hedge fund participation: Demand may not yet support launching a dedicated impact strategy. Complicating this further, the hedge fund industry has recently faced market challenges that may negatively influence current traction for impact investing approaches. But the broader long-term picture is that investor interest in ESG strategies is growing, which may translate into higher product demand in the future. As evidence, 24 percent of hedge fund investors surveyed by Preqin in late 2015 “always considered” a fund manager’s ESG policies when conducting due diligence; by mid-2016, 38 percent reported this practice.¹⁴ As social awareness is generally trending in the marketplace, and with millennials showing high interest in impact investments while their influence rises as their assets grow, it may be merely a matter of time before demand increases. If this happens concurrently with managers achieving comparable financial returns using impact styles, a new and welcome type of demand challenge may emerge: finding the opportunity to deploy capital effectively. Indeed, there may be rewards for hedge fund managers, on both the long and short side, who identify companies that will benefit from, or be punished for, ignoring these trends. ➤

- 11 For a full list of metrics, see the IRIS by the GIIN located at www.iris.thegiin.org.
- 12 “Impact Investing Index & Benchmark Statistics,” Cambridge Associates, GIIN, March 31, 2015.
- 13 United States Department of Labor, “Interpretive Bulletin Relating to the Fiduciary Standard Under ERISA in Considering Economically Targeted Investments,” Federal Register, October 26, 2015.
- 14 Preqin Investor Surveys, November 2015 and June 2016,” N=88 respondents and 110 respondents, respectively. Preqin, Ltd. / www.preqin.com. © 2016

The global movement toward social finance and impact investing is becoming influential enough for hedge fund managers to thoughtfully consider their part in this next phase of evolution.

Positioning for growth

Perspectives on the potential of impact investing span a spectrum. On one hand are the skeptics, who doubt that financial returns and impact investing may be achieved together; on the other are those who believe impact investing is the philosophy of the future. At present we may be somewhere in the middle of those two viewpoints: the early awareness that financial returns may comfortably coexist with social impact, without sacrificing either benefit. Whatever form impact investing takes next, its contribution has already been significant. Through the incorporation of new data and reporting methods, which are driving measurable metrics toward success, impact investing has taken social finance to the next level. Social finance itself continues to grow as an investment philosophy.



A number of wide-ranging developments, outlined below, point in this direction. While these developments may not apply explicitly to impact investing, any support for these social strategies will likewise encourage a wider use of this concept.

Escalating global support

The Principles for Responsible Investment, an organization supported by two United Nations agencies,¹⁵ has grown its signatory membership base from 100 to 1,500 globally over the past decade.¹⁶ To become a signatory, an organization is required to submit a declaration of intent to incorporate ESG practices into its analysis and decision-making processes. While responsible investing is not the same as impact investing, it also touches on the themes of environmental issues, social issues and sustainability.

This high level of adoption for responsible investing portends greater interest in impact investing.

Regulatory attention

In addition to the recent ERISA interpretative bulletin, two other agencies have addressed social finance topics. The Internal Revenue Service issued guidance in 2016 related to investments made for charitable purposes by foundations.¹⁷ The guidance relieves the foundation of the requirement to select investments based only on the highest rate of return, as long as the manager exercises requisite due diligence. And as demands for company transparency have accelerated in recent years regarding sustainability matters or ESG disclosure, the the US Securities and Exchange Commission (US SEC) recently announced it is looking closer at the topic.¹⁸ Many believe the SEC will consider how ESG information might be included in SEC disclosure documents, as well as how the safeguards of the system could apply to such information, potentially including assurance on the reliability of such disclosures.

Greater use of social and environmental screens

Public pension funds are updating their sustainable investing screening methods. CalPERS, for example, voted in 2016 to adopt a five-year plan for governance and sustainability, which includes a sustainable investment research initiative, among other objectives.¹⁹ Similarly, there are reports of European pension plans withdrawing investments from hedge funds due to lack of sustainability focus.²⁰ As these developments intensify attention on broader social finance inclusion, impact investing may likewise benefit.

Stronger connections between investing for good and financial returns

There is a developing thesis that companies run with an intentional focus on managing environmental and social risk may have higher returns on the financial side as well.²¹ This may relate to the concept that better use of resources and environmental protection may lower risk while leading to better returns. The industry is still collecting data around this concept, with early studies favoring the possibility that in time, the connection between social impact and financial returns may be quantifiable, and impact investing may become a generally accepted investment style. These developments illustrate that the global movement toward social finance and impact investing is becoming influential enough for hedge fund managers to thoughtfully consider their part in this next phase of evolution. If they do, they could be potentially setting themselves up to compete for the 52 percent of assets currently allocated to impact investments through private equity and debt funds. Though the focus for hedge funds needs to remain largely on financial returns, there may be steps that managers may take in the direction of impact investing that will position them higher on the social spectrum. Whether remaining behind the scenes and influencing companies through direct investment, or launching impact-oriented funds or funds of funds, any efforts move the concept forward. The elevation of goodwill through impact philosophy may create a win-win for the broader financial markets as well. As investors and the capital markets more broadly gain access to data illustrating that impact investment strategies drive value, impact investing is poised to scale, making it a sustainable strategy for hedge funds.

15 Specifically, the UN Environment Programme Finance Initiative and UN Global Compact, according to the Principles for Responsible Investment website, www.unpri.org.

16 Principles for Responsible Investment, www.unpri.org.

17 "Investments Made for Charitable Purposes," Notice 2015-62, Internal Revenue Service, September 25, 2015.

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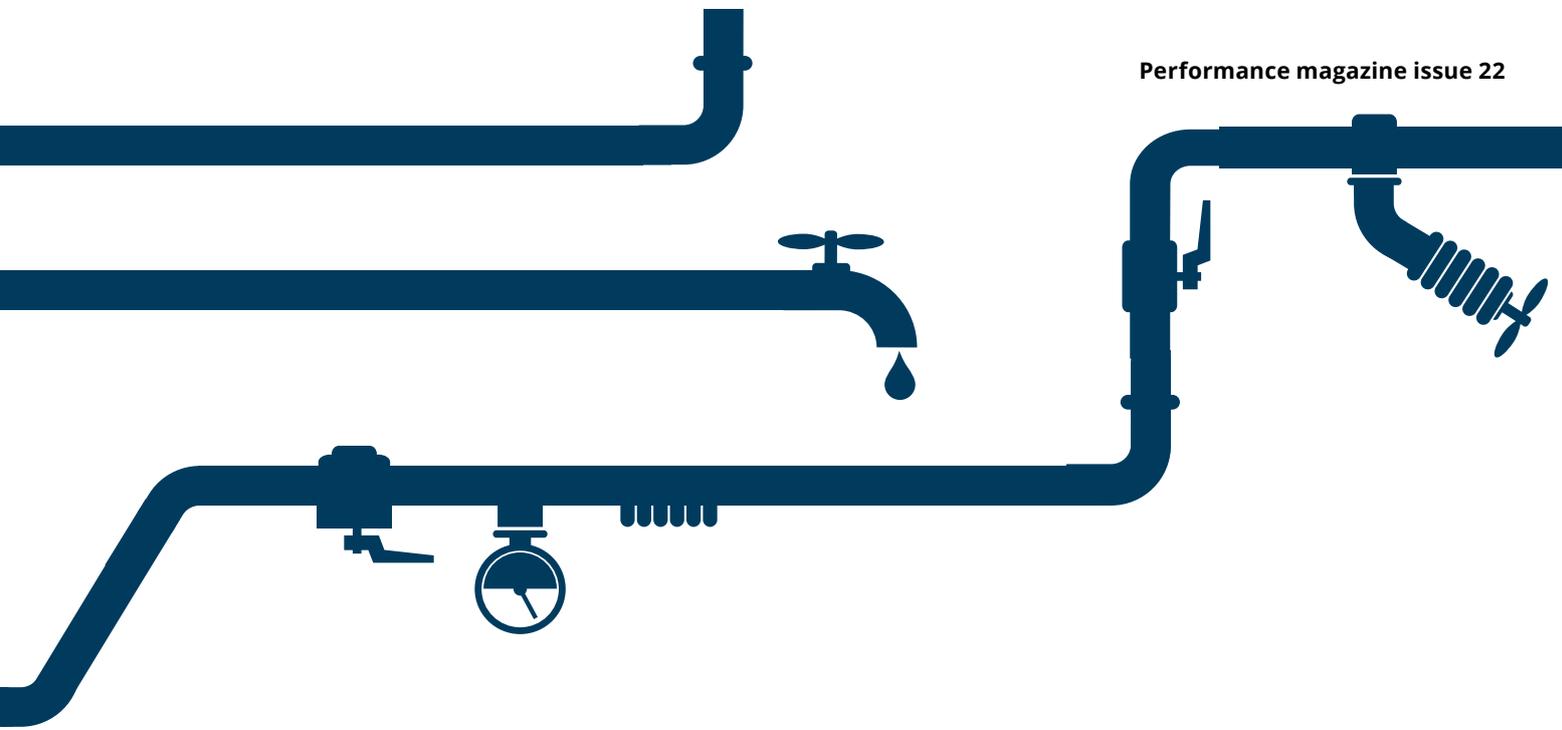
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PLUGGING THE LEAKAGES IN THE IMPLEMENTATION OF CURRENCY HEDGING

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There is much conjecture in the asset management industry over whether to hedge currency exposures, the percentage to be hedged, and how to best implement currency hedging programs. Most asset owners focus on managing the volatility of the underlying investments, and the implementation considerations of currency hedging appear to have been relegated over time.

Extract from the Deloitte investment management magazine Performance, issue 22, January 2017.

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Buy-side firms often separate the management of currency risk from asset allocation and security selection decisions and therefore manage currency hedging implementation as a separate operational process. This can result in implementation blind spots. Most buy-side firms focus their efforts on optimizing the hedge ratio and strategy decisions based on forecast movements in exchange rates, valuation, interest rate differentials, and other perceived risk factors.

The sell-side's focus on spot forecasting, minimization of self-executed spot transaction costs, targeting hedge funds, and high turnover speculators have resulted in blind spots and leakages in the buy-side implementation process that could be mitigated through a better understanding of currency as a risk asset class. This article highlights critical implementation and risk considerations that are often misunderstood by buy-side firms in fulfilling their fiduciary responsibilities.

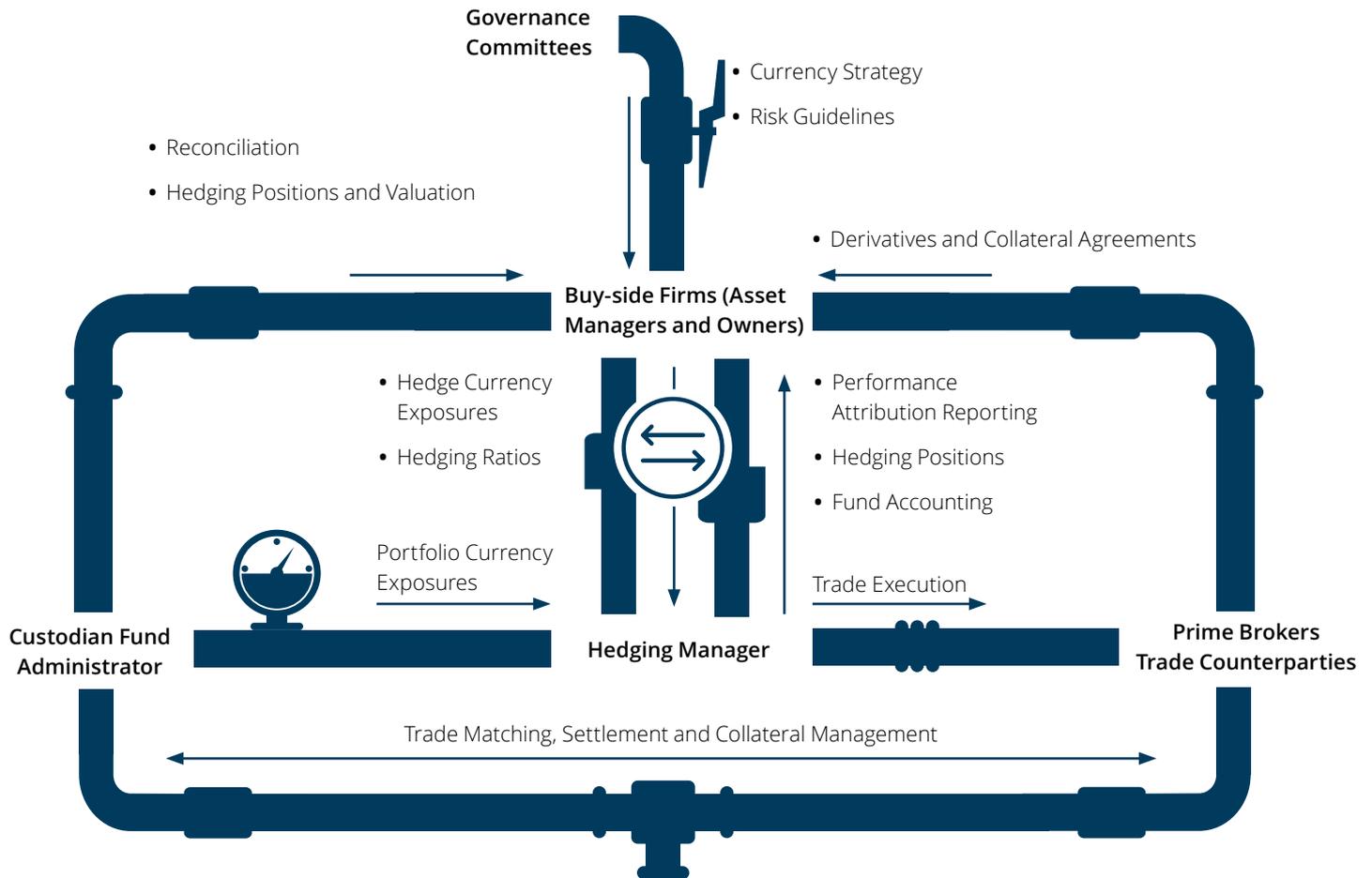
Risk management is central to managing an effective currency hedging program

The expertise and resources required to manage the execution, settlement, and collateral management of currency derivatives, and regulatory imposts should not be underestimated, if asset owners are considering implementing currency hedging processes in-house. The decision to internalize or outsource currency hedging implementation is often influenced by direct management fees. Buy-side firms should consider whether the organization possesses strong derivatives and operational risk management experience to develop internal currency implementation capabilities. Robust systems are required for constructing hedging portfolios, generating orders and executing trades. If not implemented appropriately it can result in significant implementation and execution leakages. Failure to put strong controls in place to manage interactions between the custodians, trade counterparties, and hedging managers could result in significant unintended market risk.

The following diagram identifies the myriad factors to be considered in a currency hedging program. Each area needs to be managed with strong governance, risk management, experienced personnel, and robust systems. Experienced personnel is important to minimize slippage in transaction costs and maximize interest differentials, and currency basis opportunities. Robust systems are required to minimize slippage from exposure mismatch, timing lags, and hedge ratio deviations. Having access to accurate performance and attribution reporting is fundamental to identify and remediate sub-optimal performance. ➔

Robust systems required for constructing hedging portfolios, generating orders and executing trades.

Figure 1: Managing operational risks in different parts of the process is critical



Credit and liquidity risk considerations in managing currency derivatives

Credit risk is inherent in any bilateral derivative contract, which can become significant because of the relatively large volumes in currency hedging programs. Bilateral credit support annexes (CSAs) attached to International Swaps and Derivatives Association (ISDA) master agreements are intended to minimize the risk of loss given default. However, entering into CSA agreements introduces daily liquidity risk and results in the need to manage collateral and maintain short-term liquidity reserves.

In the event of significant market movements, investments may have to be liquidated to meet collateral obligations within a short period of time if liquidity reserves are inadequate. The liquidity situation could be exacerbated if the currency hedged has a strong correlation with the investments that can be liquidated to fund settlement of the hedges because the investments are being liquidated at the worst possible time. This was especially acute for Australian-based investors with a significant holding in illiquid investments during the 2008 financial crisis.

The management of liquidity risk can in turn result in additional operational burden and be a drag on fund returns.

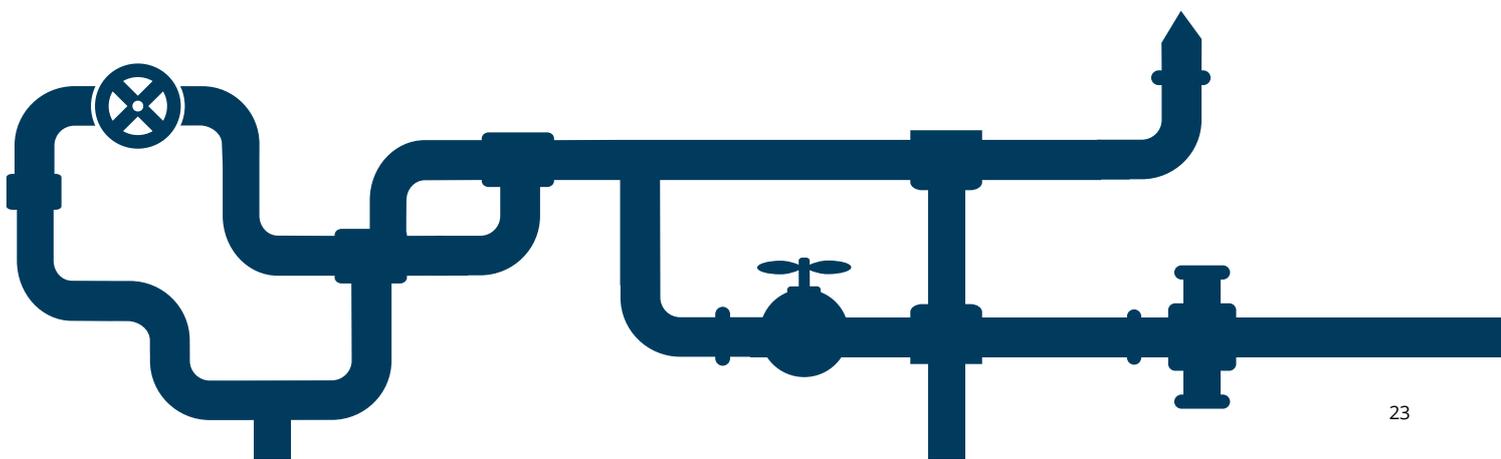
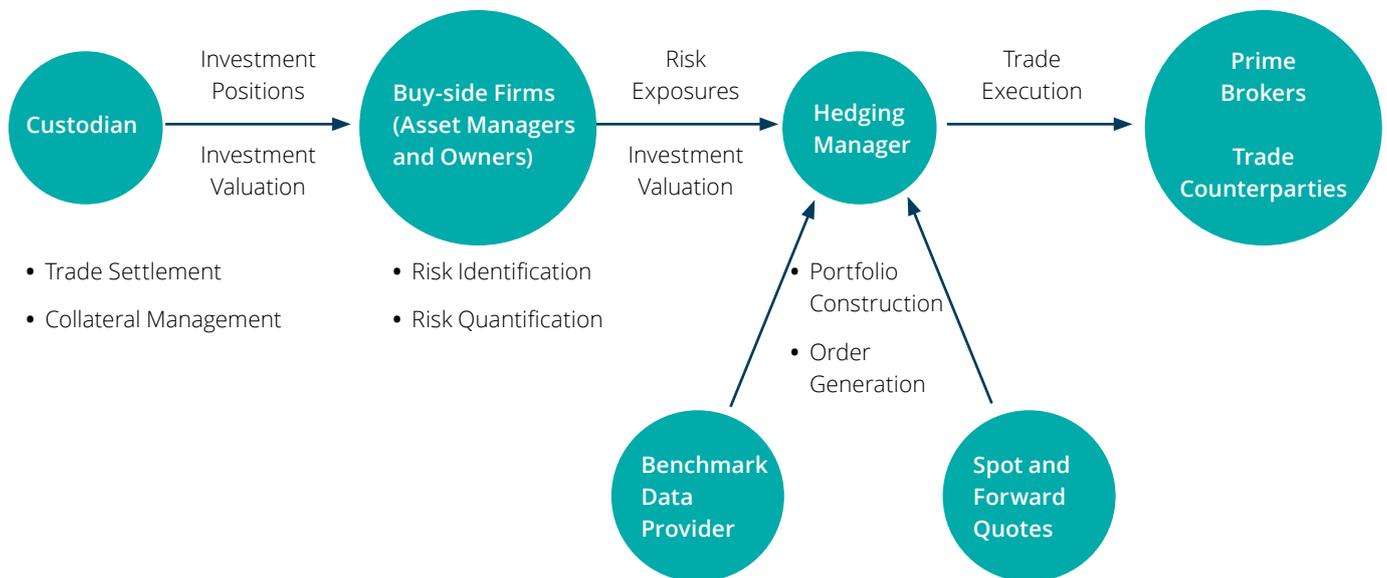
The trade-offs and appetite for credit, liquidity, and operational risks are important considerations in developing the process flow, selecting duration of hedging contracts and risk guidelines for internal or outsourced currency hedging mandates.

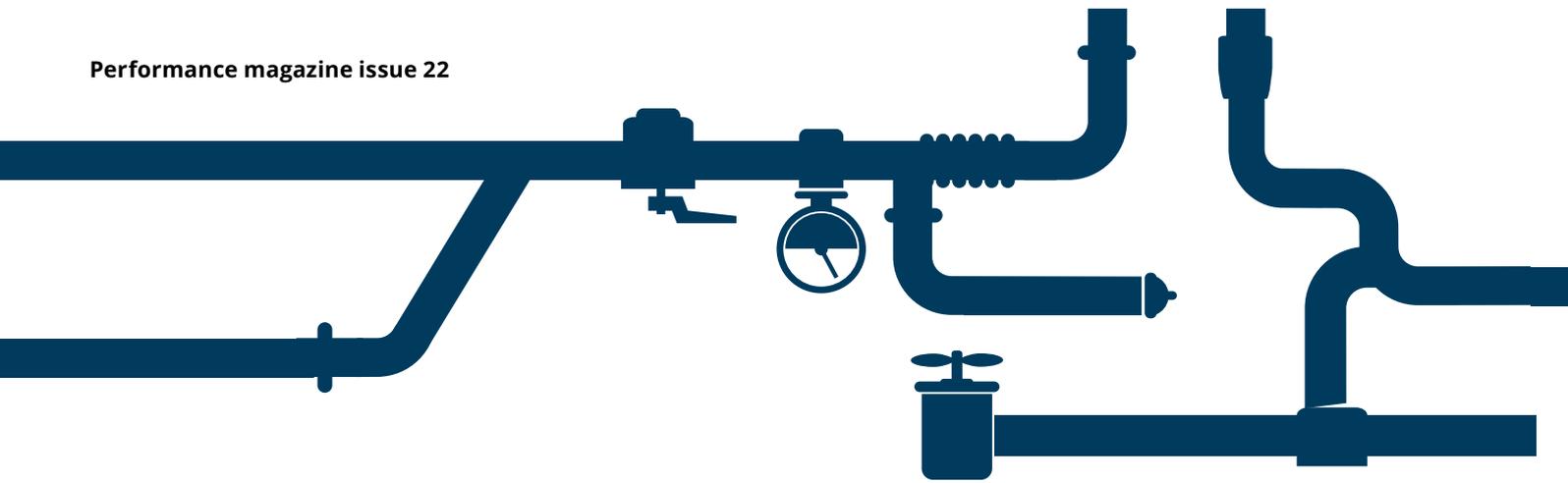
Implementation and execution leakages are significant

In an ideal world of perfect hedging, investors want to achieve the local currency returns of the globally-invested portfolio and take advantage of the interest differentials between the local and foreign currencies. Alexiev, Fenty, and Moore, in *Currency Hedged Benchmark Replication: Challenges and Improvements* (2011), classified the deviation from perfect hedging (measured by the difference between the index performance in local and foreign currencies) into three categories:

- Market-driven slippage (asset value uncertainty and interest differentials). Slippage due to index appreciation or depreciation unhedged until the hedge is adjusted is one form of market driven slippage. Frequent rebalancing can minimize market-driven slippage.
- Implementation slippage (transaction costs, timing lags, and hedge ratio deviation). Slippage due to time taken to disseminate portfolio valuation to the hedging agent and transaction costs associated with the difference between the executed price and the mid-price prevailing at the time of execution.
- Fund-related slippage due to unrealized profit and loss effect and impact from investor cash flows.

