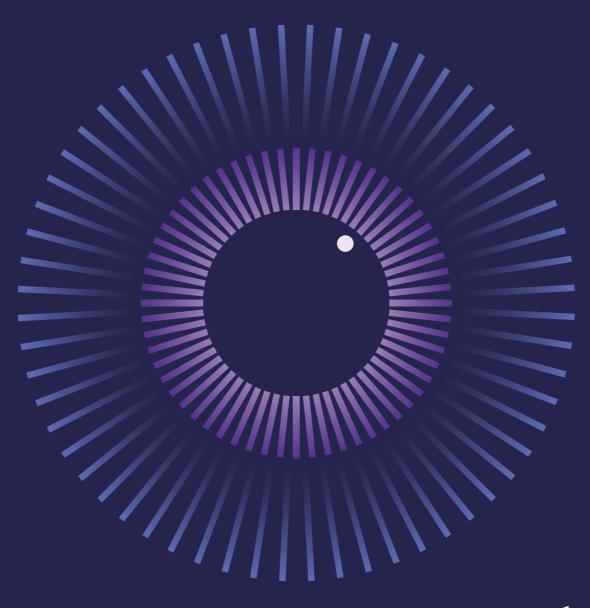
The Future of Asset Management



7 Key Trends Reshaping the Industry









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Editorial

2019 is set to be a defining year for the asset management industry. One year after the implementation of MiFID II - perhaps the most disruptive piece of regulation ever to hit the industry – the shift away from bundled offerings toward fee-based advice has already become evident in Switzerland. At the same time, new technologies are reshaping the sector, commoditizing large parts of the value chain, forcing incumbents to sharpen their value propositions.

But clients are also demanding more from their providers. Inspired by platform models in other industries like tech and e-commerce, clients have higher expectations of their providers with respect to costs, transparency, immediacy and about how they interact with their managers. With such megatrends in place, most players are battling with the effects of higher costs, lower margins, regulatory compliance, and increased client cost--sensitivity. Indeed, a veritable battle to tame operating expenses and reclaim ownership of the client relationship has erupted.

And although the industry still enjoys growth in assets under management, the future is likely to become increasingly turbulent to players ignoring the structural changes taking place in the market.

It is also in this context that we hope you enjoy reading this contribution to the dialogue, and invite you to share your thoughts with us.



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We identified seven key trends that are currently reshaping the industry



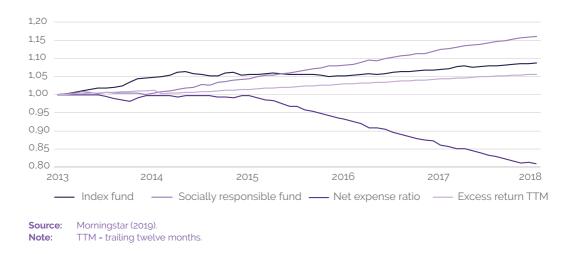


The impact of rising cost sensitivity among end clients

Costs continue to matter. Indeed, cost sensitivity has become the primary determinant of flows through the global asset management community, even eclipsing past performance as a driver **(see Chart 1)**. This is a watershed moment for the industry, not least because data suggests that investor cost sensitivity even trumps their appetite for passive funds, which is another trend that has – incorrectly – been put forward as the primary reason for the investor preference for low-cost products. Indeed, the data suggest that, since 2015, all-in costs for global managed investment products (including funds and ETFs) have been 4x more effective at explaining cross-sectional differences in organic growth rates than whether the investment is active or passive. The same is true for trailing performance. As such, it quickly becomes clear: investors care more about cost than philosophy or track record. This is a simple yet chilling new normal situation – asset managers should take note! 1

Net expense ratio as primary driver of fund flows

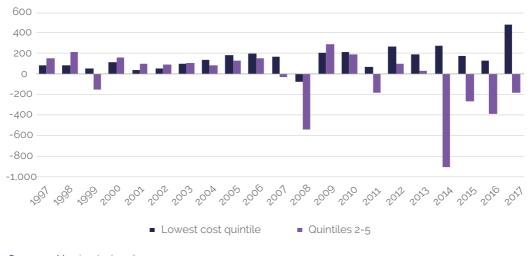
When isolating the unique drivers of fund flows globally, the net expense ratio explains variation in organic fund growth the most effectivly



This increased cost sensitivity is especially pronounced within active funds. Indeed, the cheapest quintile has received higher inflows than ever over the last 8 years at the expense of the four most expensive quintiles (see Chart 2).

2 Low-fee active-managed funds attract flows on costs of its more expensive competitors

Annual net flows (USD billions) into active managed funds divided into cheap funds (low-cost quintile) and higher cost quintiles



Moreover, the emerging investor preference for low-cost products over the past decade has led to a decline in the average asset-

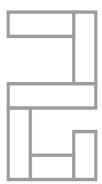
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weighted expense ratios of passive and active products alike over the last decade (see Chart 3).