In this article, the slippages are classified into implementation and execution leakages as illustrated in the process flow below:





Monitoring execution leakage

Execution leakage, from wider execution prices or trading at outlier rates received significant attention due to scandals of rigged wholesale markets and law suits against custodian banks. Execution leakage due to hidden implicit costs can lead to lower long terms investment outcomes. If monthly rebalancing cost (based on the assumption that 3% to 4% of the MSCI index basket requires rebalancing monthly) and 5 basis points per rebalance and the cost of rolling forwards quarterly is between 1.5 to 3.0 basis points, then asset owners should expect to incur implicit transaction cost between 25 to 50 basis points per annum.

Crowded trades

The crowding effect takes place at a point in time, e.g. 4.00 PM London at the end of each month when most investors perform passive rebalancing. This can magnify substantially leakages from rebalancing and can double the aforementioned implementation costs. The implicit cost is significant and therefore buy side firms that tend to focus on negotiating the lowest possible management fees for passive overlay mandates should focus on attributing execution outcomes and adopt a holistic approach in assessing the cost of currency overlay implementation.

The best execution measurement and compliance monitoring (through transaction cost analysis) are requirements under MiFID II and the practice is being adopted in other jurisdictions. MiFID II requires asset managers to monitor compliance with best execution on an ongoing basis and demonstrate compliance with best execution to clients. Market

participants have developed approaches to systematically monitor the best execution for trading in currency markets. The practice of obtaining competing quotes provides limited context to assess a trade and the best of three quotes from dealers or multi-dealer platforms may not achieve the best execution.¹ Sparks, ITG 2015 suggests that leading edge practices in monitoring execution leakages include daily measurement of execution outcomes using timestamps of mid rates, and assessment of execution strategies in respect of factors such as price, trade size and execution speed.

The ambiguity of principal and agency trading definitions, and the evolution of the hybrid model is putting execution outcomes under the microscope. Punitive fines and penalties against global custodian banks for misleading mutual funds and other custody clients by applying hidden mark-ups to foreign currency exchange trades reinforce the need for buy-side firms to actively manage and monitor currency hedging implementation. In the dismissal of a pension fund's class action lawsuit against a global investment bank in July 2013, the court pointed out controls that could have been implemented by buy-side firm to protect against unreasonable rates and continuously monitor execution outcomes.²

Execution leakage due to hidden implicit costs can lead to lower long-term investment outcomes.

¹ Michael Sparks, 2015 Multi-Asset Best Execution and MiFID II

² Leanna Orr, 2013 FX, Lies, and Marked-Up Rates (http://www.ai-cio.com/channel/REGULATION,_LEGAL/FX,_Lies,_and_Marked-Up_Rates.html)



Exposure mismatch and unintended market risks

Slippage due to investment value uncertainty can be controlled or mitigated. Buy-side firms can have significant exposure to basis risk (risk that the derivative performance deviating from the currency movement of the underlying asset could result in significant performance leakage) due to poor controls over risk measurement and frequency of rebalancing. Decisions regarding risk measurement, investment valuation, frequency of rebalancing, frequency of cash flows rebalancing ranges, timeliness of rebalancing, proxy hedging, and currencies to be hedged are important considerations to minimize unintended market exposure and implementation leakages.

- **Infrequent quantification of risk exposures that lead to over- or under-hedged relative to the target hedge ratio.**

– To minimise market-driven slippage, currency exposures in the underlying investment portfolio should be measured in real time or at least with a day lag. Global events that drive significant volatility such as Brexit could cause investment risk exposures to breach rebalancing ranges and hedges to deviate from the target hedge ratio for a substantial period before the next scheduled rebalancing. In current markets, with daily unit pricing, daily cash flows, real time investment valuation based on published proxies, increased daily volatility and market uncertainty, weekly or monthly rebalancing or monitoring are inadequate to manage currency risk.

Transition of investment portfolios denominated in foreign currencies and rebalancing of currency hedges should be implemented simultaneously. If currency hedges are rebalanced based on custodian data one or two days after the transition, currency exposures could lead to unintended market risks.

- **Measuring risk exposures of unlisted investments from custodian data**

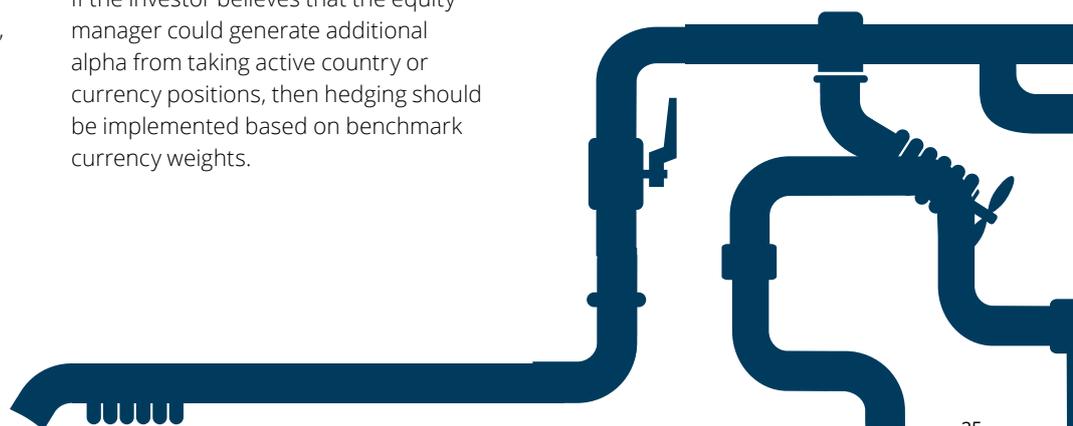
The measurement of currency risk for unlisted investments requires meticulous and diligent assessment to reduce the likelihood of the unknown risk exposures. Implementation leakages could result from hedging currency exposures reported by custodians without understanding the investment data provided by external managers to the custodian. Controls should be implemented to validate whether currency risk of unlisted investment trusts is managed on an unhedged basis and hence fully exposed to local currency movements.

- **Hedging actual portfolio versus benchmark currency weights**

The decision to hedge currency weights or benchmark weights (in the example of currency hedging for equity portfolios) depends on whether the investor wants to eliminate the aggregated active currency weights from the equity manager's stock selection decisions. If the investor believes that the equity manager could generate additional alpha from taking active country or currency positions, then hedging should be implemented based on benchmark currency weights.

- **Hedging based on proxy currency baskets**

Due to pricing, liquidity or access issues, the use of proxy hedging makes hedging strategies more manageable and less costly to implement for certain currencies. However the proxy currency baskets should be assessed frequently to determine if proxy currencies remain appropriate and the correlation of the proxy and underlying currency will converge during the hedging period. Proxy hedging could result in slippage of up to 30 basis points in any given month due to breakdown in correlation between the proxy currency and the underlying currency exposure. Sources of return from proxy hedging should be tracked and monitored to identify structural divergence in the correlation between currencies or central bank decisions not to peg their currencies against a developed market currency. ➔



Currency basis should be consciously managed

Cross-currency basis spreads between cash flows in two different currencies widened significantly after the financial crisis, resulting in currency basis risk. Depending on the level of liquidity and volatility in the market, basis spreads can have a significant impact on hedging outcomes. The volatility in cross-currency basis should be monitored by managers and asset owners who have the ability to implement shorter or longer rolls during supply/demand market dislocations. Asset owners with longer-term investment holdings should consider adopting a policy to manage this risk and determine whether longer-term hedges are appropriate to lock in cross-currency rates when the opportunity arises.

Bringing it all together

Currency implementation should be subjected to strict investment governance and oversight, independent attribution and risk controls, robust credit, liquidity, operational risk management and oversight of outsourcing arrangements. Buy-side firms must set quantifiable return and risk metrics that align to the broader portfolio return and risk objectives to measure the contribution of currency hedging to the overall portfolio.

The Bank of Institutional Settlements (BIS)³ in a recent publication reported a contraction in foreign currency derivatives trading for the first time in fifteen years due to a significant drop in trading for risk taking purposes.

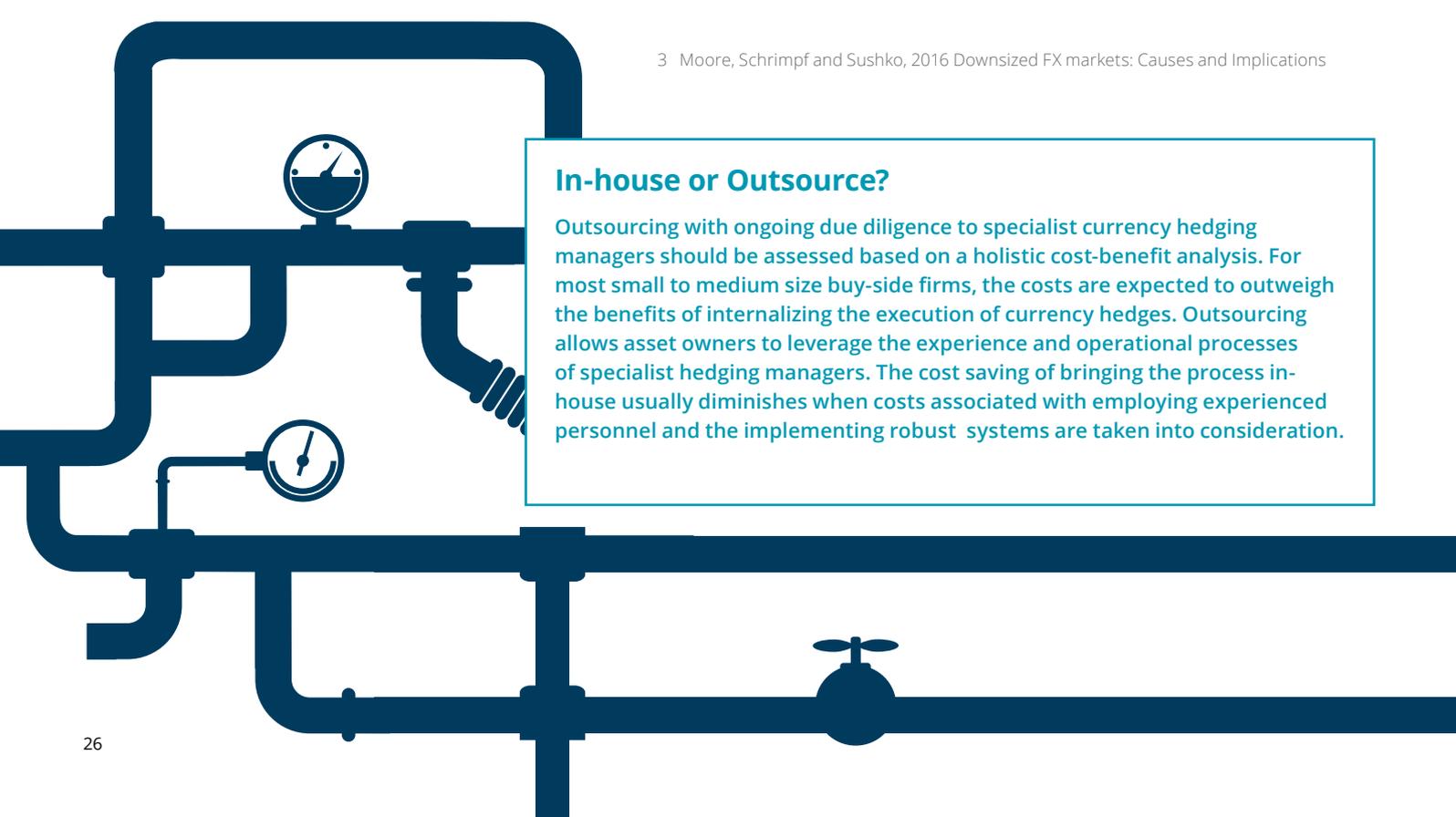
The paper reported an increase in the volume of trading for hedging and liquidity management purposes indicating a change in the composition of market participants and major changes in liquidity conditions that could significantly impact implementation of currency hedging strategies for buy-side firms.

The decision to internalise or outsource currency hedging implementation is often influenced by investment management fees but may not focus on the importance of having the right experience, expertise and systems to develop internal currency implementation capabilities. Recent foreign exchange scandals, regulatory scrutiny and market microstructure changes due to technology disruption reinforce the need to continuously assess the oversight of currency hedging processes and controls to minimise implementation and execution leakages.

3 Moore, Schrimpf and Sushko, 2016 Downsized FX markets: Causes and Implications

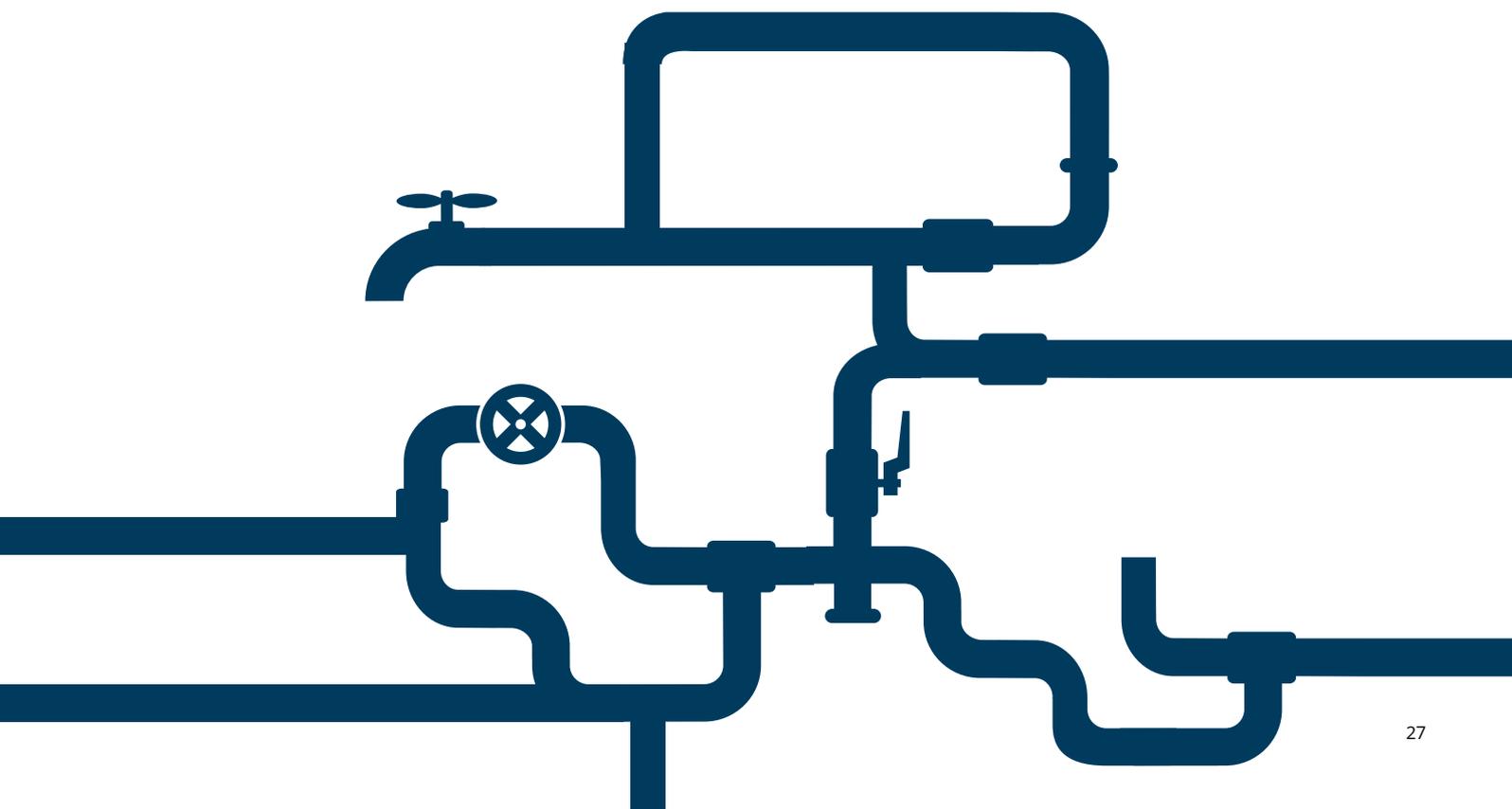
In-house or Outsource?

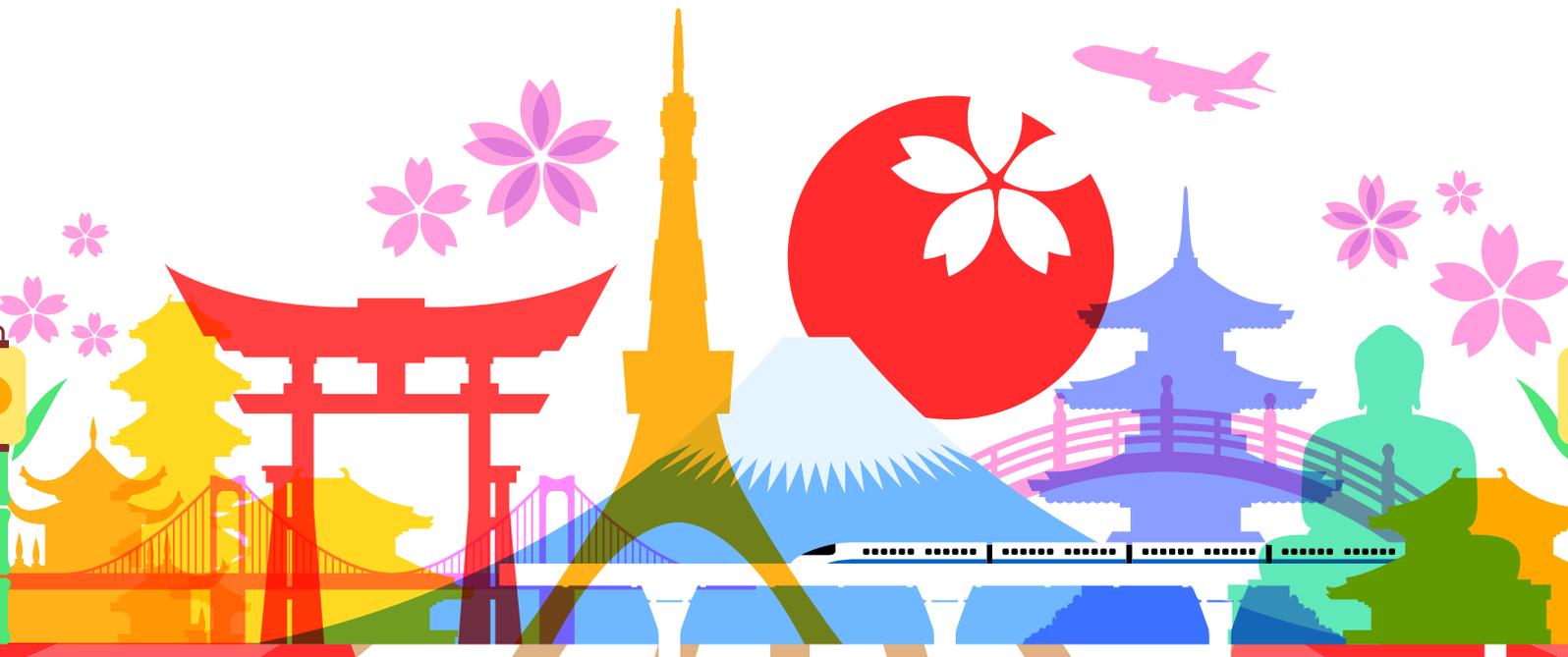
Outsourcing with ongoing due diligence to specialist currency hedging managers should be assessed based on a holistic cost-benefit analysis. For most small to medium size buy-side firms, the costs are expected to outweigh the benefits of internalizing the execution of currency hedges. Outsourcing allows asset owners to leverage the experience and operational processes of specialist hedging managers. The cost saving of bringing the process in-house usually diminishes when costs associated with employing experienced personnel and the implementing robust systems are taken into consideration.



To the point:

- Strong derivatives and operational risk management experience are required to develop internal currency implementation capabilities and implementation costs could outweigh the savings from bringing the implementation process in-house.
- The trade-offs between credit, liquidity and operational risks are important considerations in developing the process flow, selecting duration of hedging contracts and risk guidelines for internal or outsourced currency hedging program.
- Monitoring outcomes through daily measurement of execution using timestamps of mid rates is important to minimise execution slippages.
- Implementation slippages due to mismatch in exposures can be mitigated through disciplined risk measurement, portfolio valuation, rebalancing and proxy hedging practices.
- Currency hedging implementation should be subject to strict governance and oversight, independent attribution and risk controls, robust credit, liquidity and operational risk management and ongoing due diligence of outsourcing arrangements.
- Buy-side firms must set quantifiable return and risk metrics that align to the broader portfolio return and risk objectives to measure the contribution of currency hedging to the overall portfolio.





CAPITAL-RAISING ACTIVITIES IN JAPAN

A guide for offshore fund managers to navigate the regulatory landscape of Japan

Koji Yamamoto

Partner
Legal
Deloitte

During the last few years, there has been an increasing number of offshore fund managers seeking to raise capital in Japan. Throughout the financial year 2012, the total amount of investments made by Japan investors (into investment funds) was approximately JPY69 trillion¹ and this figure increased to more than JPY107 trillion in FY2015.²

However, the solicitation and marketing of fund interests to investors in Japan is a heavily regulated activity, with distinctions and nuances that are frequently unfamiliar to offshore fund managers. This article is intended to provide a broad overview of the regulatory framework applicable to offshore fund managers in relation to capital raising activities in Japan.

A. Summary of the Four Regulated Businesses under the FIEA

The key Japan regulation governing the various financial instruments business activities, including the marketing of fund interests in Japan, is the Financial Instruments and Exchange Act of Japan,³ also known as the FIEA.

The four primary financial instrument business registrations under the FIEA are set forth below:

- 1. Type 1 Financial Instruments Business** (“Type 1 Business”)
- 2. Type 2 Financial Instruments Business** (“Type 2 Business”)
- 3. Investment Management Business**
- 4. Investment Advisory and Agency Business** (“IAA Business”)

Under the FIEA, “securities” falls under two specific categories: (i) financial instruments that include shares of capital stock companies, bonds, units of investment trusts, shares of investment corporations, warrants, commercial paper, etc. (“Paragraph 1 Securities”); and (ii) financial instruments that include interests in limited partnerships, limited liability partnerships, limited liability companies, etc. (“Paragraph 2 Securities”).

As a general matter, any entity that wishes to engage in the marketing of securities to investors in Japan is required to be registered with the Financial Services Agency of Japan (the “Japan FSA”) as engaging either in a Type 1 Business (“Type 1 Dealer”) or a Type 2 Business (“Type 2 Dealer”) with such registration varying based on the type of securities that is being marketed. Specifically, any entity that wishes to engage in the business of marketing Paragraph 1 Securities to Japanese investors must be registered with the Japan FSA as a Type 1 Dealer. Similarly, any entity that wishes to engage in the business of marketing Paragraph 2 Securities to Japanese investors must be registered as a Type 2 Dealer. ➔

¹ The Japan FSA, “Results of Fund Monitoring Report” dated October 2013. The amount includes investments made by Japanese investors into both domestic and foreign investment trusts and corporations and collective investment schemes (e.g., limited partnerships); please note that the amount may be counted more than once as several distributors are handling the same fund interests.

² Ibid (dated November 2016)

³ As amended or supplemented from time to time, Law No. 25 of 1948.

The other two major registrations under the FIEA are the Investment Management registration and the Investment Advisory and Agency registration. While neither of the foregoing registrations permit the direct marketing or offering of securities in Japan, the Investment Management Business registration has been increasingly used to “indirectly” raise capital from Japanese investors whereby the registered investment manager would seek asset management mandates from Japanese investors and invest such capital into offshore funds managed by their affiliated entities.

The Investment Management Business registration is required for any entity that engages in the discretionary investment management of assets of a Japanese client, including certain types of collective investment schemes (also known as an “Investment Manager”). Furthermore, it should be noted that an additional authority under this registration permits Investment Managers to sponsor, establish, and manage “securities investment trusts” (Japanese mutual funds) through a trust agreement with a Japanese trust bank or trust company.

The final registration is the Investment Advisory and Agency Business registration. This registration covers two registered activities: (i) the business of providing non-discretionary investment advice to a third party regarding the value of securities and investment decisions; and (ii) the

business of acting as intermediary or agent for a party entering into either investment advisory agreements or investment management agreements.

B. Types of Offering: Private Placements and Public Offerings

In connection with any contemplated distribution of fund interests into Japan, it is necessary to make a determination as to the placement model by which such fund interests will be offered into Japan.

1. Private Placements

It is important to note that the definition of a private placement under the FIEA will vary significantly between Paragraph 1 Securities and Paragraph 2 Securities.

Paragraph 1 Securities

As a general matter, the “private placement” models with respect to Paragraph 1 Securities may be categorized as follows:

1. *Small Number Private Placement (shouninzu-shibo)*: Up to 49 solicitations to purchase the interests of the fund may be made during any 6-month period with certain transfer restrictions.

2. *QII Private Placement (tekikakukikan-toushika-shibo)*: An unlimited number of solicitations to purchase the interests of the fund may be made only to Qualified Institutional Investors (“QII”, tekikakukikan-toushika) with certain transfer restrictions.

3. *Professional Investor Private Placement (tokutei-toushika-shibo)*: An unlimited number of solicitations to purchase the interests of the fund may be made only to Professional Investors (tokutei-toushika) with certain procedural and transfer restrictions.

4. *Hybrid Private Placement*: Up to 49 solicitations to purchase the interests of the fund may be made during any 6-month period, provided, however, the number of QIIs shall not be included in such solicitation count.

Paragraph 2 Securities

As defined under the FIEA, a private placement of Paragraph 2 Securities limits the number of Japanese investors that are permitted to subscribe to the offshore investment fund to 499. It is important to distinguish the investor count limitations of a private placement with respect to Paragraph 2 Securities from a private placement of Paragraph 1 Securities; as with respect to Paragraph 2 Securities, the investor count is limited to 499 investors that actually subscribe to the fund as opposed to the number of solicitations made.



2. Public Offerings

As the FIEA defines a “public offering” as any offering of a security in Japan that does not fall within the definition of a private placement, any offering of fund interests that does not fall within the models of private placement as described above shall be deemed as a “public offering” of securities.

A public offering of fund interests in Japan cannot be carried out unless the issuer submits a Securities Registration Statement (*yuukashouken todokedesho*, “SRS”) to the Japan FSA except in certain cases. The SRS is an extensive Japanese language disclosure document which sets forth various information regarding the fund and the securities being offered, including, but not limited to, information regarding the issuer, risks factors, and fees.

In addition to the SRS, there are numerous rules and regulations that are applicable to publicly offered funds, including, but not limited to, periodic reporting, restrictions on short selling, and limitations on borrowing.

C. Notification of the fund

With respect to certain types of funds, the issuer of the security may be required to make a filing to the Japan FSA pursuant to the Act on Investment Trusts and Investment Corporations of Japan (the “ITIC Notification”).

The submission of the ITIC Notification is not required for all investment funds but only foreign investment trusts and foreign investment corporations (excluding, for example, limited partnerships). With respect to foreign investment trusts and foreign investment corporations, prior to the relevant Type 1 Dealer engaging in any marketing activities with respect to the fund, an ITIC Notification must be submitted to the Japan FSA.

The ITIC Notification itself is a Japanese language document which summarizes the material terms of the fund and its various service providers. The contents of each ITIC Notification are not available to the public and the ITIC Notification is effective immediately upon submission to the Japan FSA.

Subsequent to the original filing of the ITIC Notification, the issuer will be required to amend the ITIC Notification if any information set forth in the ITIC Notification should subsequently change.

In connection with any contemplated distribution of fund interests into Japan, it is necessary to make a determination as to the method of offering by which such fund interests will be offered into Japan.



Despite the complexities of the Japanese regulatory framework, the past few years have seen a significant increase in capital-raising activities in Japan.

D. Exemptions from Financial Instruments Business Registrations

A brief overview of certain exemptions available to offshore fund managers from the financial instruments business registrations are described below.

1. The Foreign Securities Firm Exemption

With respect to the marketing of securities to Japanese investors, foreign securities firms (i.e., offshore entities that are regulated under the laws of their home jurisdiction to engage in a securities distribution business—"Foreign Securities Firm") may be able to rely on a narrow exemption from the Type 1 Dealer/Type 2 Dealer registration requirements as described above. Specifically, pursuant to Article 58-2 of the FIEA, subject to certain conditions, a Foreign Securities Firm may engage in limited securities marketing activities directed toward a Japanese investor without being registered as either a Type 1 Dealer or a Type 2 Dealer under the FIEA (the "Foreign Securities Firm Exemption").

The conditions and restrictions on the Foreign Securities Firm when marketing securities under this exemption will vary depending on the type of the Japanese investor being targeted. However, in many cases, the Foreign Securities Firm will be prevented from engaging in any "onshore" marketing activity under this exemption (i.e., representatives of the Foreign Securities Firm physically visiting Japan) and marketing activities will be limited to e-mails, phone calls, etc. initiated outside of Japan.

Furthermore, it should be noted that prior to any marketing of securities by the Foreign Securities Firm under this exemption, an ITIC Notification must be submitted to the Japan FSA if the relevant fund is a corporate or trust type-fund.

2. The Article 63 Exemption

With respect to the marketing of Paragraph 2 Securities in Japan, specifically, interests in limited partnership, the general partner may use the "Exemption for Special Business Activities Directed at Qualified Institutional Investors, etc." pursuant to Article 63 of the FIEA (the "Article 63 Exemption").



Without being registered under the FIEA, the Article 63 Exemption permits the general partner of the limited partnership fund to engage in the following two registered activities:

(i) A “self-offering” (jiko-boshuu) of the limited partnership interests

(ii) A “self-management” (jiko-unyo) of the assets of the Japanese limited partner

As these two activities would normally require the general partner to be respectively registered as a Type 2 Dealer and as an Investment Manager under the FIEA, the Article 63 Exemption was a popular method by which general partners of offshore funds elect to distribute their partnership interests into Japan. As of March 1, 2016, the Article 63 Exemption was significantly overhauled to increase the various burdens and requirements of general partners operating under this exemption.

3. Reverse Solicitation Model

Unlike the Foreign Securities Firm Exemption and the Article 63 Exemption, the so-called “Reverse Solicitation Model” is not a statutory exemption under the laws or regulations in Japan. Under this theory, the argument is that any provision of fund information by the offshore fund manager to a Japanese investor does not constitute “securities marketing” if the provision of such information was in response to an unsolicited request from such Japanese investor.

As the provision of fund information by the fund manager is contended not to be securities marketing, no financial instruments dealer registration would be required, and furthermore, an ITIC Notification would not be required to be submitted to the Japan FSA in connection with a corporate or trust-type fund.

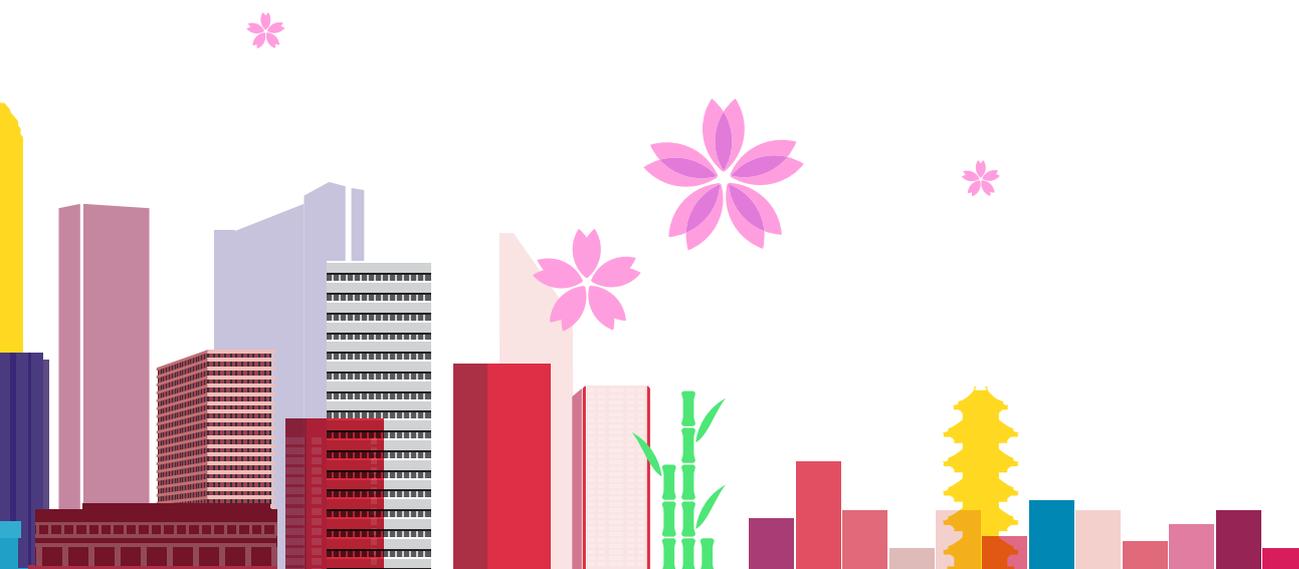
While some offshore fund managers have historically relied on a “reverse solicitation” approach in conducting “marketing” in Japan and continue to do so, it is important to note that this is not an exemption that is formally recognized under Japanese law. In fact, reliance on the Reverse Solicitation Model has been in decline as offshore fund managers are increasingly wary of relying on this exemption given its lack of regulatory recognition, particularly in consideration of the potential regulatory and reputational risks if deemed to be engaging in an unregistered securities marketing business in Japan.

Conclusion

Despite the complexities of the Japanese regulatory framework, the past few years have seen a significant increase in capital-raising activities in Japan. As Japanese investors and investment allocators are increasingly looking to global managers to achieve target returns, it is anticipated that Japan will continue to be a key allocator for investment funds in the future.

To the point:

- Under the laws and regulations of Japan, there are four financial instrument business registrations
- The marketing of fund interests in Japan is a regulated activity which will require either the Type 1 or Type 2 Financial Instruments Dealer registration depending on the type of the fund interests being offered
- Paragraph 1 Securities covers liquid type of fund interests such as shares or units, while Paragraph 2 Securities covers limited partnerships
- The definition of a private placement for Paragraph 1 Securities and Paragraph 2 Securities differs significantly
- Separate from the registration requirements of the marketing party, corporate and trust type funds must make a filing with the Japan FSA





Towards the end of treaty benefits for funds?

In the last couple of years, there has been a tightening of the rules and practice around treaty benefits. This is not news for fund managers and investors, but this seems to be more common than before and for distribution to a wider range of beneficiaries. This is partly due to the OECD BEPS project that aims at tackling tax evasion. However, this goes beyond the sole purpose of fighting tax evasion, as it allows states to restrict treaty access to certain categories of tax payers.

Let us dive into the details of the OECD BEPS proposals and see the position of France and Luxembourg, regarding treaty access for funds. >

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The position of the OECD in respect to investment funds is less easy to apprehend and is still, to a certain extent, a work in progress.²



The position of the OECD

The OECD BEPS proposals address a wide range of themes throughout 15 action plans, with a view to adapt the existing international tax rules to enable countries to combat tax fraud and tax avoidance more efficiently. One of these “actions,” namely Action 6, looks at developing model treaty provisions and recommendations regarding the design of domestic rules to prevent granting treaty benefits in appropriate circumstances. Treaty access for investment funds and pension funds is specifically covered in this action.

Pension funds

The response of the OECD for pension funds is relatively clear: pension funds should be considered as “resident” for treaty purposes in the country where they are constituted, as long as they fall within the definition of a “recognized pension fund.”¹ Under the proposed rules, a “recognized pension fund” should mean *“an entity or arrangement established in that state that is treated as a separate person under the taxation laws of that state and: (i) that is constituted and operated exclusively to administer or provide retirement or similar benefits to individuals and that is regulated as such by that state or one of its political subdivisions or local authorities; or (ii) that is constituted and operated exclusively to invest funds for the benefit of entities or arrangements referred to in subdivision i).”*

The definition is rather generic and clear; we expect that, if implemented, it should not raise particular difficulties.

Investment funds

The position of the OECD in respect to investment funds is less easy to apprehend and is still, to a certain extent, a work in progress.² The OECD proposes to make a distinction between “CIV” and “non-CIV” funds.

The term CIV would be used to designate “funds that are widely-held, hold a diversified portfolio of securities, and are subject to investor-protection regulation in the country where they are established.” In Europe, this should encompass funds that qualify as UCITS. These funds, which are open to the public and tightly regulated, should benefit from treaty benefits. The understanding is that these vehicles are not aimed at tax avoidance or profit shifting.

Funds that are not CIVs (e.g., private equity funds, hedge funds, trusts, etc.) would be qualified as “non-CIVs” and their entitlement to treaties remains uncertain: OECD members have not yet been able to reach a common position in this respect and are currently reviewing the public comments received on their draft proposal of 24 March 2016. Non-CIVs would typically have to meet criteria in order to benefit

¹ OECD public discussion draft “Treaty residence of pension funds” dated 29 February 2016

² Cf. OECD Report “The granting of treaty benefits with respect to the income of collective investment vehicles” adopted by the OECD Committee on Fiscal Affairs on 3 April 2010

The term CIV would be used to designate “funds that are widely-held, hold a diversified portfolio of securities, and are subject to investor-protection regulation in the country where they are established.”

from tax treaties. These conditions could either be the conditions set out under a specific “limitation-on-benefits” (LOB) clause or, alternatively, a “principal purpose” test. The application of these tests to investment funds may be difficult in practice and therefore the OECD is still working on the detailed rules.

While not finalized, we can already see that the approach of the OECD is quite sophisticated, as it differentiates between pension funds, CIV funds, and non-CIV funds, on the basis of their purpose and legal or regulatory features. In our view, by adopting this approach, the OECD acknowledges the diversity of funds and tries to design the most appropriate rules for each category of fund.

The OECD has chosen to dismiss the “look-through approach” when addressing the treaty entitlement of funds for pension funds and CIVs. That is, the funds themselves would be entitled to treaty benefits (subject to certain conditions being met), as opposed to having to “look through” the fund and apply treaty benefits at the level of each investor. This is probably good news for many funds, as this circumvents the practical difficulty of determining the identity and tax residency of each of the investors at a given time (which is almost impossible for funds that are not dedicated to a limited number of investors).

Concerns are expressed about the complexity of the rules proposed by the OECD, especially the application of the LOB clause and the principal purpose test to funds. We share these concerns, but the rules are not yet finalized; we welcome the fact that the situation of funds would be covered in tax treaties.

In terms of implementation, these provisions could be included in tax treaties upon negotiation of bilateral tax treaties (which may take several years and lead to discrepancies) or they could be implemented through the execution of a multilateral treaty under the aegis of the OECD (it is however unlikely that the negotiation of a multilateral instrument would be achieved in the short term). ➤

Non-CIVs would typically have to meet criteria in order to benefit from tax treaties. These conditions could either be the conditions set out under a specific “limitation-on-benefits” (LOB) clause or, alternatively, a “principal purpose” test. The application of these tests to investment funds may be difficult in practice and therefore the OECD is still working on the detailed rules.

The position of France and Luxembourg
France – A strict application of the “subject to tax” clause

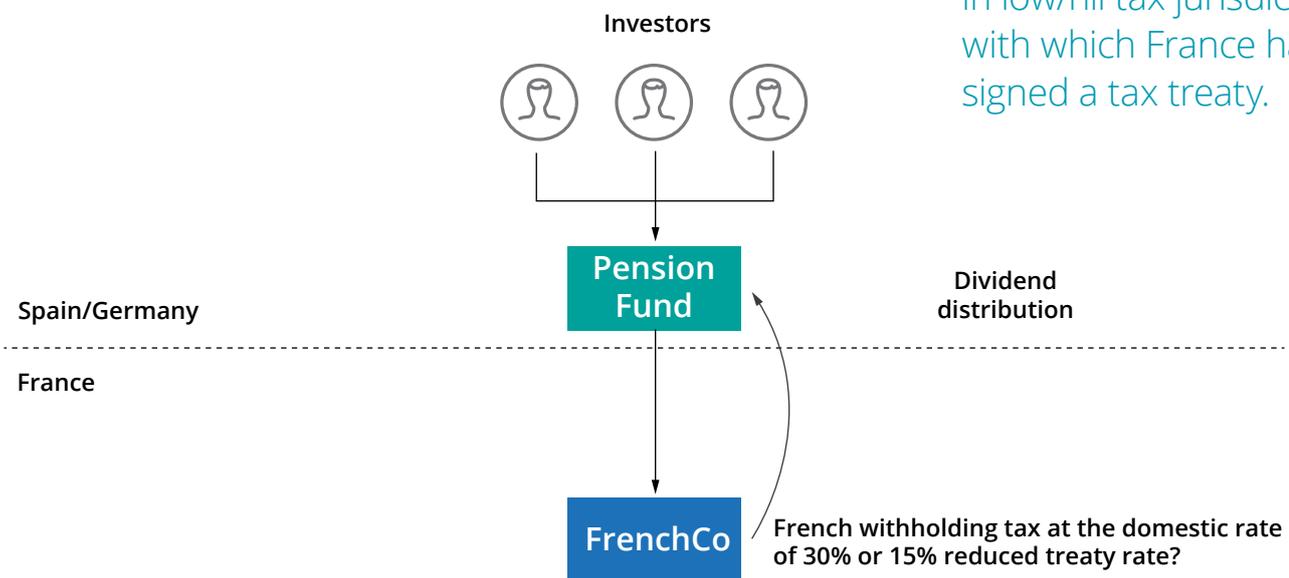
Some tax treaties signed by France already contemplate and allow the application of some of their provisions to qualifying pension funds or UCITS, but it represents only a minority of tax treaties currently in force.

Further, treaty entitlement of non-French funds and pension fund investors has become a topical question in France, pursuant to two recent decisions of the French Administrative Supreme Court

(“Conseil d’Etat”).³ In these cases, the French Administrative Supreme Court denied access to the France-Germany and France-Spain tax treaties to a German pension fund and a Spanish pension fund, respectively. Consequently, dividends paid under the French shares held by Germans/ Spanish pension funds suffered French withholding tax at the standard rate of 30 percent (as opposed to the 15 percent reduced rate provided in these treaties).

The facts are summarized in the diagram below:

This raises a lot of uncertainties on the treatment of holding companies benefiting from favorable tax regime on dividends or capital gains, and the application of the parent-subsidiary directive. More generally, this could affect any entities located in low/nil tax jurisdictions with which France has signed a tax treaty.



³ Conseil d’Etat, 9 November 2015, N. 370054, min. c/ Landesärztekammer Hessen Versorgungswerk and Conseil d’Etat, 9 November 2015, N. 371132, min. c/ Sté Santander Pensiones SA EGFP

The reasoning of the *Conseil d'Etat* in the case relating to the German pension fund was that since a pension fund is exempt from corporate income tax in Germany due to its status and activity, it should not be regarded as "subject to tax" and therefore should not qualify as a "resident" under the Germany-France tax treaty.

Regarding the other case, the *Conseil d'Etat* reached the same conclusions (and denied the application of the France-Spain tax treaty) on the basis that the Spanish pension fund was subject to corporate income tax at the rate of zero percent in Spain, and therefore could not be regarded as "subject to tax" in its country of residence.

The principle has become that treaty benefits cannot be granted to an entity that is not effectively liable to tax due to its status or its activity, unless specifically provided for in the wording of the tax treaty.

Although this principle was outlined in the case of pension funds and investment funds, it actually has much broader consequences, especially when taken in the context of BEPS discussions.

The denial of the treaty benefits to EU pension funds has given rise to criticisms by French tax experts, but the French Administrative Supreme Court has confirmed its approach in a case relating to an offshore Lebanese company (not a fund), which was subject to tax at a low fixed amount: treaty access has been denied to the company on the basis that it could not be regarded as "subject to tax."⁴⁴ This case clearly shows the current trend of the French tax authorities who take a very restrictive approach to treaty benefits and deny treaty access even when there is no tax evasion, solely on the basis that the recipient of the income is subject to a minimal tax in its country of residence. They consider that if the recipient is exempt from tax in its country of residence, there is no double taxation on this particular income and therefore there is no need for France to apply the treaty provisions. This raises a lot of uncertainties on the

treatment of holding companies benefiting from favorable tax regime on dividends or capital gains, and the application of the parent-subsidiary directive. More generally, this could affect any entities located in low/nil tax jurisdictions with which France has signed a tax treaty.

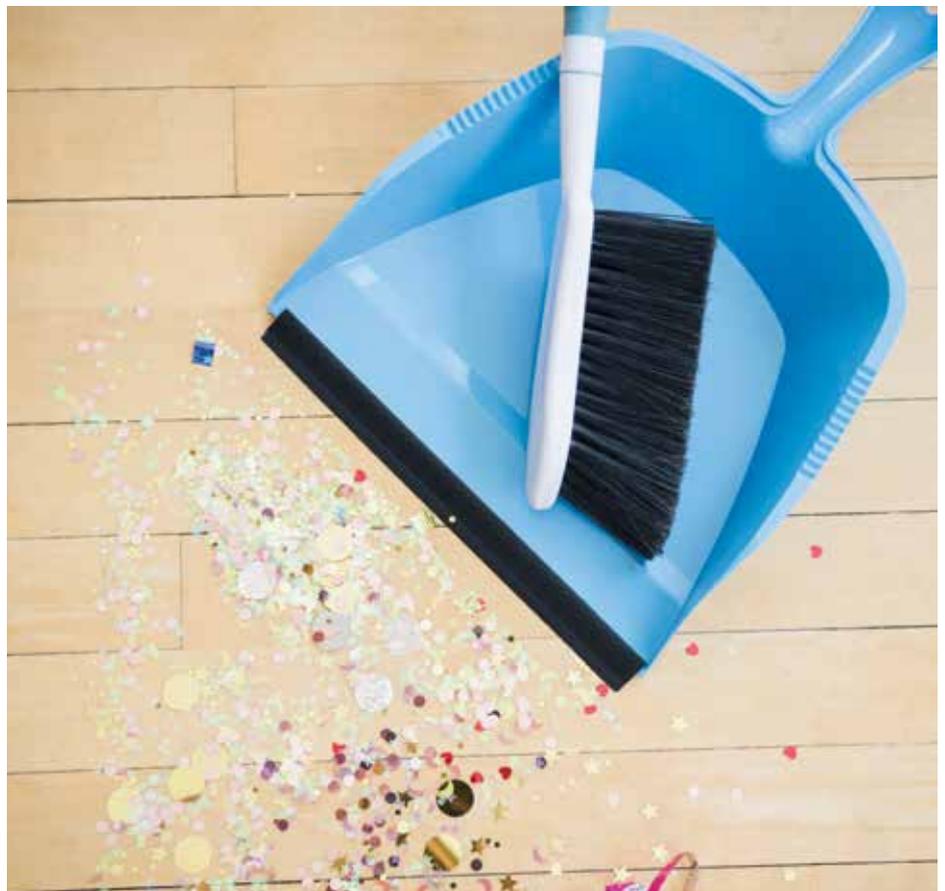
Is France going too far?

When claiming that the sole purpose of a tax treaty is to prevent situations of double taxation, and that there is none when the fund is exempt from tax, the French tax authorities and French Court overlook one important point: investors are generally subject to tax, and in most countries, funds are exempt, so that investors are subject to tax as if they had invested directly in the underlying assets held by the fund.