Average asset-weighted expense ratios are under pressure globally

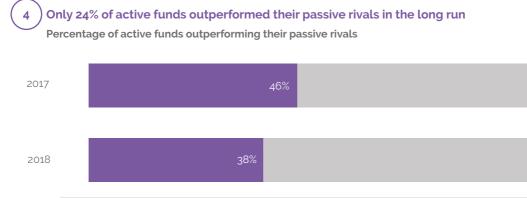


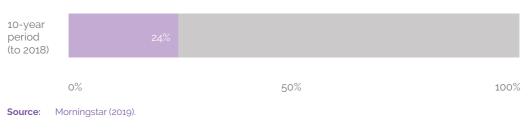
Average asset-weighted expense ratio: Mutual funds vs. ETFs



The elusive quest for alpha and how factor investing could mitigate this dilemma

Most active asset managers are unable to beat their benchmarks after costs (see Chart 4). This reality is particularly pronounced for high-fee active funds. In efforts to offset these challenging odds, factor investing has attracted a lot of attention as way to offer investors better prospects.





Factor investing chooses securities on style and macroeconomic attributes that are associated with higher alpha - or excess return above the market (see Chart 5). Such attributes or factors can include themes momentum (buying winners and selling losers)

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or low volatility (buying low risk stocks and selling high-risk stocks). And importantly, since these strategies can be implemented mechanically, it's another way for asset managers to lower their costs.

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|-------|
| 11,8 | 8,3 | 9,5 | 6,3 | 9,0 | 2,9 | 10,1 | 7,9 | 3,9 | 5,1 | 7,1 | 3,0 | 3,5 | 4,9 | 4,6 | 3,6 |
| 11,2 | 7.9 | 3,8 | 3,4 | | | | 7,2 | 2,6 | | | 2,9 | 3,2 | | 2,1 | |
| 3,2 | 2,8 | 0,9 | 2,0 | 0,9 | 1,4 | 3,9 | | 1,8 | | 4,9 | 1,5 | 2,8 | 2,4 | | |
| 1.7 | 1,8 | -1,3 | | 0,4 | 1,1 | 3,8 | 2,9 | | 3,9 | 1,1 | 0,8 | | 2,1 | 1,4 | 1,1 |
| -0,1 | 1,3 | | 1,0 | -1,4 | 0,5 | 2,9 | 1,3 | -0,4 | 1,1 | 0,8 | 0,6 | -0,6 | -0,9 | -0,5 | -0,5 |
| -0,1 | 1,0 | -3,6 | -0,5 | -1,6 | 0,1 | -18,3 | -0,2 | -0,8 | 0,5 | -0,6 | -3,2 | -1,2 | -2,2 | -0,5 | -2,5 |
| 4,8 | | -0,7 | 22,2 | 49,0 | -33,7 | 35,8 | 4,4 | -9,5 | -6,6 | 41,8 | 17,3 | 17,1 | 10,0 | 10,8 | -17,9 |

Certain factors have consistently outperformed the market

| Factor | Description | | | | | | | |
|----------------------------|-----------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| Size | Premia earned by ranking stocks on market capitalization | | | | | | | |
| Value | Premia earned by ranking stocks on price multiples and growth rates | | | | | | | |
| Momentum | Premia earned by ranking stocks on trailing returns | | | | | | | |
| Volatility | Premia earned by ranking stocks on lowest trailing volatility | | | | | | | |
| Quality | Premia earned by ranking stocks on return on assets and financial leverage | | | | | | | |
| Yield | Premia earned by ranking stocks on total dividend and buyback yield | | | | | | | |
| Developed North America | Premia earned by ranking stocks on exposure to Developed North America regional returns | | | | | | | |

Source: Morningstar (2019).

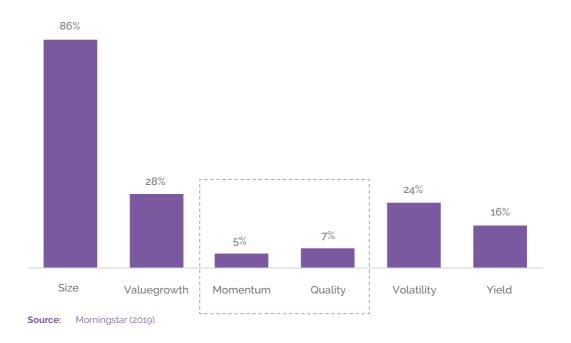
While some factors have been widely implemented (e.g. value/growth and size), others such as low volatility, quality, yield, or momentum are less popular (see Chart 6).