Whether it is widely held investment funds or pension funds, they are hardly set up as tax avoidance or fraud vehicles. They are rather instruments put in place to

encourage long-term savings or payment of retirement pensions whether sponsored by employers or by governments. Other AIFs widely held or meeting strict qualifying criteria should be in the same situation. On this basis, it seems wrong to deny treaty benefits.

Regarding the effects of Action 6 more generally and the use of holding companies, although Action 6 clearly aims to deter groups of investors from using empty shells as holding companies, a lot of international structures do use intermediate holdings. These can be located in a different jurisdiction from the assets or from the investors. From now on, this will have to be supported by strong commercial reasons. In reality, commercial financial and tax reasons are often intricately linked and therefore this may reduce the availability of treaty benefits to these vehicles. ➤



In reality, commercial financial and tax reasons are often intricately linked and therefore this may reduce the availability of treaty benefits to these vehicles.

Having said that, denying treaty benefits to holding companies in general again seems to go beyond the initial purpose of the OECD initiative.

Further, the position of France is not in line with the proposals made by the OECD in the context of BEPS which, although complex and not finalized, try to find a solution adapted to each form of funds, where France basically rejects the application of the treaty to any fund which is not specifically referred to in the relevant tax treaty.

Luxembourg - A pragmatic approach

On 12 February 2015, the Luxembourg Tax Authorities (LTA) issued Circular L.G.-A. n°61 that provides an update on the Double Tax Treaty (DTT or “treaty”) access for Luxembourg investment funds and new guidance rules on the issuance of Certificates of Tax Residence (CoTR). The scope of the circular concerns both UCITS Funds (established under the Law of 17 December 2010) and Specialized Investment Funds (established under the Law of 13 February 2007).

This circular will be regularly updated to take into account new DTTs (or amendments to existing tax treaties) entering into force in Luxembourg.

With the publication of this circular, the LTA correlates the access of investment funds to treaty benefits to the issuance of certificates of tax residence. On what concerns Luxembourg investment funds, the LTA will issue—depending on the investment fund type and the contracting party’s jurisdiction—one out of three types of CoTR: 1) Type 1 Certificate; 2) Type 2 Certificate; and 3) Type 3 Certificate.

1) Certificate of Tax Residence for SICAV-SICAF Funds - Type 1

In section 4.A of the circular, the LTA has confirmed that, on what concerns the treaty jurisdictions⁵ that have accepted to grant the benefits of the treaties to the Luxembourg SICAV-SICAF Funds, a CoTR (Type 1 Certificate) will be issued. For information purposes, the template of such CoTR is attached in appendix to the Circular.

Where the FCPs are considered tax residents due to the wording of the DTT, the FCPs are entitled to obtain a CoTR issued by the LT.



2) Specificities applicable to FCP Funds – Type 2

While FCPs do not, in general, have access to the treaty benefits due to their lack of legal personality, the LTA has nevertheless confirmed that FCPs can benefit from them due to the treaty special wording (e.g., Germany, Saudi Arabia⁶). Depending on the DTT, the access may be subject to specific requirements such as the existence of Luxembourg resident investors into the FCP—this is the case in respect of the DTT between Germany and Luxembourg.

Where the FCPs are considered tax residents due to the wording of the DTT, the FCPs are entitled to obtain a CoTR issued by the LTA—an example of which is attached in appendix to the Circular (Type 2 Certificate).

3) Certificate of Tax Residence based on Luxembourg tax legislation – Type 3

Finally, the LTA has confirmed that both UCITS and SIF SICAV-SICAF funds can obtain a CoTR based on the Luxembourg domestic tax legislation (Type 3 Certificate). Such a certificate may be of assistance when the funds need to confirm their Luxembourg tax residence for reasons other than the access to the DTT provisions (e.g., EU tax reclaims under the “Santander” and “Aberdeen” European Court of Justice jurisprudence). The template of such CoTR is also attached in appendix to the Circular.

The reason justifying the request for a CoTR must be described in the request to the LTA.

The Circular also provides clarity on the Luxembourg DTT whereby the contracting party's jurisdiction does not accept to extend the benefits of the DTT to the Luxembourg funds⁷ and also the ones where its application is uncertain.⁸

Practical modalities to obtain a CoTR

Irrespective of the type of CoTR requested to the LTA, a regulatory attestation from the *Commission de Surveillance du Secteur Financier* (CSSF) must be attached to the request. This attestation will confirm the legal form of the fund and its current supervision by the CSSF.

In respect of Type 3 Certificates, the details on the income received by the SICAV-SICAF funds must also be attached to the request to the LTA. In case a request is introduced in relation to a future income, a description of the investment policy of the fund must be provided with the request to the LTA, and the details of the income for which the certificate is requested must be provided to the LTA no later than 30 June Y+1.

In practice, and although the circular provides clarity on the countries that accept to grant treaty benefits to the Luxembourg investment funds, we see that theory can sometimes be disconnected from reality.

It can become quite challenging to apply the DTT reduced rates when this application is 1) dependant on the confirmation that the majority of the investors reside in the same country of the investment fund—clearly an issue for Luxembourg-domiciled funds

that are distributed on a worldwide basis; 2) dependant on the completion of tax reclaims forms designed by tax administrations that assimilate investment funds to commercial companies, and expect that the same substance requirements are to be extended to the first entities; 3) limited to UCITS investment funds and disregarded when it comes to UCITS-like funds; 4) dependant on time consuming, burdensome, and costly administrative procedures. ●

To the point:

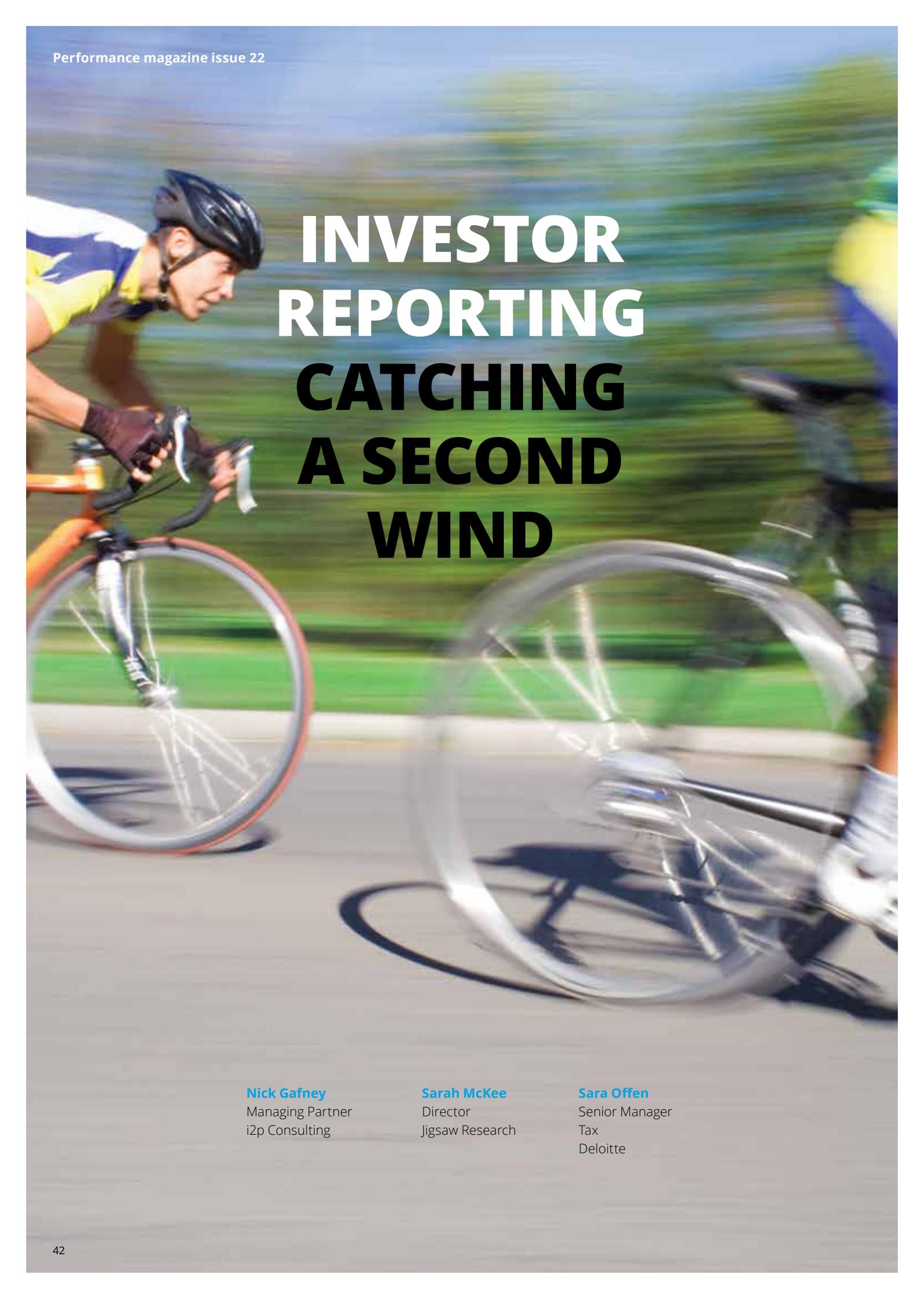
- The world of investment is varied and cover many different types of structures and investors. The OECD acknowledges that situation and tries to define different rules – which are still a work in progress - to apprehend this reality.
- The countries should however not overlook that, despite this complexity, it is critical to balance the objective to tackle abuse and tax avoidance with the necessity to protect long term investments.

5 Denmark, Spain, Indonesia, Ireland, Morocco – due to a clear agreement between both competent authorities; Germany, Saudi Arabia, Armenia, Austria, Azerbaijan, Bahrain, Barbados, China, United Arab Emirates, Georgia, Guernsey, Hong Kong, Isle of Man, Israel, Jersey, Laos, Liechtenstein, Macedonia, Malaysia, Malta, Moldavia, Monaco, Uzbekistan, Panama, Poland, Portugal, Qatar, Czech Republic, Romania, San Marino, Seychelles, Slovenia, Sri Lanka, Tajikistan, Taiwan, Trinidad and Tobago, Tunisia, Turkey, Vietnam – by virtue of a clear text; Finland, Kazakhstan, Republic of Slovakia, Singapore, Thailand – by virtue of the interpretation of the Luxembourg tax authorities (possibly subject to challenge by the other competent authority).

6 Germany, Saudi Arabia, Guernsey, Isle of Man, Jersey, Seychelles, Tajikistan.

7 South Africa, Belgium, Brazil, Japan, Norway, Netherlands, United Kingdom – by virtue of an agreement; Canada, Estonia, Hungary, India, Iceland, Latvia, Lithuania, Switzerland – by virtue of the interpretation of a clear text; United States, (Memorandum of understanding), France (art 10bis), Mauritius (Protocol), Mexico, Sweden (Protocol) – by virtue of the Double Tax Treaty; Russia – by virtue of the interpretation of the tax authorities.

8 Bulgaria, Greece, Italy, South Korea.



INVESTOR REPORTING CATCHING A SECOND WIND

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The global regulatory environment continues to challenge the asset management industry. For many fund and asset based tax teams this is a trying, and tiring, time. As regulators require more extensive information and more comprehensive investor reporting, those affected must not only meet compliance obligations and manage risk, but also deliver on investor demands and try to thrive in a highly competitive environment. So, with the OECD's Common Reporting Standard (CRS) now coming into play, can they summon up the energy for a second wind?

In the first half of 2016, Deloitte commissioned a follow up to independent market research with asset managers first carried out in 2013. Through a series of in-depth interviews, the aim was to update the picture emerging from the first study and assess asset managers' progress on the continua of risk management, process efficiency, and performance improvement.

When we surveyed the industry in 2013, three core drivers of need were pushing asset managers toward a more sophisticated business operating model:

- 1. Achieving better oversight and managing risk**
- 2. Improving process efficiency**
- 3. Adding value and improving performance**

In short, managing risk was critical, but improvement and innovation of the investor experience was also at the forefront of their ambition. Though resources were squeezed and there were conflicting forces at play, the direction of change was clear, albeit at varying degrees of pace depending on the institution and impetus from the top.

Running to stand still

Since 2013, we have witnessed a more moderate approach to managing risk and meeting investor demands, due in large part to the changes in the global regulatory environment. Our research suggests these changes have had a significant impact on the direction and pace of change. Asset managers undertook massive efforts—stretching already stretched resources—to get ready for and achieve FATCA compliance. By the time the CRS arrived in 2016, the industry felt it was very much running to stand still.

Consequently, when it comes to achieving future visions for adding value and improving performance, ambition has been replaced with inertia.

In other words, what we now see is an industry experiencing a degree of regulatory fatigue. Coping is the new normal. Limited resources are mainly focused on the frequently cumbersome process of delivering the essentials: gathering the required data, achieving compliance, and attempting to manage often un-quantified risks.

Seen but not heard

With increasing regulation and the enhanced scrutiny this entails, risk has definitely risen up the agenda within the asset management industry, as has the importance of the tax function as a result. However, despite a sense of growing risk, along with the degree and nature of that risk—and in turn the appropriate level of mitigation—is not always well understood or defined.

Initially, the fear of non-compliance with new global regulation caused organizations to invest considerable resources in their initial response. Many in the industry established Project Management Offices (PMOs) to manage the many facets of FATCA in order to understand what was required, mobilize the organization, and try to locate and gather the requisite data. Now, with two years of reporting under their belts, many institutions are anxious to consider FATCA “done.” There is a degree of hope from many that there will be tolerance from the regulators should any errors surface in the future. PMOs are being disbanded and tax departments are left with increased workloads without much increase in dedicated compliance resources.

While global compliance risk is still on the boardroom radar, this is very much on a “no news is good news” basis. Tax teams are expected to be seen and not heard. The expectation is that they should manage risk behind the scenes while also delivering investor satisfaction by structuring funds efficiently, keeping costs low, and maintaining the quality of reporting. ➤

Expectations relating to the impact of CRS are mixed, with no clear consensus emerging as to the nature of the upcoming challenge. Sentiment is strongly linked to the degree of difficulty anticipated around collating the required account data, as well as the perceived imminence and severity of the threat of regulatory non-compliance. It is fair to say that with regard to risk the overall picture emerging from the latest research is not one of clarity and purpose.

Improvement or inertia

Because resources are stretched and the risks around FATCA and CRS are not fully defined or understood, most institutions suggest they do not have a clear sense of what “good” should look like in terms of process or resourcing models. As a result, current ambition is often restricted to simply being “good enough.” Without clarity on risk and how to best manage it, there is evidence of a reluctance to make significant investment in making process “improvements” in case these are proved to be directionally wrong or even unnecessary in the future.

Many of those interviewed recognized that better use of technology and control of data could be a means to achieve more efficient and effective delivery, better oversight, and improved risk management. But, at present, the industry seems to be too mired in responding to today’s compliance requirements to think about how to achieve wholesale organizational change.

Ultimately, the FATCA experience has shown that access to the data has proved key to an organization’s ability to meet the information reporting challenge. This has forced organizations to focus more on their data but solutions are often patchwork and piecemeal by nature, rather than the planned and fully integrated systems that might be more future proof and deliver cost and value benefits in the longer term. So, without a clear vision of what “good” looks like—and with the significant internal barriers that often exist to more wholesale change—tax teams are very much making do and keeping their heads down. So long as risks appear to be being managed and

minimal noise is heard in the boardroom, the business case to do more remains harder to make. The unanswered question at this stage is: What might break this inertia?

Back to basis

When first interviewed in 2013, many research participants felt under pressure to add value and improve the overall performance of the organization. For those within a more centralized organization there were certainly clearer opportunities to add value through cost minimization and investor reporting. However, with the increased focus on simply getting through the new regulatory requirements, in more recent interviews there was far less indication of this pressure.

Now, as a consequence of managing increasing volume with similar—or in some cases fewer—resources, it seems the pressure is more focused on meeting basic stakeholder requirements and avoiding regulatory issues. Generally, the industry now seems less clear on the commercial benefits of being compliant or the potential to find additional value from better systems and data. Because of volume and an ever-shifting landscape, the process of compliance is currently seen as just part of the cost of doing business.

Of course, this is not a universal view. As with process efficiency, some did recognize the benefits and potential added value that better data access and control might offer. But there is still evidence of a reluctance to even think about striving for this until they are able to return to a state of business as usual.

Looking for a new business as usual

As the sands of the global regulatory landscape continue to shift, it seems the asset management industry is somewhat stuck emptying its boots, rather than looking for the oasis. But does the choice between making do and realizing a transformational vision have to be so binary? Experience with some organizations suggests that there is a third way, founded on a change in mindset and a more pragmatic approach to envisioning improvement.

The mindset shift largely revolves around what constitutes “business as usual.” As teams become fatigued by the constant pressure of complying with new regulations and the associated risk and reporting requirements, they yearn to return to a business as usual state, believing that this will free up the time needed to formulate a vision and plan for a better future state. In fact, because change is probably the only certainty, shifting the focus to achieving a new state of business as usual that can accommodate and mitigate the impact of constant change is a more realistic and fruitful perspective. Inevitably, better command of process, data, and risk are at the heart of this.

Nonetheless, this still requires some kind of roadmap. The key is greater pragmatism and a more incremental approach rather than one of rapid transformation. While organizations should focus very much on tangible improvement rather than making do and mending, the roadmap must be defined and broken down into manageable bite-sized steps that can be realistically accomplished and will deliver benefit in their own right.

So, taking data as an example, the first step might be to simply locate all the required data, going through a methodical process to identify, map, and access all sources. Having delivered this, subsequent steps might consist of cleaning the data, securing the data, and ultimately to consolidating the data in order to provide a more robust platform to deal with future requirements. A similar approach can be taken to identifying, mapping, quantifying, and mitigating risks. Through these incremental steps, an organization will naturally achieve some process efficiency and improvement that can then be recognized and expanded in a way that makes sense for that organization.

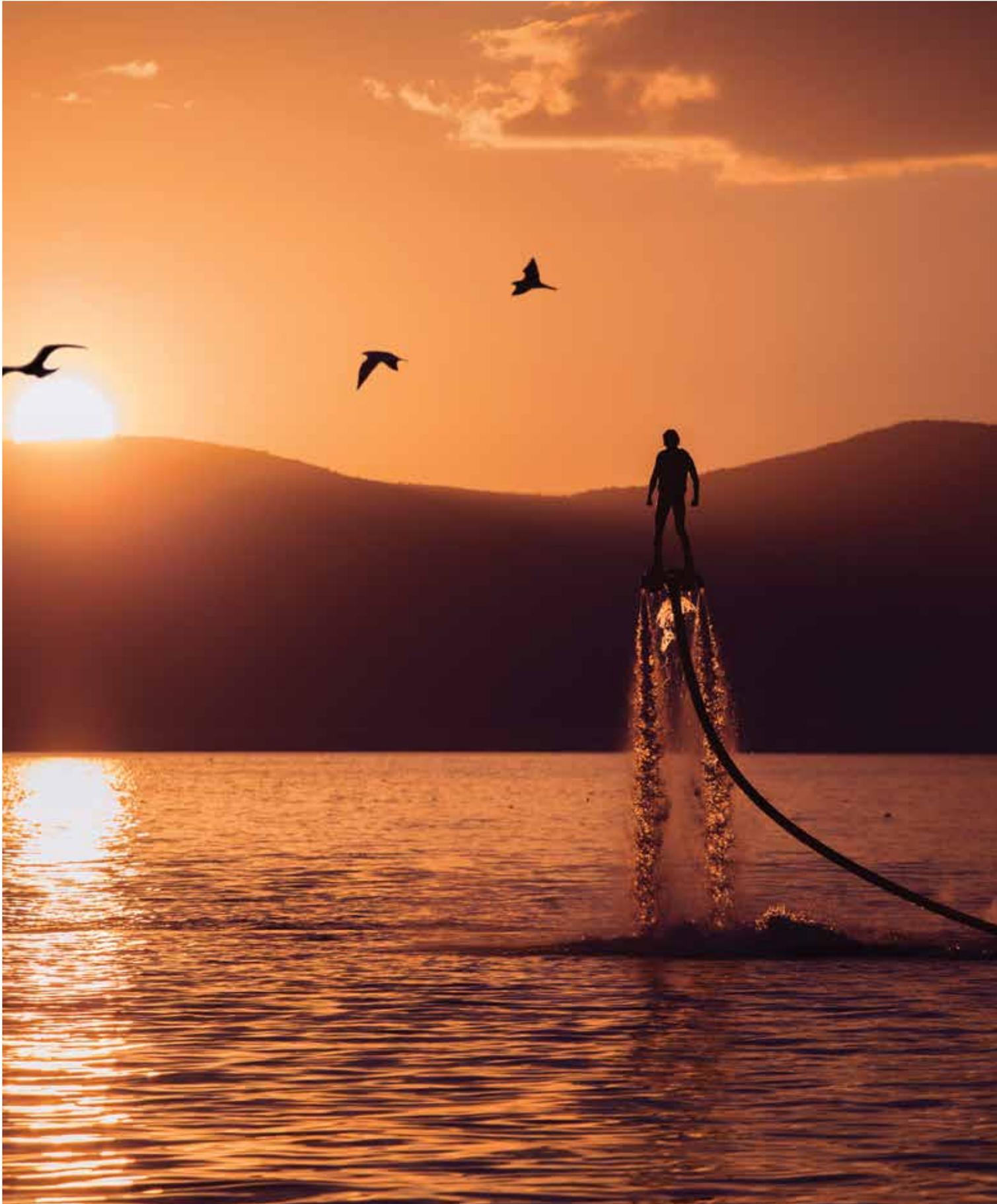


In conclusion

It might be fair to suggest that inertia is perhaps one of the bigger risks emanating from the current challenges facing the asset management industry. When the sheer weight of regulatory pressure leads to a strategy of simply coping, not only do opportunities to deliver value fall by the wayside but, by simply making do, organizations risk falling behind the curve and losing competitive advantage. Finding a second wind and breaking through the inertia with a more pragmatic, incremental path to a new and improved “business as usual” is perhaps the answer. ●

To the point:

- The global regulatory environment continues to evolve and expand rapidly, and asset managers must evolve with it to remain competitive in the marketplace
- Asset managers recognize that better data access and control could add significant value, but don't feel like they have the resources or time to take on such a wholesale change
- Currently, organizations are doing their best to achieve a state of being “good enough” and there is a feeling of regulatory fatigue and inertia
- To break the inertia, organizations should focus on reaching a new “business as usual” state by making a series of incremental changes that could, in the end, lead to something like the transformational vision to which they once aspired



Unlocking efficiency through industrialization

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The banking industry has been under cost pressure and regulatory scrutiny since the onset of the financial crisis. At the same time, the industry is facing significant technological developments with disruptive potential. After nearly a decade of challenging market conditions, banks are now seeking solutions to improve cost-to-income ratios, secure regulatory compliance, and foster innovation to deal with market disruptions. Industrialization is not a new concept in the industry. However, the benefits are still to be sowed, as little emphasis has been placed upon it. Going forward, nine levers of industrialization can guide banks toward the sought-after solution to unlock the efficiency and agility in banking. ➤



Key banking industry trends

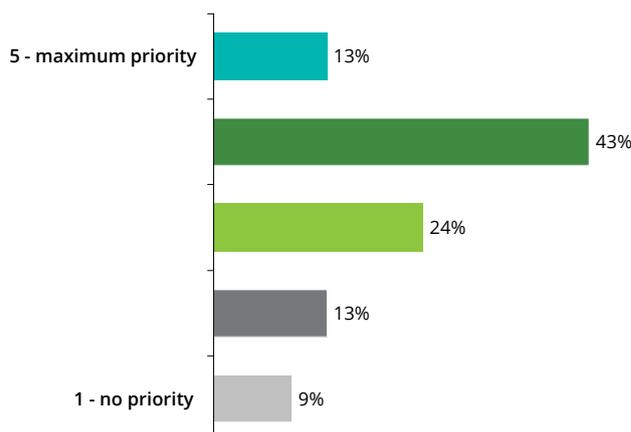


Challenging market conditions have pressurized profitability margins among banks. This has happened on a global scale through a combination of both increasing costs and declining revenues. The ones that are particularly affected are European banks: According to ECB calculations, the average return on equity of Euro-area banks has decreased from over fifteen percent in 2000 to a mere five percent in Q2 2016. This is a result of various factors, such as record low interest rates, unfavorable market conditions, more stringent capital requirements, risk-averse clients, and increased competition.

Tightening regulatory requirements add their share on the challenges for banks. This has resulted in banks being tied up in remediation activities at the expense of focusing on clients. Finally, the emergence of new technology-centered players (FinTechs and tech giants such as Apple, Google, or Alibaba/Ant Financials) has increased the need for innovation to avoid being disrupted.

In order to cope with the situation of decreasing margins, banks have primarily focused on “quick wins” to improve profitability. Frequently, these were achieved through cutting the number of employees without fundamental changes in how banks operate. Now, the focus of financial institutions is changing. In a recent survey by WealthBriefing and Deloitte, 85 percent of globally selected wealth managers named increased focus on their core businesses as a key priority.

Priority given to reduce efforts on standardized processes in order to focus on value-adds



Source: WealthBriefing & Deloitte (2016), “Evolving operating models in wealth management”

Our research has confirmed that industrialization can also increase the speed of innovation and agility.

In the same survey, wealth managers expressed their intent to significantly invest into developing client-facing and client-adviser enabling technologies. Still, with “quick wins” off the table, the question remains: How will banks be able to fund the development of new competitive advantages while re-establishing long-term efficiency?

Industrialization as a response...

One compelling answer is industrialization, which is characterized as the elimination of redundancies, the review of sourcing options, and the standardization of processes. While industrialization in banking is not a new topic, it has recently been gaining increased attention. Around 90 percent of banking executives surveyed in a recent Swiss study agree that the key benefits of industrialization are reduced costs and enhanced scalability.

Additionally, more than 50 percent of respondents in a global survey among wealth managers consider reducing effort on standardized processes as a high priority. Instead, they plan to focus on value-add processes and to invest into client-facing activities. These findings are consistent with insights from Deloitte’s global outsourcing survey 2016, whose participants view outsourcing as a means to cut costs, focus on the core business, and solve capacity issues.

Furthermore, our research has confirmed that industrialization can also increase the speed of innovation and agility. Industrialization fosters innovation, as resources will be freed up from standardized processes and can subsequently be redeployed in innovation efforts. Particularly smaller institutions benefit from the outside expertise of their outsourcing or collaboration partners and can shape and participate in “innovation ecosystems.” Streamlined processes, effective organizations, and lean IT systems of an industrialized institution allow it to react quickly to disruption and incorporate new innovative offerings.

...but facing significant challenges

Considering the perceived benefits of industrialization, the question remains why financial institutions are not more advanced in their industrialization efforts. For instance, 30-50 percent of Swiss banks admit that they have exploited the industrialization potential to no extent at all or only limited for most industrialization levers except for the fundamental ones (process excellence, organizational efficiency, and product rationalization). Similarly, even for the most standardized functions (corporate action processing, payment processing, and securities transaction processing), less than 40 percent of wealth managers globally report those as highly standardized.

According to our research, the biggest impediment for further advancement of industrialization principles is change resistance and cultural barriers. This is understandable, as industrialization may require that working habits will change and certain jobs may even be at risk, but with other jobs to be created. ➔

It is the leadership's responsibility to provide clear direction and identify change agents within the organization to lead the transformation from within. Indeed, banking executives have revealed in interviews that for sustainable change, the full buy-in of the organization is required, and therefore expertise on tools and methods needs to be built internally.

Today, this knowledge is often not widely spread within organizations, but needs to be brought in from the outside. This explains to some extent why executives view high costs as another important challenge for implementing industrialization efforts. Therefore, financial institutions are advised to invest in line with their strategy, industrialization maturity levels, and core competencies.

What is industrialization?

Based on the experience in other industries, five principles of banking industrialization can be derived that drive the overarching objectives of the elimination of redundancies, the review of sourcing options, and the standardization of processes:

For a successful implementation, nine actionable industrialization levers implementing the five principles can be defined. These can be categorized according to their maturity: Foundational levers target short-term improvement in the execution of existing processes; transformational levers target long-term redesign of the operating model; while disruptive levers target the reinvention of a bank's business model, organization, and culture. Whereas the nine levers can be applied independently, it is important to highlight that the full benefits of industrialization are only obtainable for the banks that holistically base their strategy on the five principles of industrialization.



According to our research, the biggest impediment for further advancement of industrialization principles is change resistance and cultural barriers.

Five principles of banking industrialization

| | | |
|--|--|--|
|  | Front-to-back service alignment | <ul style="list-style-type: none">• Coordinate services along the value chain in order to maximize client-and service orientation• Focus on improving availability, service quality and processing improvements |
|  | Distinct process orientation | <ul style="list-style-type: none">• Build banks' operating models around processes• Steadily and consistently improve productivity of all processes |
|  | Cultural shift | <ul style="list-style-type: none">• Instill a distinct mind-set among staff to value efficiency and evolution• Reward employees for suggesting improvements and involve staff early in the change process |
|  | Resource optimization | <ul style="list-style-type: none">• Introduce a meaningful performance measurement system at optimizing resource allocation• "You can't manage if you don't measure" |
|  | Value chain decomposition | <ul style="list-style-type: none">• Re-think your value chain regularly and source smartly• Be aware of core competencies and differentiating activities |

Source: Deloitte (2016), "Industrialization in banking"

The Deloitte banking industrialization framework



Process Excellence

Introduce front-to-back process management by assigning process owners and applying advanced process analytics; apply continuous improvement principles; standardize processes across the bank.

Organizational Efficiency

Reduce hierarchy levels and optimize span of control; breakup vertical silos to increase front-to-back alignment to client services; centralize common functions; tailor organization to cross-function interactions, decision-making, and agility.

Product Rationalization

Optimize and standardize product and service shelf; balance a broad offering while reducing duplicate and non-differentiating low-volume products; leverage open architecture principles for product platforms.

FOUNDATIONAL

Improving execution of existing operations and value creation (short term)



Value Chain Reengineering

Align value chain to clients and services, not products; make choices and focus on core competencies; rethink non-value-added activities; buy managed services for activities which are not sufficiently differentiating or strategic.

IT Simplification

Decommission end-of-life applications; leverage standardized multi-product and multi-entity capable systems; minimize software customization; optimize IT infrastructure; introduce software as a service and infrastructure as a service.

Location Optimization

Apply workspace concepts fostering innovation and collaboration; optimize footprint per employee; consolidate locations; expand global reach to leverage talent supply; optimize employment costs through near- and offshoring.

TRANSFORMATIONAL

Re-design of operating model (longer term)



Industry Utilities and Joint Ventures

Establish industry utilities to commercialize own capabilities; build joint ventures with peer banks or non-financial services providers in order to create economies of scale and capability networks.

Process Digitalization and Robotics

Introduce digital processes such as paperless client onboarding; leverage big data analytics for superior client services; use robots for rules-based, repetitive processing; increase connectivity with digital ecosystem.

Economic Value Management

Introduce business analytics to measure client value, costs to serve and process performance; optimize allocation of resources in producing and offering products and services to clients; closely link KPIs and rewards.

DISRUPTIONAL

Re-invention of banks' business model, organization and culture

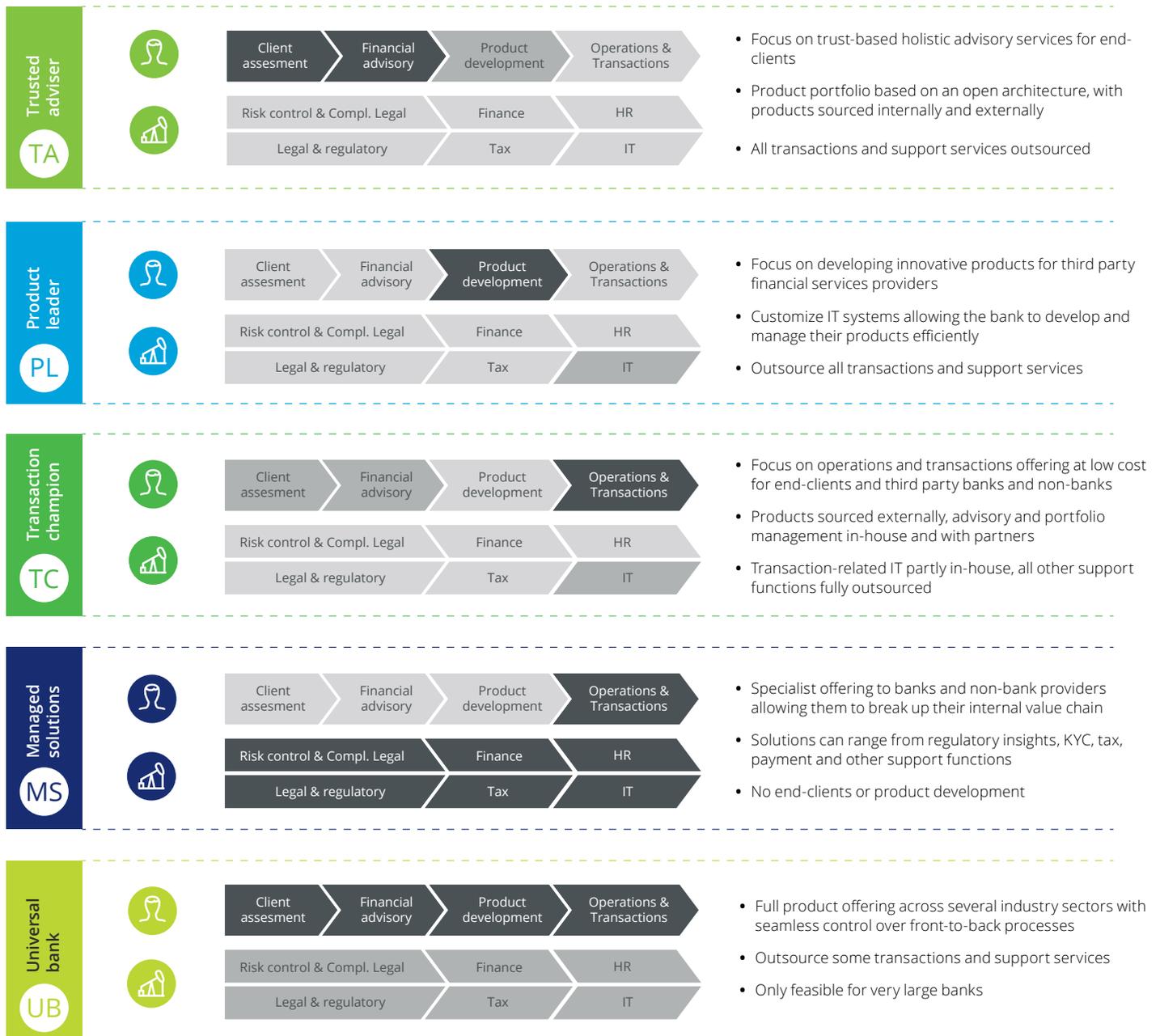
Emerging operating models

Industrialization will have an impact on the operating models of banks depending on their chosen business model. In particular, by applying value chain reengineering and considering partnering and joint ventures, financial institutions will focus only on certain parts of the value chain. We anticipate five distinct future banking business models to emerge and the success of these banking models will partially rest on the results of industrialization efforts.

The implementation of these emerging operating models depends strongly on the institution's capabilities and business model. When asked about the expected timeframe to implement business process outsourcing, a key element of a holistic value chain reengineering, all asset managers reported 6 to 18 months. Other institutions—such as universal banks, who have more complex value chains and tend to outsource only selectively—expect much longer implementation timelines.



Banking business models of the future



LEGEND



Source: Deloitte (2016), "Industrialization in banking"



Around 90 percent of banking executives surveyed in a recent Swiss study agree that the key benefits of industrialization are reduced costs and enhanced scalability.

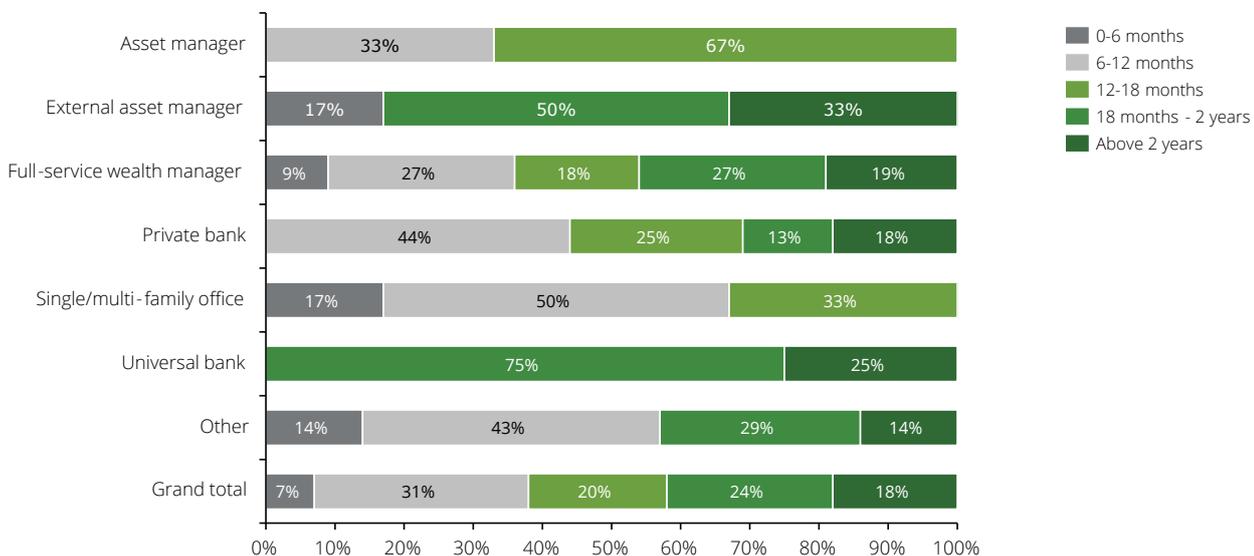


If financial institutions indeed want to achieve much higher industrialization levels within the next five years, as Swiss banks have expressed in a recent survey, this calls for action today. However, not every value chain reengineering opportunity will be implemented, as the efficiency gains offered by BPO providers will not meet the expectations of the outsourcing institutions. Over 90 percent of globally surveyed wealth managers expect a minimum efficiency gain of 20 percent in order to enter a business process outsourcing contract. BPO providers are therefore challenged to increase their own

maturity and efficiency in order to offer an attractive value proposition to their clients. Institutions that have achieved high process excellence or that already have a scalable platform may opt for the managed solutions business model and become a BPO provider themselves. In fact, 12 percent of surveyed wealth managers consider offering services to other industry players, and a further 21 percent are unsure whether they want to offer this type of service to other institutions. At the same time, other non-traditional BPO providers such as the Big 4 are extending their offering—particularly for asset managers.

As the maturity of the BPO providers increases and industrialization efforts pick up pace among financial institutions, the level of outsourcing will rise and become increasingly important. Even data confidentiality and IT risk concerns, which today are seen as important risks of outsourcing, will be reduced as better solutions are implemented and the industry gains more experience with such setups. As a result, financial institutions will increasingly focus on their businesses where they can leverage their core competencies and add value for their clients.

Implementation timeframe expectation against type of institution



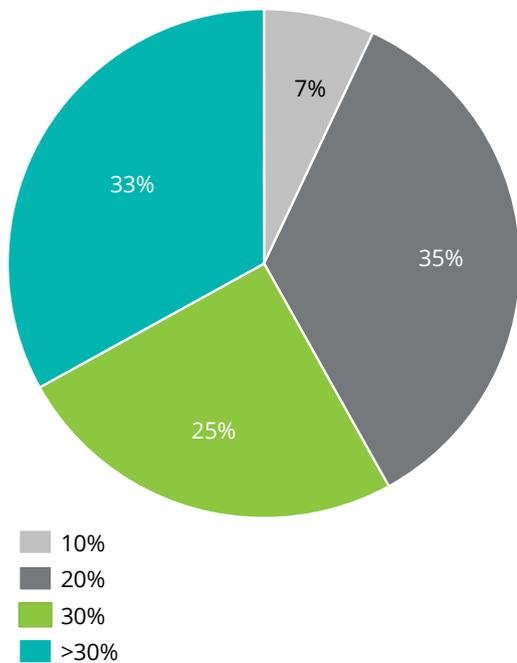
Source: WealthBriefing & Deloitte (2016), "Evolving operating models in wealth management"

However, as noted in the study by WealthBriefing and Deloitte, the definition of what is value-adding will vary between industry players, as different players have different core businesses. As an investment manager, investment research is pivotal to its value creation, whereas IT software development is not. An online retail banking player will likely decide the other way around. Thus, there is no clear-cut definition as to what is value-adding for each industry player. In the same research, the majority of wealth managers stated relationship and quality of service as their key value-add, which is typical for the business model of a trusted adviser. Accordingly, a more radical evolution of operating models is perceivable, allowing trusted advisers to focus even more on client relationships and service.

In various countries, groups of banks have started to establish service companies, which serve competing banks. In Germany, several of such service companies have been established a while ago already, not only as part of regional and mutual banking groups but also as service centers for large banks. UBS's CEO Sergio Ermotti recently proposed an even more radical step for Swiss banks. His idea of a "super-back-office" serving most domestic banks might sound ambitious, however, once foundational and transformational industrialization levers have been exploited, such a disruptive step toward the creation of industry utilities seems logical. ➔

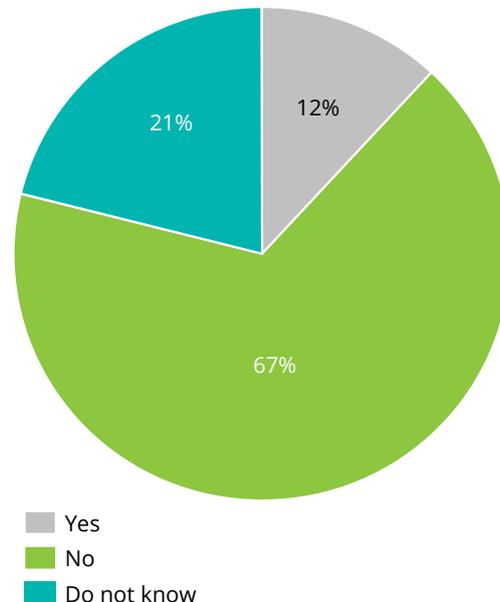
If financial institutions indeed want to achieve much higher industrialization levels within the next five years, as Swiss banks have expressed in a recent survey, this calls for action today.

Minimum level of prospective efficiency gains institutions are looking for in order to enter a BPO contract



Source: WealthBriefing & Deloitte (2016), "Evolving operating models in wealth management"

Institutions offering or considering offering BPO services to other institutions



Source: WealthBriefing & Deloitte (2016), "Evolving operating models in wealth management"

IT simplification and process digitalization

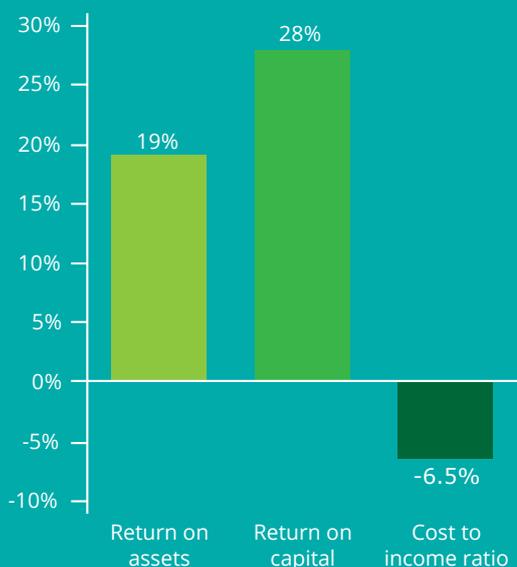
Besides changes to the value chain and the organizational setup, financial institutions consider simplifying their IT landscape and automating their processes. Many banks have targeted programs in place or are planning to establish one in the next three years to reduce their IT complexity. Yet, the majority counts on continuous improvement. Such efforts include the usage of Software-as-a-Service (26 percent of Swiss banks plan to mostly or fully implement such a solution within the next five years), Infrastructure-as-a-Service (29 percent), or even Platform-as-a-Service (31 percent). Also, today most financial institutions consider implementing modern, third-party core banking systems. Indeed, Deloitte research shows that European banks using such platforms significantly outperform

peers using legacy systems in terms of return on assets, return on capital, and cost-to-income ratio.

Such technological changes require significant investments with payback periods of multiple years. In a fast changing world with new technological developments breaking through (blockchain, cognitive computing, and the like), many institutions might be reluctant to undertake such investments now. How can financial institutions increase processing efficiency while avoiding the pitfall of investing in an obsolete system? Leaders are adopting a “two speed technology” approach to this challenge, investing in a stable core while deploying an agile approach to the client interface and connecting to technology partners to exploit the potential of such innovation ecosystems.

Many institutions are also considering process robotics and digitalization to increase automation by substituting repetitive tasks executed by humans through rule-based engines. This is a tactical yet powerful alternative to upgrading core banking systems for better straight-throughput-processing rates. In a recent Deloitte study of industrialization in Swiss banks, more than 60 percent of surveyed banks indicated that in five years they plan to exploit process digitalization in areas such as product suitability, risk control, accounting, and reporting—today less than 40 percent exploit process digitalization. Typical robotics use cases in investment management include the compilation of research data from various sources, creation of customized benchmarking, MiFID transaction reporting, or derivative exposure reporting.

Performance improvement over five years of banks running on third-party banking applications relative to those using legacy applications



Source: Deloitte (2014), “Banking disrupted”

Achieving 20-30 percent cost savings

Across all levers, the potential financial implications of industrialization are significant. Based on our experience with implementing industrialization levers, we have estimated the potential cost savings for fully industrializing an average bank to be 20-30 percent. This relates to a reduction in FTEs of 30-40 percent, which includes personnel shifts to third parties. However, differences among banks may be extensive, depending on the starting point.

How to get started

Financial institutions aiming to reap the benefits of industrialization should first get clarity on their general strategic direction and their core competencies. Next, institutions may conduct a maturity assessment across the industrialization levers by looking at front-to-back processes. Through identifying the biggest gaps and by focusing on what is core and what is non-core, institutions can define a change portfolio. In this phase, buy-in from various stakeholders and from key employees is pivotal.

Only if the principles of industrialization are embraced by the organization, the necessary changes can be sustainably implemented. The leadership in the institutions is on the hook to lead the way into the future. When the right measures are taken today, the necessary resources for unlocking future value through increased agility and innovation can be made available. ●



To the point:

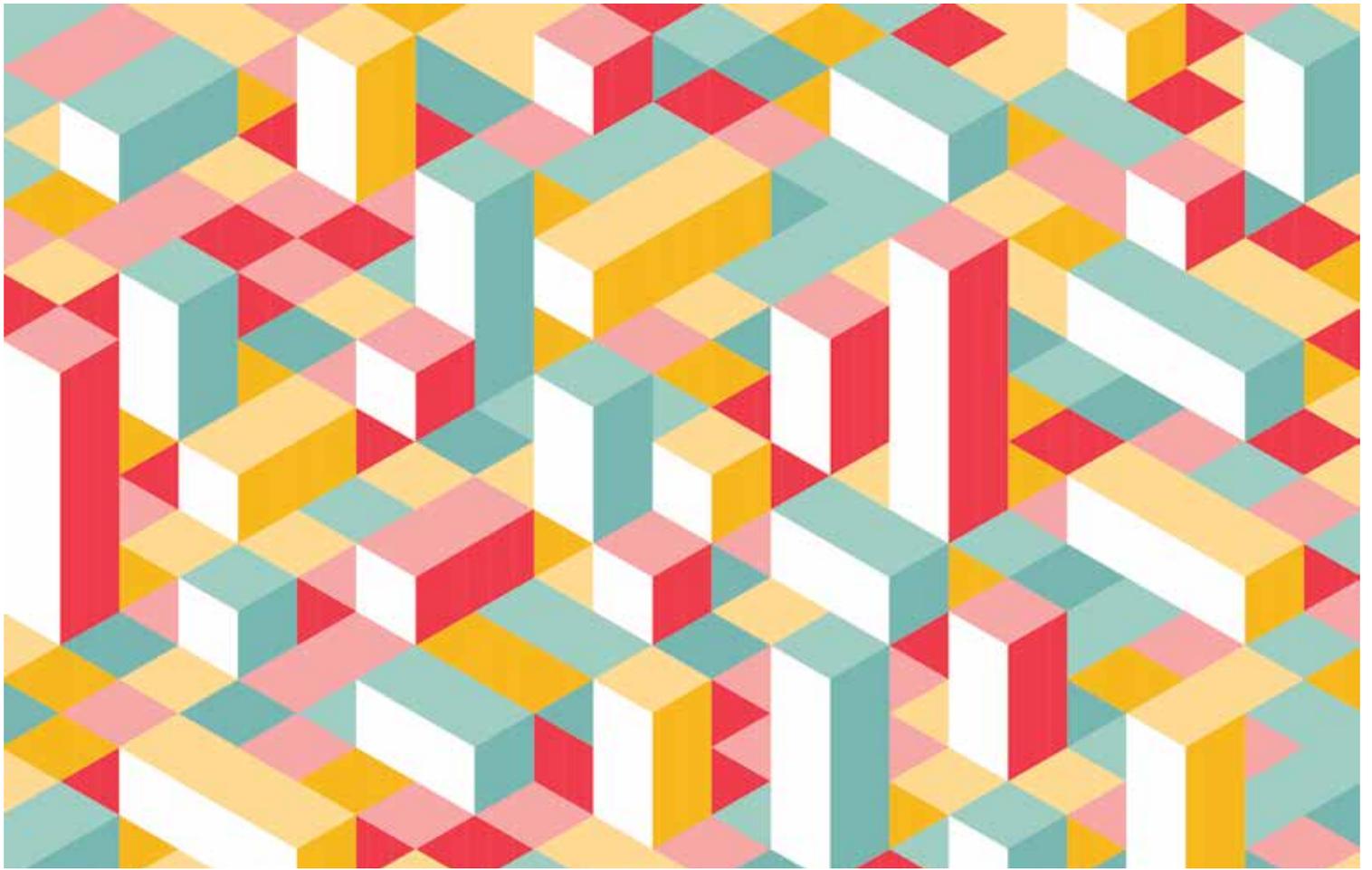
- The banking industry is under pressure from multiple sources, such as decreasing revenue streams, regulatory scrutiny, and market disruptors
- Industrialization can help financial institutions increase scalability, decrease costs, and foster innovation, which is ever more important today
- Yet, change resistance needs to be overcome by institutions through comprehensive change efforts with constant focus from senior management, while investments need to be planned wisely
- Reengineering of the value chain and leveraging business process outsourcing are key means of industrialization, but need to be aligned with the institution's target business model
- IT simplification and robotic process automation complement each other in achieving higher straight-throughput-processing rates, increasing agility and readiness for new business models
- 20-30 percent cost savings are achievable through industrialization

Impact of industrialization levers on revenues and costs of banks

| | Revenue growth | Cost reduction | FTE reduction |
|---------------------------------------|----------------|----------------|---------------|
| Process excellence | 0-5% | 5-10% | 10-20% |
| Organizational efficiency | 0-5% | 5-10% | 10-20% |
| Product rationalization | 0-5% | 5-10% | 10-20% |
| Value chain decomposition | 10-20% | 10-20% | >20% |
| IT simplification | 0-5% | >20% | 10-20% |
| Location optimization | 0-5% | >20% | 0% |
| Joint ventures and industry utilities | 0-5% | 5-10% | >20% |
| Process digitalization and robotics | >20% | 5-10% | 10-20% |
| Economic value management | 0-5% | 5-10% | 10-20% |

Increase in revenues/decrease in costs ● 0% ● 0-5% ● 5-10% ● 10-20% ● >20%

Source: Deloitte (2016), "Industrialization in banking"



Future-proofing real estate: An insight into the potential use of blockchain in real estate funds

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Introduction

The global real estate funds industry has recently experienced a stunt in growth due to a number of factors, most notably

- Uncertainty regarding the European Union e.g. Brexit
- A slowing Chinese economy
- More recently, the U.S presidential election
- An increase in ‘rich pricing’

A slightly lower level of transactional activity of \$292 billion was recorded in H1 of 2016 in comparison to the figure of \$324 billion in H1 of 2015 (FOOTNOTE 1 HERE). Yet, fundraising on average amongst the top 5 private equity real estate firms, over a five year period, has increased by \$26,735.67 million (U.S.) indicating the leading players remain confident in the

future state of the industry . (See figure below).²

This article will explore existing real estate property management solutions, focusing on the top private equity real estate platforms in the marketplace, including subject matter expert’s viewpoints on the existing software infrastructure. Blockchain technology and its core distinctive characteristics, will be discussed as an alternative solution whose unique features are well suited to the real estate funds industry. Lastly, future considerations will be addressed in order to assist industry players consider and understand the value of incorporating a blockchain solution for the whole asset management process.

Industry sector ripe for disruption

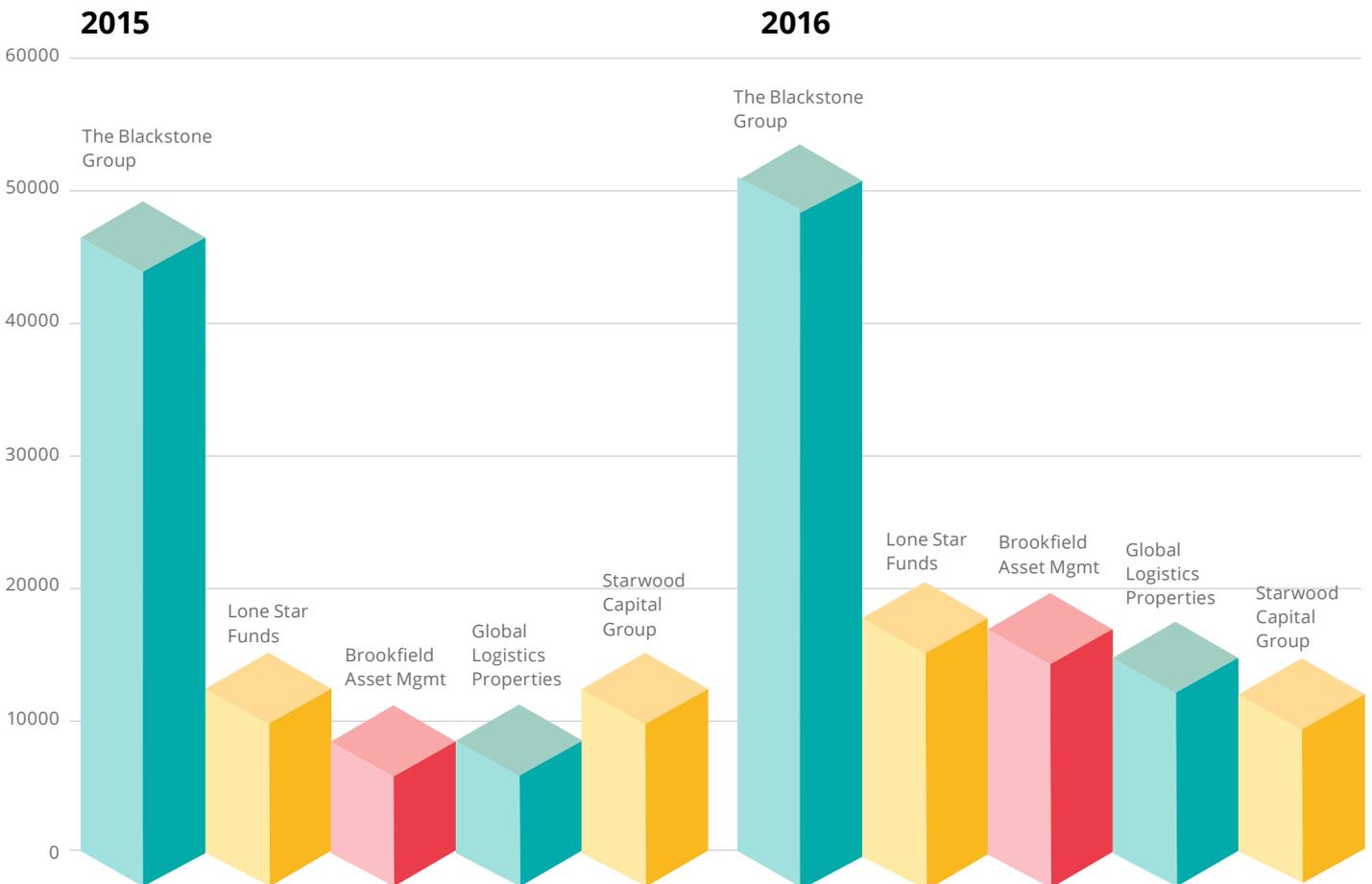
This decline has resulted in global investors taking a more conservative approach,

focusing on gateway cities and managing their expected return on investments accordingly. The industry is undergoing a sizeable change in its core offering away from real estate as a financial asset to real estate as a service. For example, Germany is regarded as the prime hub for capital within Europe, followed by Ireland. Both locations are considered prime locations for investment and property development for 2017.

“Blockchain technology is rapidly advancing and we see in real estate an opportunity to drastically improve efficiency and reduce costs leveraging this technology” – David Dalton, Partner Deloitte Ireland, Global Blockchain Leader

Industry players will need to identify and realize new efficiencies and achieve cost savings in order to compete in this increasingly changing landscape. ➔

Top 5 largest Private Equity Real Estate firms in the world



1 Prequin, Real Estate Spotlight, August 2015

2 PERE's Annual Ranking of the Largest Private Real Estate Firms in the World, May 2016, 2015

As highlighted by **Mark Degnan, Director Corporate Finance, Deloitte Ireland:** *“the buy and sell side of transactions in real estate funds are hampered by a lack of technology being used in the process. The management information (MI) being used is derived from a number of different systems and has to be manipulated, which takes time and proves to be expensive. There is an opportunity for technology to be leveraged to expedite this process for all involved”.*

Currently, there are a number of different systems used by asset managers including property management software, loan software and arrears software amongst many others. A common concern raised by industry players is the lack of integration amongst the different systems, people and teams working in silos and ultimately not effectively communicating with one another. As such, this lack of integration and consistency presents pitfalls for data manipulation to take place when producing management information (MI) required for a deal to take place. The key to enabling all deals to move quickly (not just those specific to real estate funds) is to:

- Involve and engage all stakeholders
- Keep stakeholders up to date
- Resolve issues quickly

What are the common denominators to the points above? It's simple, people and data! The Real Estate Funds sector requires very detailed information (right the way down to the wiring in a building) and for that information to be able to be shared securely and quickly with the other participants. So what is required is an industry standard technology which is used by all participants to store information securely, to share data quickly and which can be trusted by all participants to be accurate view.

Due to the detailed level of data which needs to be recorded for a property, investing in a secure and transparent property management software would provide a clear means of enhancing the efficiency of the real estate management process for all stakeholders. YARDI, MRI and SS&C are regarded as the top Private Equity Real Estate Software Providers. These platforms enable users to efficiently track and manage the vast numbers of documents required to ensure compliance with all of the contractual and legislative requirements affecting their company currently in the marketplace. It will become clear when we walk through their service offerings how a more advanced solution with an ability to connect all users in transparent way would be a favourable alternative for all involved.

“Real Estate transactions and valuation data tend to be relatively lower in volumes and highly complex. We believe that this, coupled with the fact that this process remains relatively manual across multiple participants, means fund administration in this sector will be one of the greatest beneficiaries of Blockchain transformation”. – Cormac Dinan, Director Consulting, Deloitte Ireland

The existing property management solutions: a sub-par game?

Oracle JD Edwards

Oracle JD Edwards EnterpriseOne Real Estate Management integrates all of the information about your properties under management, hereby working to streamline financial and operational processes throughout the entire real estate lifecycle. Users have noted easy configuration, good mobile access and excellent customer support. Therefore it will not come as a surprise that that Oracle JD Edwards is a popular choice amongst the US Real Estate Investment Trusts, per Deloitte US analysis.

Yardi

More than 20,000 businesses, corporations, and government agencies rely on Yardi software to manage and drive their real estate business. This property management platform facilitates clients worldwide to access information specific to their needs, including owners, managers, investors, and other stakeholders. Yardi offer two platform services; the Yardi Genesis³ platform for smaller real estate firms, and the Yardi Voyager platform for mid- to large-sized property owners, managers, and investors. Both platforms include accounting, operations, and ancillary processes with mobility for residential and commercial portfolios. The solutions serve over 18 real estate markets, including construction development, government, office, industrial, retail and airports.⁴

MRI

With over 45 years of experience with clients in 5 continents, MRI offers business management software solutions to the global property management industry. As one of the leaders in real estate enterprise software applications and hosted solutions, MRI serves the global multifamily and commercial properties by helping them improve their bottom line and returns on their business portfolios. The Multifamily suite effectively manages the entire real estate cycle, from online leasing to renewals and statement of deposit. The Commercial suite provides budgeting and forecasting, financials and accounting, and tenant connect.⁵

3 Oracle, November 2016

4 Yardi, October 2016

5 MRI, October 2016

6 SS & C, October 2016

7 SAP, October 2016



SS & C

SS & C provides property management software, real estate fund administration services to more than 6,900 clients globally. It offers a vast array of products such as; SKYLINE which is a property management and accounting platform and TNR Solution which provides Portfolio and Fund Managers with the tools to track and manage property deals and relationships at the Fund and Investor level.⁶

SAP RE FX

Outside of the US, SAP offers a full stack, integrated work management solution that aims to simplify the complex real estate operations for clients of all sizes. This software has the added benefit of also being fully integrated to SAP financials, which from our analysis, some users note as a major benefit.⁷

A clear trend in our analysis is that the systems discussed are currently struggling to handle the massive amount of data that now needs to be held on each property. This has seen these systems see faults such as severe lagging, increase in cost and in the worst cases system failure. It is abundantly clear that an alternative solution could prove to be a better fit. In theory, a system which has the capacity to distribute a ledger to all parties involved in the process would be a major plus. This shared nature would mean no single point of system failure, and its security could be achieved with high levels of encryption. The cost would also be less, as scale would be achievable as the ability to add more parties would be written into the software. It is our opinion a viable alternative could be a blockchain based solution.

Real Estate in a blockchain world

"We believe that blockchain technology holds tremendous potential for the financial services industry, particularly as a digital ledger of transactions that can increase efficiency and reduce errors. In the alternatives sector, I can foresee potential uses for blockchain in the recording of mortgage liens and property title transfers in real estate, as well as clearing and settlements in the private equity space. We are closely watching and evaluating these areas of application." Alan Flanagan, Global Head of Private Equity & Real Estate Fund Services BNY Mellon. 

The global real estate funds industry has recently experienced a stunt in growth due to a number of factors, most notably uncertainty regarding the European Union, Brexit, a slowing Chinese economy, and, more recently, the U.S. presidential election.



The hype around blockchain is one which is not going away, with Don Tapscott going as far as calling it 'the technology most likely to change the next decade of business.'⁷ In 2016 we have seen a vast majority of the world's largest financial services clients test the technology either through consortia, such as R3, or in proof of concepts by themselves. While some sceptics claim this is little more than marketing to 'stay relevant', what cannot be denied is blockchain technology has a number of key characteristics which are well suited to a plethora of identified use cases. Below we will look at how there are some key characteristics which could alleviate some of the current issues problems with the property management software discussed.⁸

Cross-border – an easy to use, cross-border ledger, which is particularly powerful for the nature of this business. This is particularly powerful given the current trend in real estate funds to diversify their portfolio across locations.

Transparency – easy auditing and tracking of transactions across the network is a clear benefit of a blockchain enabled solution. By having full transparency between all parties on the ledger, users will have a clear, holistic view relating to the property.

7 Harvard Business Review, May 2016

8 Deloitte Netherlands, "Blockchain technology: 9 benefits & 7 challenges," 2016

9 Deloitte Netherlands '#3 Blockchain – the benefits of smart contracts', November 2016

Permanent trusted records – a blockchain is an immutable record of transactions, which ensure no manipulation or loss. This is particularly powerful to have when selling on a property, as there is the opportunity to cut the time for due diligence significantly.

Automation – the possibility of conditional transactions via smart contracts, which can ensure less error on behalf of operational staff looking after the property, both on & off site.⁹ This could potentially see the introduction of smart contracts which could track mortgage arrears,

Multi-party – a blockchain by nature is a multi-party technology, with transaction information being shared peer to peer across the network. A criticism of some of the software vendors currently is the inability of parties to communicate on the platform, which could be eliminated by using a solution powered by blockchain technology. Low overhead to add many different parties, whether trusted or untrusted.

Secure – strong encryption functions built in. No single point of failure like the current systems due a distributed record of the truth across a number of different devices.

Real time – close to real time data available to all stakeholders, which can ensure total confidence in the investment for all parties.

For instance, a distributed ledger could be used to record all operations related to property management where whole invoicing (payables and receivables) and related payments maybe reported on a distributed ledger, or even actually paid with fiat currency-backed virtual money. These data can then be retrieved upon authorisation as input of the property valuation, streamlining as such various processes such as reporting, valuation or risk management." – Thibault Chollet, Director Consulting, Deloitte Luxembourg

It is clear when reading the above that a blockchain-enabled property management solution would be well suited to the real estate funds business. A real-time, secure view of the data relating to a property is something that many of the current systems struggle to provide in an easily digestible format.

A blockchain-enabled solution could solve this issue, and drastically reduce the time it takes to manipulate the data about a property into usable management information. We will now look at some key considerations moving forward for the real estate funds industry.

"By implementing additional blockchain applications in the real estate industry transaction times and costs can be reduced further. Furthermore it enables decision makers to use data analysis for making future investment decisions on selling, buying and constructing real estate," according to Jan Willem Santing, manager of Deloitte Real Estate.



“Blockchain technology works best when there is a clear business problem to solve and clear business benefits to be achieved. With no multi-party, secure, fast and inter-operable industry standard technology in the real estate fund sector, blockchain has all the features to rapidly become the ‘go-to’ technology solution.”

Lory Kehoe, EMEA Blockchain Hub Lead

Future Considerations & Conclusion

As Thibault Chollet contends, *“It is difficult to exactly shape the future of the real estate industry ecosystem that distributed ledger technology will enable. But have no doubts that blockchain is coming”* Indeed, while we may not see blockchain technology cause a paradigm shift across the whole industry in the near term, it is abundantly clear from the above that an alternative real estate management system would be the perfect use case to test the applicability of blockchain in this market. The benefit for the big players is being part of the transformation of the industry as we know it, and building solutions which will see lower costs and greater efficiencies.

As Cillian Leonowicz mentions “there is an open goal for an asset servicer to take real estate by the scruff of the neck, create a new standard, control the killer app platform and then invite inefficient competitors to their new blockchain enabled platform on a service model fee basis”.

Deloitte’s Global Head of Real Estate, Bob O’Brien remains very positive on

the future of blockchain in real estate, remarking “Blockchain technology has significant potential to impact the Private Equity Real Estate industry by enhancing the speed and quality of data shared in the due diligence process of transactions, improving property level operating and performance information available to portfolio and asset managers, and facilitating communications between fund management and fund investors.”

The future for blockchain is much closer than people realise and whether people realise it or not (and or like it or not), blockchain is here to stay! The opportunity for distributed ledger technology is significant and now is the time to start your blockchain journey. By developing POCs and carrying out pilots, the true potential of the technology can begin to be realised and what Tapscott claims will be the most disruptive technology of the next decade. Don’t be tempted to sit on the fence and adopt a *‘wait and see’* approach. We don’t want to be here next year saying we told you so...

Now is the time. Be Ready. ●

To the point:

- The global real estate fund industry has recently experienced a stunt in growth due to a number of factors (most notably, uncertainty regarding the European Union, Brexit, a slowing Chinese economy and, more recently, the U.S. presidential election) yet fundraising on average among the top five private equity real estate firms over a five year period has increased by US\$26,735.67 billion between 2015 and 2016
- A blockchain-based solution will become an alternative in the real estate fund industry
- A real-time, secure view of the data relating to a property is something that many of the current systems struggle to provide in an easily digestible format. A blockchain-enabled solution could solve this issue, and drastically reduce the time it takes to manipulate the data about a property into usable management information
- The future is near, and blockchain is here to stay



The future of asset servicing - Shaped by three disruptive technologies

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A huge wave of technology disruption is heading toward the asset servicing industry. Within a five-year timeframe, robotic process automation (RPA), blockchain, and cognitive systems will have a dramatic change and a profound, lasting impact on service providers' operations.

These disruptive technologies combined offer enormous potential for asset servicers to create efficiency, reduce risk, and improve the quality of service to clients. Here we describe where these impacts will be felt most, and outline actions that asset servicers can take to ensure they can ride the wave of technology disruption without being consumed under it.

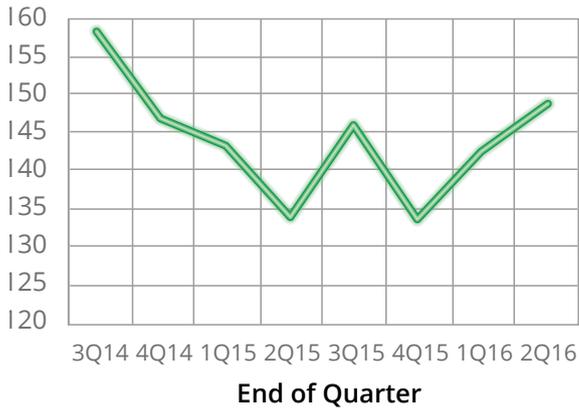
Asset servicing today

Why is asset servicing standing squarely in disruption's path? According to Deloitte research, the industry employs 200,000 people worldwide. It is argued that the industry is at this level partly due to inefficiencies that accumulated in its systems and processes over decades. Many of these fulltime employees (FTEs)

perform manual, repeatable tasks that automated technology can now cost-effectively replace.

The value of Assets under Management is rising, yet the challenge for asset servicers is considerable: since 2008, the regulatory environment has been the dominant bias for their development, and as a consequence, operational expenses and the number of FTEs are rising too. While technology has evolved, the focus on regulatory change and cost reduction means the industry has failed to keep pace. However, now more than ever, alarm bells are calling for new technology to replace back- and middle-office repetitive, manual, and cost-inefficient processes, with improved process automation—delivered on a continuous basis. ➔

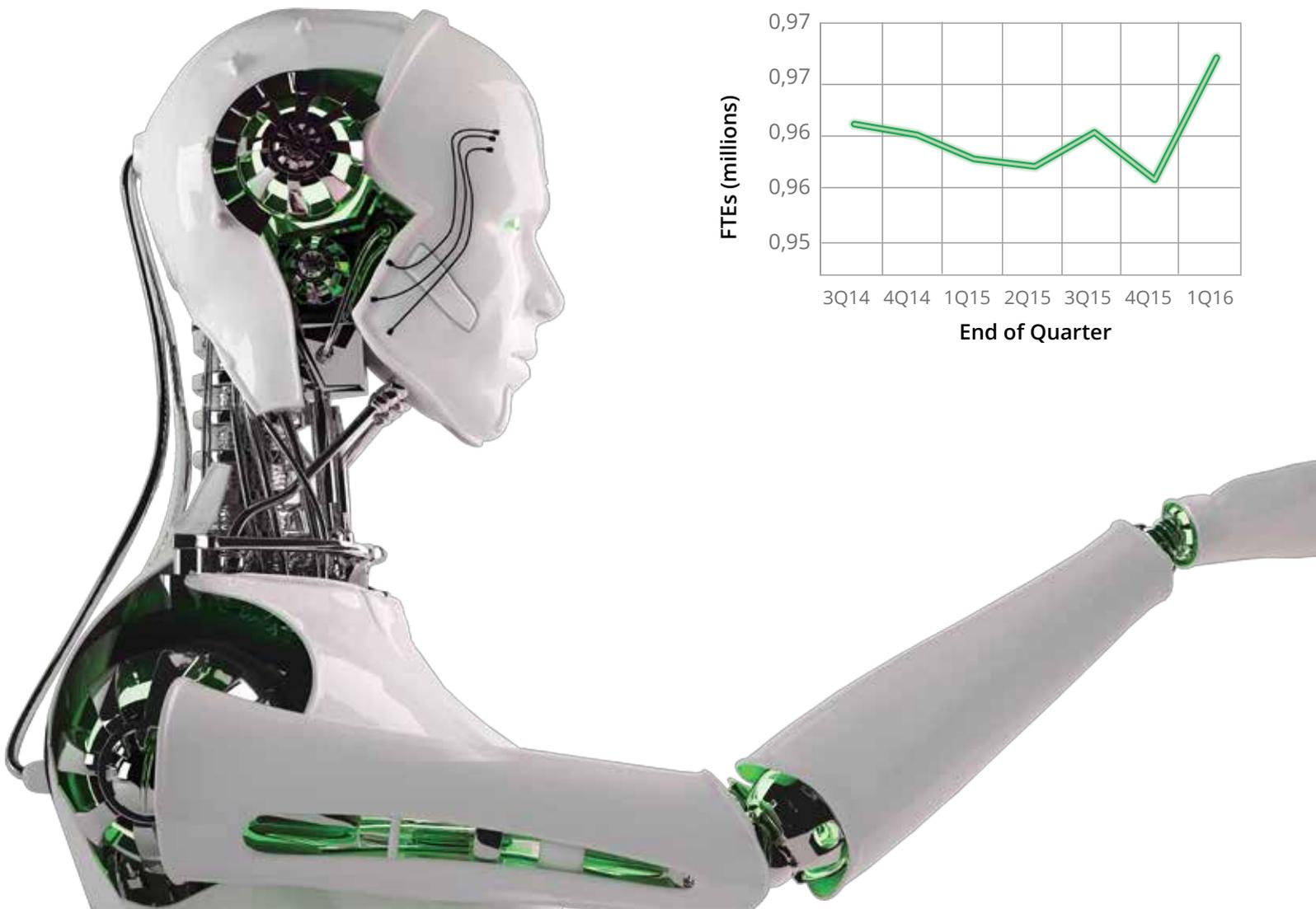
Industry AuM



Expenses



FTEs



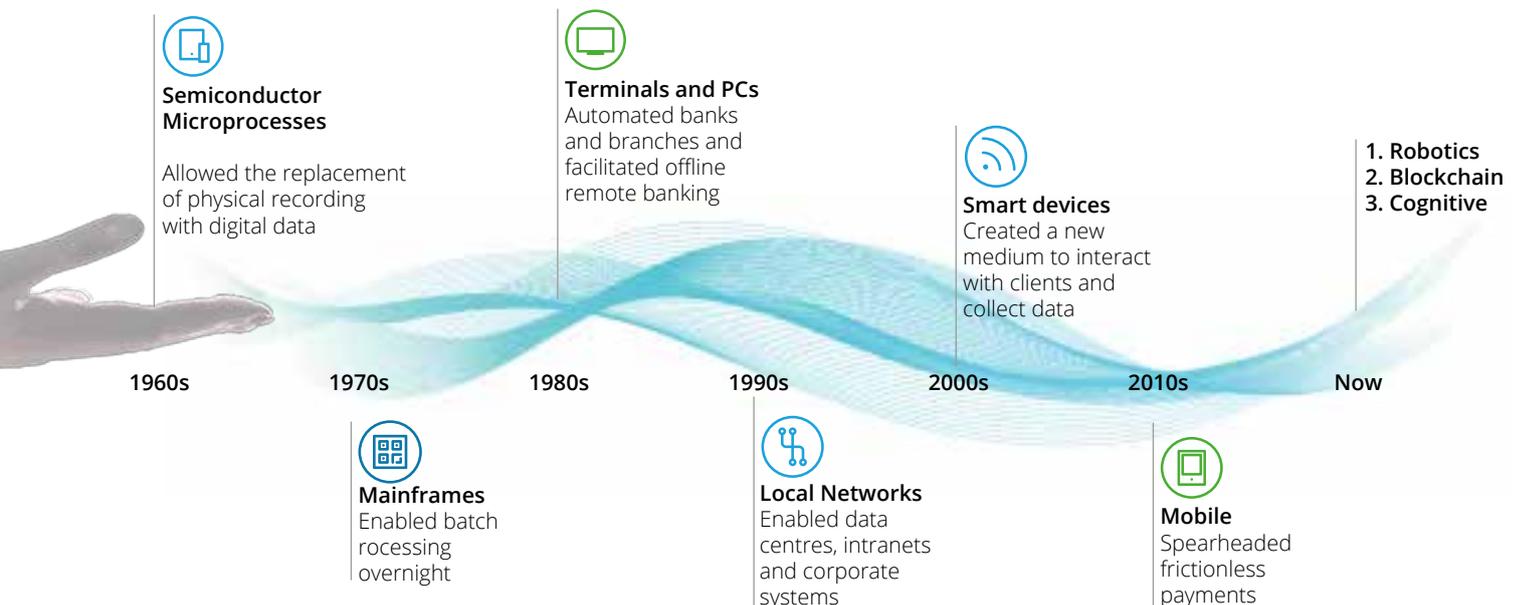
Disruption uncovered: robotic process automation, blockchain, and cognitive technology

What are these disruptive technologies? They are technologies that do not develop in a linear way, but evolve much faster and have a greater impact than traditional technologies. Here we've chosen these three technologies because each represents the greatest disruption posed in the short-term (automation), medium-term (blockchain), and longer-term (cognitive technology).

Continued levels of repetitive manual activities still embedded within asset servicing processes are making robotic

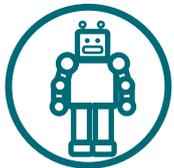
process automation (RPA) the ideal candidate to automate much of the standard asset servicing value chain. Blockchain's impact on the wider financial ecosystem will make trading and post-trading processes much more efficient, improve regulatory control, and potentially remove multiple intermediaries. Cognitive technology is more likely to have an effect on asset servicing further into the future. Simon Ramos, Advisory & Consulting partner at Deloitte Luxembourg, recognizes that there are real opportunities surrounding cognitive technology and that asset servicers need to be cognizant of this emerging technology and its potential to reform the industry. ➔

We've chosen these three technologies because each represents the greatest disruption posed in the short-term (automation), medium-term (blockchain), and longer-term (cognitive technology).



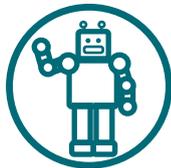
RPA explained

Robotic process automation refers to a set of software tools called robots (or bots) that perform routine or repetitive business processes—the kind that are typically carried out today by shared service centers and back office processing teams. They are ideally suited to the challenge of business processes that straddle multiple IT systems that don't always talk to each other, or are too time-consuming for humans to perform, yet which don't warrant large scale IT transformation.



Robots are...

- Computer-coded software
- Programs imitating human Interaction with applications
- Cross-functional and cross application software



Which can interact with all application types...

- ERP
- Windows
- Excel, Word
- Outlook
- Mainframe
- Citrix
- Explorer
- BPMS



Robots like processes that are...

- Rule-based & repetitive
- Based on structured input data
- Mid-to-high transactional volume
- Prone to human error
- Low exception rates and process variation
- Fluctuating demand

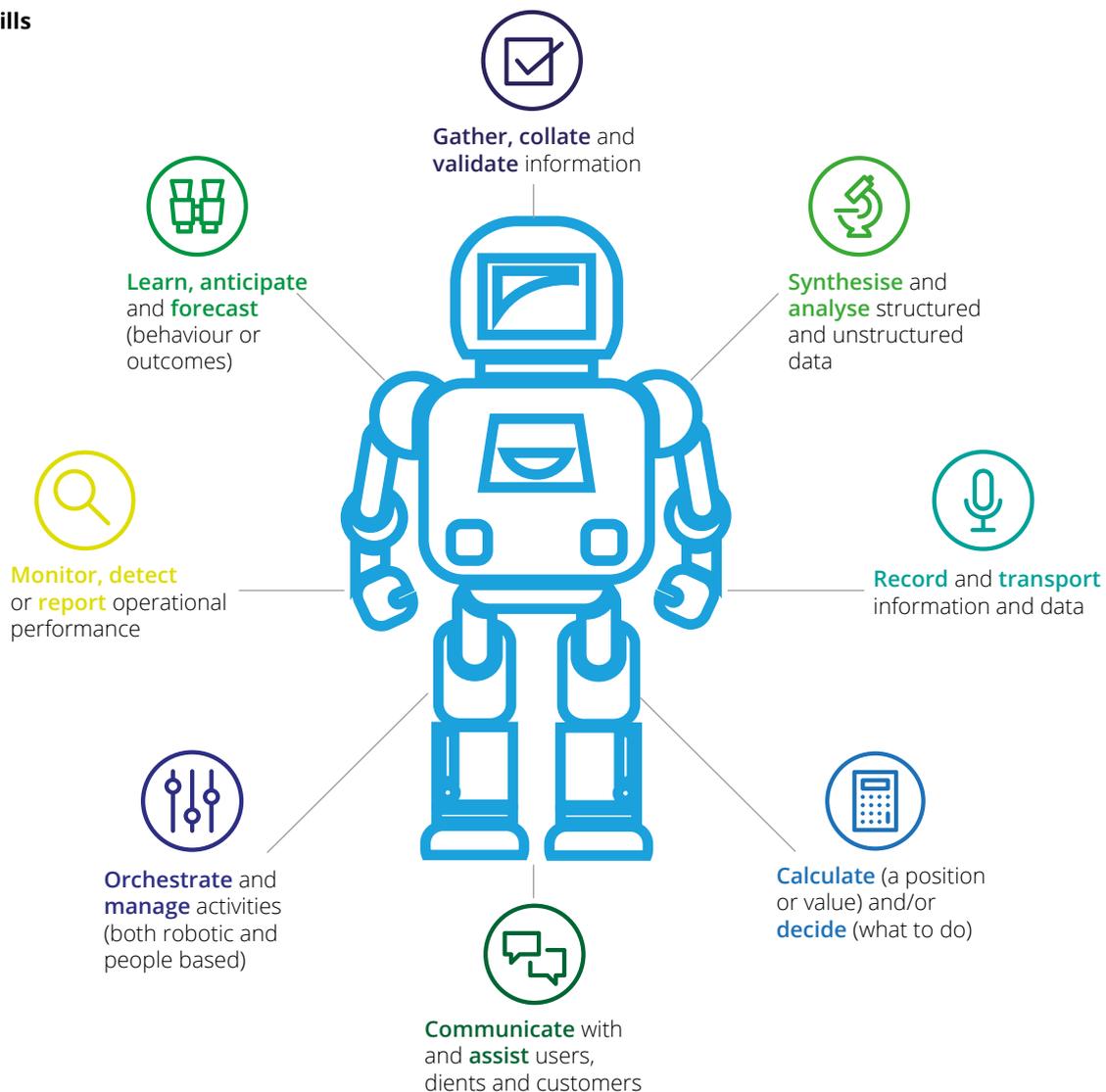


There are real opportunities surrounding cognitive technology and asset servicers need to be cognizant of this emerging technology and its potential to reform the industry.

The commercial attractiveness of this approach is self-evident, as a license for a software robot is likely to cost less than an onshore staff member or an offshore staff member. Today, thanks to advances by the specialist providers, the software has also become more agile, adaptable, and accessible. There are nonfinancial benefits too, as robot-based process performance is designed to be more predictable, consistent, and less prone to errors compared to a human process, thus reducing operational risk. Moreover, a robot can typically be deployed in a matter of weeks. Once in place, new processes can often be assigned to them in days if not hours. ➔

A license for a software robot is likely to cost less than an onshore or offshore staff member.

Robotics skills

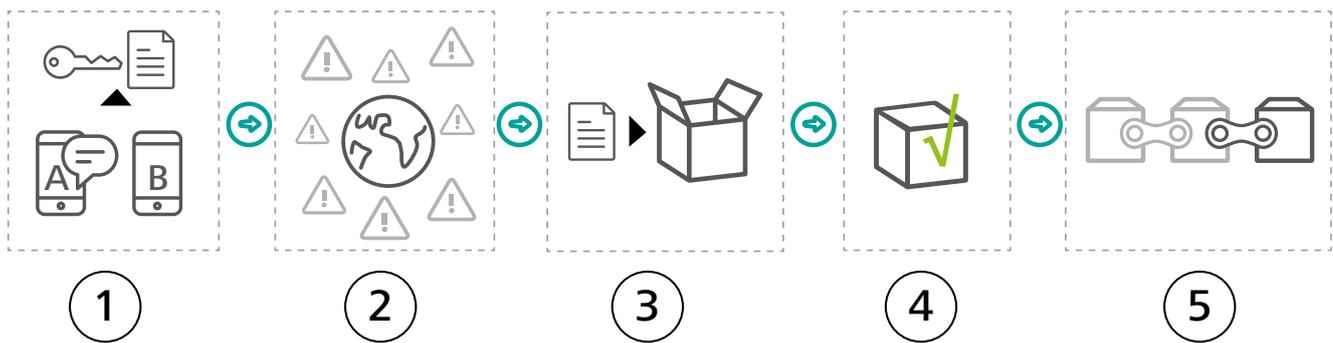


Blockchain explained

The World Economic Forum has forecast that by 2025, at least 10 percent of global GDP will be stored on blockchain platforms. A blockchain is a distributed database for recording transactions where every participant on the network shares a copy of each transaction. By design, blockchain doesn't need a centralized trusted authority to validate transactions. A blockchain stores data in "blocks," or fixed structures. A block's content typically contains a validated list of digital assets and instruction statements, such as transactions made, their amounts, and the addresses of the parties to those transactions. It uses cryptographic

functions to ensure the security of its data. Many industry observers see this aspect as revolutionizing how we interact and do business. It makes trading and post-trading processes more efficient, while improving regulatory control. In addition, smart contracts are becoming a cornerstone of blockchain applications, whereby a computer program is capable of enabling two parties to conclude an agreement which is enforceable using blockchain technology. Since the terms of the agreement are stored on the blockchain, the whole process of conducting business is streamlined as the need for intermediaries and different platforms is removed.

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Cognitive technology explained

Born out of research into Artificial Intelligence, cognitive technology comprises several areas, including natural language processing, computer vision, speech recognition, and robotics. More advanced than bots, cognitive technology mimics human judgement in its ability to recognize handwriting, identify images, and use natural language processing to interpret information. Machine learning capability allows these tools to improve over time and has been the foundation of the rapid advance of robo advisers in the investment management sector.

Though not yet as mature as RPA, Deloitte believes cognitive technology has huge transformational potential. An important emerging trend is where enterprises are starting to employ RPA together with cognitive technologies such as speech recognition, natural language processing, and machine learning to automate perceptual and judgment-based tasks, which were traditionally performed by humans. The uses of AI are potentially limitless, but the tools are also more expensive to deploy than RPA tools and therefore will have a longer implementation timeline.

- Cognitive tools can drive value by improving complex, non-routine tasks requiring an element of judgment and learning
- These tools are rapidly improving in capability, though still in a nascent stage of development
- They are best deployed for narrow, specific business purposes

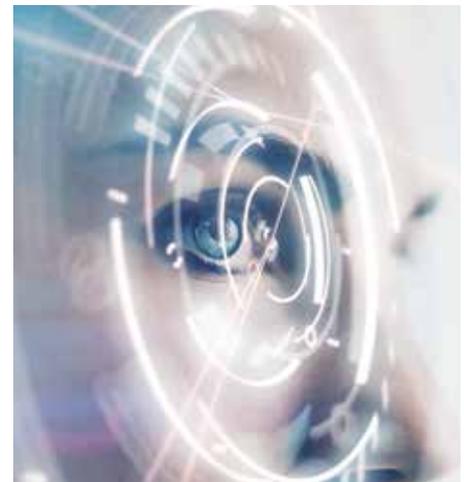
Currently Bank of New York Mellon uses robots to perform many of its trade settlement and data reconciliation functions.¹

Impact, challenges and risks

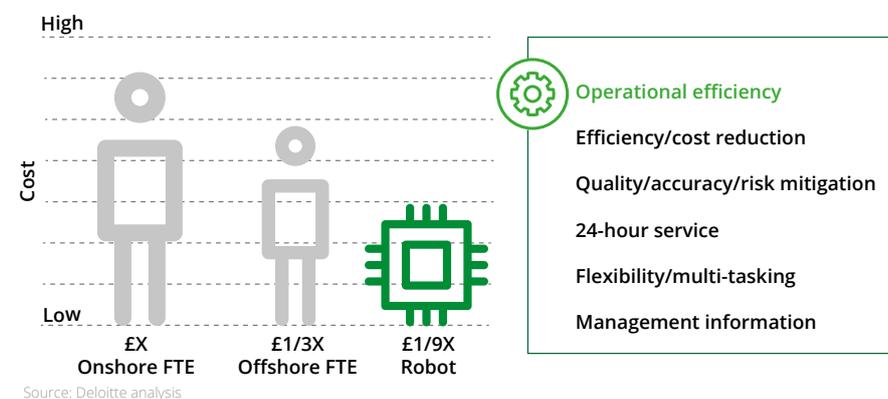
RPA

Deloitte believes RPA will be the first of the disruptive technologies to truly affect the asset servicing market in the immediate term. RPA tools to automate the processing of trade instructions alone have the potential to create significant value for any asset servicer. In addition, benefits also include identifying revenue leakage where invoicing processes were not aligned with price points for fund accounting and custody. Currently BNYM uses robots to perform many of its trade settlement and data reconciliation functions.

India is one of the locations most affected by disruptive technology, as it's where many of the large global asset servicers have significant operations employing thousands as a result of the large scale offshoring initiatives over the last decade. The tasks and processes that have been offshored were identified, documented, and transferred—making them ripe for rapid automation there. Some of those leading asset servicers have already started deploying RPA on a large scale to handle high-volume repeat tasks, and India's banking and financial services sector is a popular location for these early-stage exercises. ANZ Bank's India centers have already successfully deployed 800+ robots within their organization, with plans to deploy a further 250 in the coming year.



Machine learning capability allows these tools to improve over time and has been the foundation of the rapid advance of robo advisers in the investment management sector.



Source: Deloitte analysis

¹ <http://www.americanbanker.com/news/bank-technology/how-bny-mellon-became-a-pioneer-in-bots-1090969-1.html>

Automation is expected to be fully embedded in asset servicing within five years. Sridhar Rajan, banking and securities partner in Deloitte New York, believes that automation won't have replaced people entirely but it will have supplanted some roles. In addition, he foresees automation reducing the headcount by between 60 and 70 percent, leaving FTEs to focus on the last 30-40 percent of the task—a custodian's workforce therefore becomes focused on real exceptions that these tools cannot solve, and start to focus more on real risk. The range of cost savings varies widely but indications suggest an average of 30-40 percent is achievable, however it is important to note that cost savings should not be the sole measure of success.

Blockchain

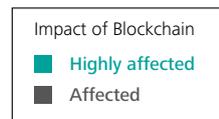
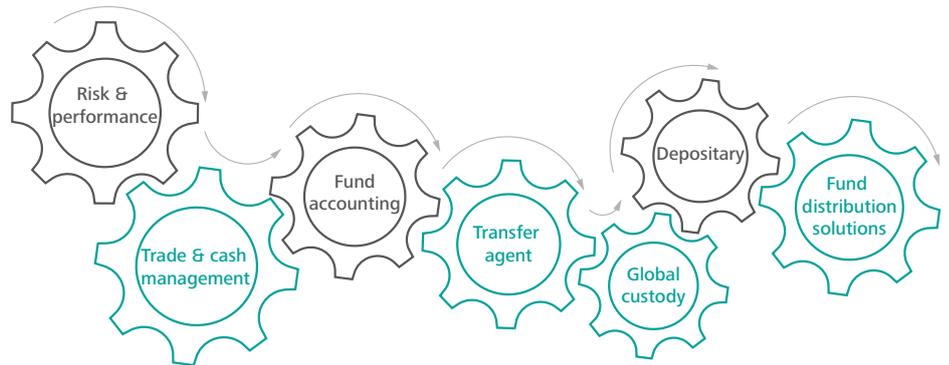
Applied to asset servicing, blockchain would result in a completely redesigned value chain. Lory Kehoe, director and head of Deloitte's EMEA Blockchain Development Centre in Dublin believes that blockchain may eventually go so far as to eliminate the requirement for large parts of today's trade processing and reconciliations operations. If funds are selling directly to investors and this is recorded on the blockchain, it may also remove the need for the transfer agent to monitor subscriptions and keep a share register of participants in the fund, further streamlining the entire value chain.

The function of a custodian is to safe-keep securities and make sure they are assigned to an owner. "Tomorrow, if that

relationship is on the blockchain and has that immutability, and all the transactions are on the blockchain, then that gives you much of the same value as a custodian gives today from an ownership point of view. That piece of their business can be replaced by a blockchain solution," says Eric Piscini, Deloitte Consulting Principal in the US and Deloitte's global blockchain lead.

Whereas RPA can be bolted onto existing technology platforms, blockchain represents a more fundamental, transformational change to asset servicers' IT infrastructure. Mark Heaton, senior manager at Deloitte UK, likens it to "open heart surgery."

Applied to asset servicing, blockchain would result in a completely redesigned value chain.

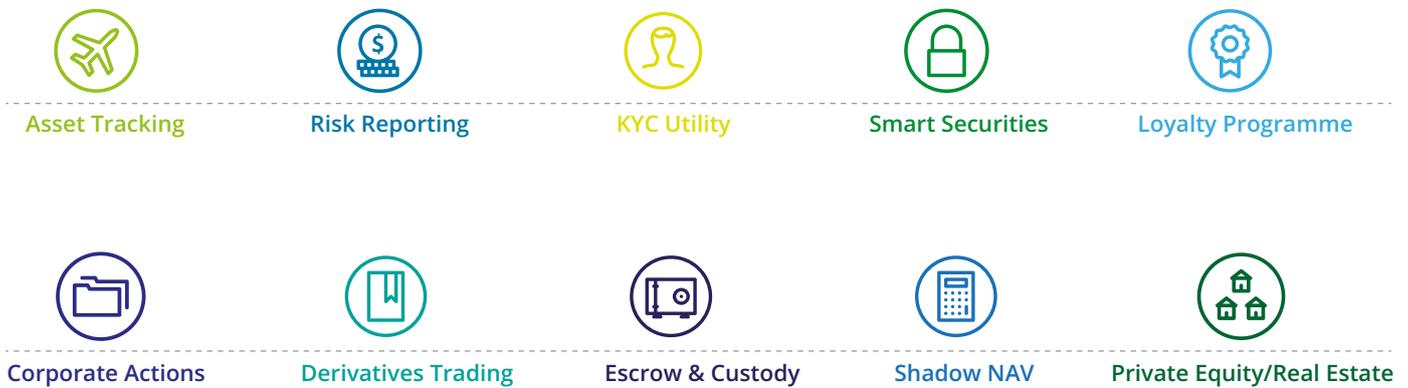


Debate rages over blockchain's readiness for the kind of wide-scale adoption that asset servicers need. Skeptics say the technology has yet to be proven at anything other than lab scale; right now the bitcoin blockchain can currently handle around five to 25 transactions per second which isn't sufficiently fast for what financial service providers need. There are also concerns around anonymity and aggregation: blockchain potentially discloses sensitive information regarding nominee accounts for example, which could lead to confidential information being leaked into the market.

Yet, Benjamin Collette, partner and leader of strategy, regulatory, and corporate finance at Deloitte Luxembourg, expects investors to be the principal beneficiaries of savings resulting from blockchain, with a smaller amount going to the service providers. "Most of the costs will be reduced because automation will streamline the older processing costs and cash settlement value chain, which will result in massive cost savings to the client. We will see the ongoing charges within funds going down dramatically. I think there will be half a billion dollars of savings directly as a result and if you include the potential blockchain impact, you could double or triple that." ➔

Debate rages over blockchain's readiness for the kind of wide-scale adoption that asset servicers need.

Asset/Investment management use cases



Asset servicing value chain



Collette expects blockchain will result in an industry that looks very different from a headcount perspective five years from now. The number of FTEs in the industry will decrease, as many manual tasks such as order processing and cash reconciliation will be encapsulated in a blockchain-like solution. However, Collette anticipates that although there will be significant job losses, there will be job creation in “satellite around the traditional asset servicers” in the form of positions required to operate and run blockchain systems that do not exist in asset servicing today.

Cognitive technology

Sridhar Rajan describes cognitive technology as a stage in a journey—an evolution of RPA seen on a continuum. “RPA is around taking functions that are automated by using software as if it was a human interacting with a machine, and joining the dots. Cognitive systems take their place at the more complex side of the journey. It has some drawbacks: whereas it’s possible to walk back through a process to track an error, that’s not so easy to achieve with cognitive systems,” he says.

It should be noted that increased automation of tasks does not necessarily lead to loss of jobs. Workforce augmentation, rather than replacement, is more often than not the key driver. Lower FTE costs are the logical conclusion from introducing increased automation into a system, but there is increasing evidence to show that the leaders in this area have identified other benefits first. Early movers such as BPOs feared their model was threatened by RPA, so they looked at it sooner and many formed the view that the bigger benefits are increased efficiency and improved customer service. Bots improve processing quality and they enable 24/7 service—cost saving is not necessarily the number one priority.

Preparing for the wave of disruption

Five years from now, the asset servicing industry will look very different. The onward march of disruptive technology calls for a profound shift in thinking among asset servicing providers. If regulation was the driver for the past decade’s activity, the next five years needs to see technology at the forefront of providers’ strategic thinking.

This means scaling investment in technology and the technology organization within their business. In the age of Fintech, tomorrow’s asset servicing organization will be a technology-enabled utility rather than today’s service provider model. There are several core areas where service providers should direct their attention in order to stay ahead:

- Upskill senior management
- Shift hiring plans
- Recruit expertise
- Define success
- Get faster, fast
- Split divisions
- Move up the value chain

Three outcomes are emerging as possible avenues that the asset servicing industry will take over the next number of years. Scenarios A, B, and C discuss the potential impact that disruptive technology will have on the value chain of the asset servicing industry.

Conclusion

Scenario B is the most likely outcome, whereby the value chain will be disrupted but not disintegrate entirely. However, in order to capitalize on the upward growth trend and increase profits, asset servicers will need to invest in new technology to meet the needs of their evolving client base. RPA, cognitive systems, and blockchain will create an asset servicing industry that looks very different to now, but this disruption will happen in stages over the next three to five years. We anticipate a domino effect whereby asset servicers will begin implementing RPA to tackle low-level, repeatable, process-based tasks.





Scenario A

- Slow and incremental Change.
- It is thought that Blockchain is not disruptive because it's going to take time and as such cannot be classified as "disruptive".
- Improved efficiency and cost savings will be felt across the industry.
- Robots and back and middle-office worker work in unison, however robots will not entirely replace humans.



Scenario B

- The value chain will be disrupted by new technologies.
- Costs will be reduced because of streamlining the older processing costs through automation.
- New entrants to the arena such as startups will likely change the industry as we know it today and create a more varied and disrupted asset servicing industry.
- Back and middle-office tasks will no longer be offshored, rather taken back in-house and replaced with new technologies.
- Senior executive members possess a strong understanding of current technology developments in this area.



Scenario C

- The value chain in its current state will disintegrate.
- Significant disintermediation will occur, disrupting the foundations of Asset Servicing as it stands today.
- Wider access to funds for the man on the street and asset servicers will tap into emerging economies.
- New workforce tailored to maintaining this technology. Blockchain will replace the need for intermediaries within Asset servicing, with all service providers operating from the same distributed ledger.
- Self-sufficient investors will no longer require asset servicers to meet their investment needs, consequently Service Providers will have to enhance their offerings in order to retain clients.

They will follow this with blockchain as that technology matures. As RPA becomes embedded, it will pave the way for introducing cognitive technology and artificial intelligence that applies rules and human-like judgement to asset servicing roles.

It's always better to be the disruptor than to be disrupted. Now is the time for asset servicers to start formulating tactical and strategic plans, in order to be ready for when the technologies' tipping point arrives and the waves begin to crash down on the industry. ●

To the point:

- Asset Servicing is the middle and back-office services provided by an administrator or custodian. The industry employs approximately 200,000 FTE's worldwide.
- Disruptive technologies look set to have a profound impact on the Asset Servicing industry with the capability to automate and replace many of the routine, repeatable tasks undertaken by FTE's in this space.
- Deloitte have examined and assessed three disruptive technologies which we believe will have the biggest impact for

our clients in the Asset Servicing industry: robotic Process Automation (RPA), Blockchain and Cognitive Learning.

- These disruptive technologies, combined, offer enormous potential for asset servicers to create efficiency, reduce risk and improve quality of service to clients. Here we describe where these impacts will be felt most, and outline actions that asset servicers can take to ensure they can ride the wave of technology disruption without being consumed under it.



THE GROWTH OF ETFs IN EUROPE

Christian MacManus

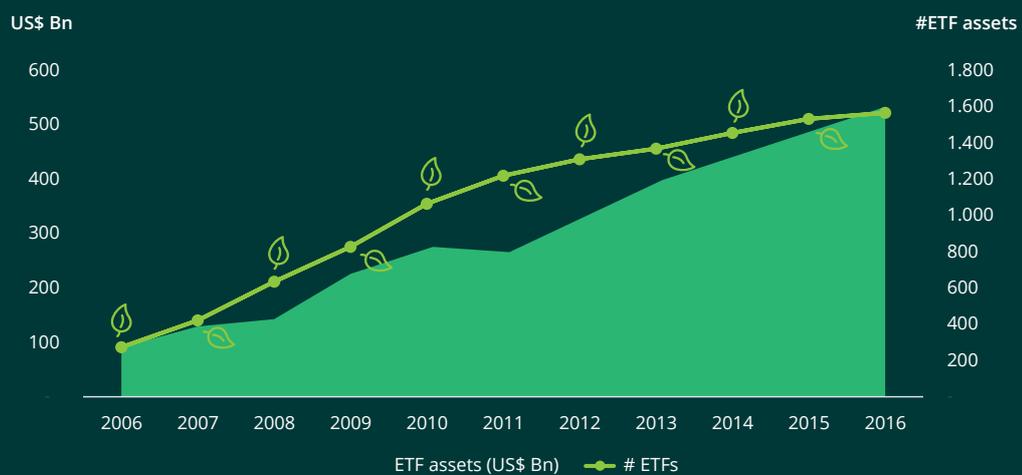
Partner
Audit
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Jack Lee

Director
Audit
Deloitte

The European Exchange-Traded Fund (ETF) industry continues to build on the significant growth over the last 10 years. Promoters for ETFs are developing new products by expanding the nature of ETFs in the market and the assets under management (AuM). As of September 2016, the industry had enjoyed a decade of growth, averaging 20.4 percent per annum in the number of ETFs in Europe and average growth of AuM 20.1 percent per annum.¹ This achievement has been driven by post-credit crisis quantitative easing bull run in the financial markets. ➤

Figure 1

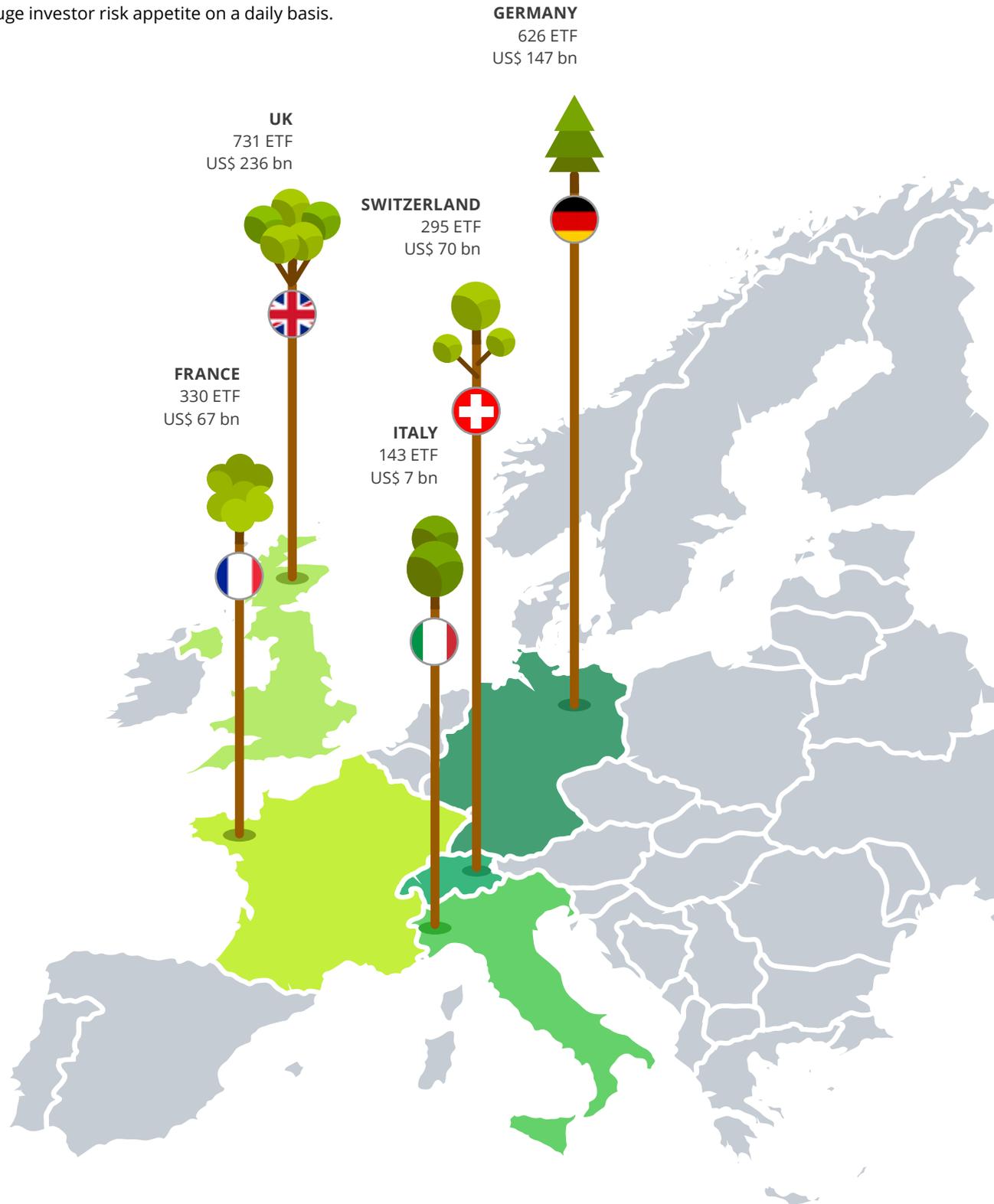


¹ Data sourced from ETFGI

As at the end of September 2016, the European ETF industry had 1,556 products, with AuM of US\$536bn from 49 providers and listed on 24 exchanges across Europe. The top five countries where ETFs are listed are: UK with 731 ETFs, Germany with 626 ETFs, France with 330 ETFs, Switzerland with 295 ETFs and Italy with 143 ETFs. The top 5 countries account for US\$527bn of the US\$536bn of assets in the European market.

The growth in ETFs has resulted in them becoming the barometer for investor sentiment. By watching the flows into ETF asset classes, distributors can gauge investor risk appetite on a daily basis.

Figure 2





Key Drivers

In this environment of significant growth, we see the key drivers for asset accumulation in the industry to be as follows:

- *Low Cost*
- *Liquidity*
- *Transparency*

Low Cost

As with any investment, operating costs vary among ETFs. The last few years have seen a material repricing of ETFs. New entrants have resulted in aggressive market share plays based on low total expense ratios (TER). The weighted average expense ratio for ETF strategies in Europe is 31 bps. The cheapest products track fixed income indices averaging 26 bps, while the most expensive are alternative ETFs averaging 77 bps.

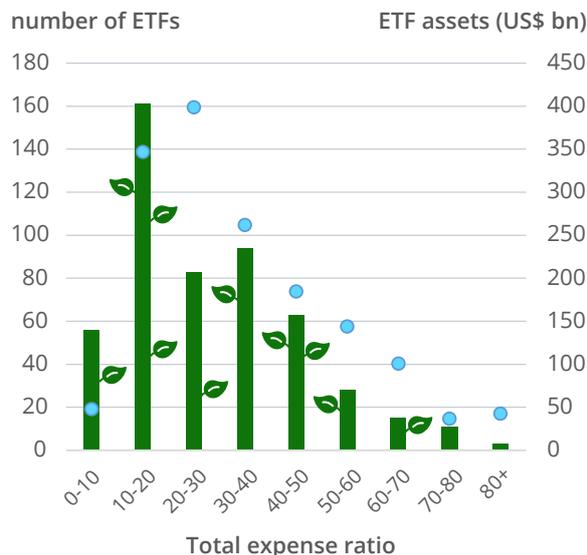
There are a number of ETFs with an expense ratio less than 10 bps. The pressure of lower fees and the lower risk profile for investors is a reason for the significant inflows into fixed income strategies. In the fixed income strategies, the top three promoters, are iShares, with an average TER 25bps, DB has an average TER 20bps and Lyxor has an average TER 17bps.

The market for low TER, bluechip index tracking ETFs is saturated. New entrants can now only compete on bespoke index/factor products or in the smart beta/actively managed ETF space.

Figure 3

| TER (bps) | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80+ |
|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-----|
| #ETFs | 48 | 347 | 399 | 262 | 185 | 144 | 101 | 37 | 43 |
| EFT assets (US\$ Bn) | 56 | 161 | 83 | 94 | 63 | 28 | 15 | 11 | 3 |

| Asset class | ETFs |
|-------------------|------|
| Equity | 32 |
| Fixed income | 26 |
| Commodities | 44 |
| Alternative | 77 |
| Mixed | 65 |
| Active | 34 |
| Inverse | 37 |
| Leveraged | 46 |
| Leveraged Inverse | 42 |
| All | 31 |



In the UK the Financial Conduct Authority (FCA) plans to shake up the funds industry. The FCA published the Asset Management Market Study Interim Report in November 2016 and the key theme coming from the report is that actively managed funds are underperforming their benchmarks after costs are deducted. The UK's asset management industry will need to start to offer investors an "all-in" fee as part of sweeping measures unveiled by the FCA in their report to try to kick-start competition and reduce costs for investors. Any regulation that will be implemented will see a significant amount of flows going the ETF industry. ➔



Over the last decade, ETFs have become an investment of choice compared to mutual funds (passive and active).

Liquidity

Over the last decade, ETFs have become an investment of choice compared to mutual funds (passive and active). This is due to investors believing ETFs are extremely liquid investments as they are traded on the main regulated market exchange. As ETFs are traded during market hours, investors can execute trading strategies to help achieve their investment objectives. However, stock market circuit breakers can cause pricing and liquidity issues for ETFs. This has been exasperated by the record flows into ETFs, particularly, fixed income ETFs. Regulators are concerned about the “liquidity illusion,” while others believe ETFs, as very large owners of fixed income bonds, should be better placed to deal with a potential decline in liquidity.



Transparency

As ETFs are listed on the main regulated market exchange, all their information is publicly available and they generally track a benchmark. The vast majority of ETF investors are still institutional, but there is a shift to retail investors investing into ETFs. When analyzing an ETF you are able to see the NAV (Net Asset Value) price trade during the trading day. This transparency is unlike traditional open-end mutual funds, which do not price their funds until day's end. The investor may not know how much they made or lost with traditional open-end mutual funds. ETF transparency sets a high standard for fund managers or promoters. One is able to see the entire holdings of an ETF on the fund company's website, which is updated daily. One can also see the expense ratio clearly publicized at most research websites such as Morningstar.

Some fund managers have launched a variety of new products that trade on exchanges that are also referred to as ETFs. However, some of these new products may provide less transparency than traditional ETFs that hold physical securities and may inadvertently introduce additional risk for the investor arising from the management, construction, and performance characteristics of these products. Some of these ETFs may be synthetic ETFs that could be highly leveraged, which generates additional risk for investors. As investors look to smart beta and active products, the promoters are finding it harder to create and test new products in the market while achieving speed to the market. These new products will ultimately support the growth of the industry. Smart beta ETFs make up most of the new product launches in 2016, attracting strong inflows from investors seeking greater returns and diversification at a lower cost than actively managed funds. Inflows are particularly strong in Europe, with investors favoring dividend or equity related products.

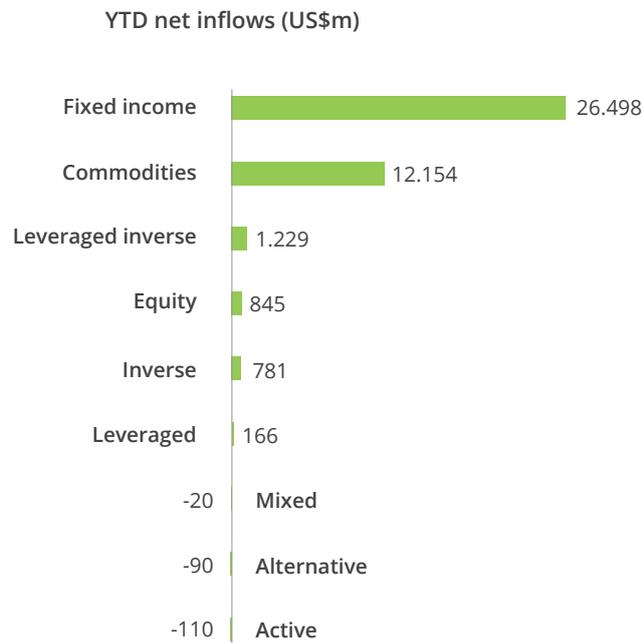
While there are new products being launched, the regulators are looking for clearer labelling of product structure and investment objectives, more frequent and timely disclosure for all holdings and financial exposures, clear standards for diversifying counterparties and quality of collateral and disclosure of all fees and costs paid, including those to counterparties. This is to allow investors to make investment decisions while understanding all of the risks associated with the ETFs.

Growth in Product Strategies

The promoters are keen to anticipate the needs of investors and continue to create new products for investments. The key ETF strategies are as follows:



Figure 3



Fixed income

Fixed income strategies dominated the ETF inflows with over US\$26bn and the launch of 40 new products in the first nine months of 2016. Corporate bond ETFs gathered the largest net inflows year to date (YTD) with US\$14.2bn, followed by emerging market bond ETFs with US\$7.9bn, and high yield ETFs with US\$2.9bn, while government bond ETFs experienced the largest net outflows YTD with US\$2.4bn. There are newer ETFs in the mortgage and credit spreads strategy that create higher risk for investors.

Commodities

The commodities strategy has generated the second largest inflows in European ETFs with US\$12.1bn and ten new product launches in 2016. Precious metals ETFs gathered the largest net inflows YTD with US\$10.2bn, followed by broad commodity ETFs with US\$1.8bn and industrial metals

ETFs with US\$0.2bn, while ETFs providing exposure to energy experienced the largest net outflows YTD with US\$0.03bn. Physical ETFs like gold gather the largest net inflow in relation to precious metals, followed by silver with US\$9.8bn and US\$0.4bn respectively.

Equity

Equity ETFs have generated the bulk of new product launches so far in 2016 with over 87 new products. Conversely, Equity ETFs have had significant outflows in AuM up to July 2016 but it has since picked up inflows between August and September to get back to US\$0.8bn of net inflows during the year. European equity ETFs experienced the largest net outflows YTD with US\$14.7bn, followed by developed Asia Pacific equity ETFs with US\$3.4bn, while North American equity ETFs gathered the largest net inflows YTD with US\$7.9bn,

followed by Emerging ETFs with US\$6.7bn and Global ETFs with US\$4.3bn.

The five largest promoters of ETFs are iShares, db xdb ETC, Lyxor AM, UBS ETFs, and Amundi ETF. Combined they have 963 ETFs with AuM of US\$433bn, representing 76.1 percent of the market. In 2016, the top five promoters have launched 50 new products.

Despite numerous challenges, the market for ETFs will grow substantially over the coming years. The significant inflows over the last few years has shown the growth in ETF products and the benefits will allow investors to have access to ETF products with lower costs, liquidity and transparency. More investor segments will embrace ETFs in a growing number of markets and new firms/promoters will develop new products to enter the market.



The Future of ETFs

We expect ETF assets to continue to grow, and we predict that the industry AuM will reach US\$3trillion by the end of 2020. We also expect ETF inflows to be significantly more than mutual funds (actively managed and passive). Innovation is crucial to the ability of ETFs to meet an ever growing range of needs, and attract an ever wider range of investors. As the industry grows, it is becoming progressively harder for promoters to deliver new products at a lower cost model. There are new threats to current promoters with new market entrants entering the market and there is a need to invest in new technology that will allow for the lower cost model. Some of the opportunities to innovate in the ETF industry are:

Stock Lending

With the lower cost model, promoters are finding it more difficult to generate income. Stock lending is one example where promoters are able to generate additional income. Most managers see stock lending as a positive function. The majority of investors welcome the resulting reduction in cost, and stock lending has great potential to increase the liquidity of ETFs in Europe. Stock lending can reduce the transparency of returns as it could increase the tracking error in ETFs and give physical ETFs some of the features of synthetic ones. If promoters want investors to continue supporting stock lending, they need to be as transparent as possible about lending limits, average lending levels, and revenue sharing policies between the ETF and the promotor and provide details of collateral received by funds.

Distribution Model

One of the key areas that the industry has been slow to be innovative is around distribution models. ETF promoters face the same distribution challenges as all fund providers, in addition the need to educate investors about ETFs and the advantages over mutual funds. The emergence of robo-advisers as an accessible retail channel could overturn this picture. The most obvious application for robo-advisers is direct sales to retail investors. Wealthfront and Betterment's are two robo-advisers in the US. Wealthfront charges a flat

fee of 0.25 percent that applies only to investment amounts above US\$10,000. If you are investing under that amount, you can open an account with Wealthfront and put your money in ETFs for no cost. Betterment's fee structure ranges from 0.35 percent for small balances to only 0.15 percent for balances greater than US\$100,000. No matter which robo-adviser you choose, your TER comes out to much less than it would for an actively managed fund².

Robo-advisers are a golden opportunity, but there has not been significant uptake or development in robo-adviser technology in Europe. The development of platforms to use robo-advisers could take years to reach their potential in many markets. Promoters need to be innovative and consider investor preferences by either buying or launching their own robo-advisers in the markets.

Brexit

There are concerns among promoters and investors on Brexit, which brings a number of challenges to the ETF industry. Currently there is lack of clarity over Brexit and when the UK will actually leave the European Union, and whether agreements will be put in place to allow the UK to have access to the single market. This provides passporting challenges for the promoters based in the UK and also for the distribution of UCITS into the UK investors. There are 731 ETFs listed on the London Stock Exchange that could be affected given that most of those ETFs are not domiciled in the UK. Overall, Brexit may have a negative impact on the ETF market, but this creates more opportunities in other locations for either relocation of promoters or listing the ETF on additional exchanges.

The ETF industry's track record of growth is fascinating. There are so many new mutual fund providers entering the ETF market, which is increasing the competition for ETFs. The increase in passive funds threatens the distinctiveness that has served the ETF industry so well. If ETF providers want to continue growing, we believe that technology, adapting to changing markets, and innovation will be the keys to success. ●

To the point:

- The European ETF industry continues to build on the significant growth over the last 10 years. Promoters for ETFs have continued to develop new products by expanding the nature of ETFs in the market and the assets under management
- Key drivers in this environment of significant growth are low cost, liquidity, and transparency
- We expect ETF assets to continue to grow, and we predict that the industry's AuM will reach US\$3,000bn by the end of 2020

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