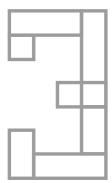
Adopting these factors can thus be a way to generate alpha, beat benchmarks, and consequently stem the tide of outflows facing the high-fee fund community.

Only few funds have a tilt towards less popular factors such as "momentum" or "quality"

% of funds with large exposure to certain factors

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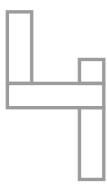


The impact of MiFID II at the end of 2018

MiFID 2 is one of the most disruptive pieces of regulation ever to hit the industry. The directive is already reshaping the distribution model for asset management in two fundamental ways: first, the regulation effectively bans commissions, incentivizing a structural shift to fee-based services; and second, the directive enforces rigorous requirements to provide independent advice in the interest of the client.

One year after the introduction of MiFID 2, predictions that lower research spending would put pressure on brokers' revenues and lead to a more concentrated market seem to have been prescient. Indeed, before the directive, it was common to receive investment research bundled with trading services (the research itself was "free" of charge), which is no longer possible in a post- MiFID 2 world. As such, trading commissions have fallen, and the consolidation wave has only started.

Looking ahead, MiFID 2 is set to have a fundamental effect on the way products are distributed, business models are run, and to the pricing and cost structures of incumbent players. As such, firms that comply with MiFID 2 early are likely to be better off than firms that are simply waiting for as long as possible to develop a clear response.



More consolidation ahead?

Consolidation pressure in the industry is a secular trend. Indeed, players are being forced to join forces by two main drivers: 1) increasing compliance and technology costs on the expense side, and 2) declining fees and slow organic growth for many active managers on the income side. Indeed, the industry as a whole has a high degree of operating leverage (high fixed costs, but low variable costs); as such, gaining scale is invariably an important and effective strategy against margin pressure.

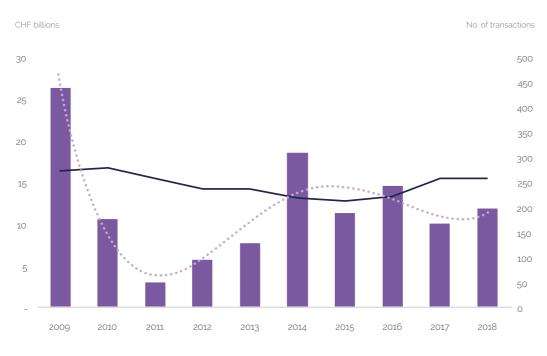
So it is unsurprising to see that merger and acquisition (M&A) activities remained high in 2018 (see chart 7). In fact, deal count in the

years 2017 and 2018 (253 M&A deals) were at their highest level since 2011. Moreover, deal volume reached nearly CHF 11.7 billion in 2018 in the US alone. Recent examples of M&A deals include Invesco's in October 2018 announced plan to acquire MassMutual's fund unit OppenheimerFunds for USD 5.7 billion [1]. This would represent one of the largest deals of the recent years.

Importantly, deals like the Invesco transaction invariably lead to an even more concentrated market. In fact, last year, Vanguard and BlackRock, two of the world's largest managers, were responsible for 57% of global net inflows into passive and active funds [1]. 7

Moreover, the exchange-traded fund (ETF) market is even more concentrated: Of the USD 3.7 trillion market, Vanguard has a share of 26%. BlackRock, State Street and Charles Schwab together control another 60%, reflecting a market in which the biggest four players control 86% of the total [2]. Looking ahead, fee pressure, the evolving impact on technology and high regulatory costs will probably further accelerate the global consolidation wave.

2017 & 2018 saw 253 M&A deals in the US the highest level since 2011

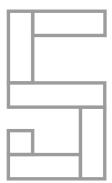


M&A transaction volume within the US Asset Management sector

Total transaction value (CHF bn.) — No. of transactions (right axis) Poly. (Total transaction value (CHF bn.))



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Automation and Al in Asset Management

Automation and artificial intelligence applications is set to be used in three different ways in the asset management industry:

to automate the investment process,
to offer customized solutions and
for better customer support.

First, Automating back-office processes: In contrast to simple automation, robotic process automation ("RPA") can be used for more complex tasks involving many different systems. It is especially useful to automate high-volume, manual, repetitive processes. In financial services, RPA can be used for data maintenance tasks such as transferring data from e-mails and other sources to record systems, to replace lost credit and debit cards and automatically handle system records and client communication, to read documents and extract relevant information through natural language processing and maintain systems. The implementation of RPA reduces costs and typically leads to performance increases. It is estimated that RPA costs are on average 50% lower than offshore back-office employees and 90% lower than onshore back-office employees [1]. RPA can further enhance customer experience and improve the speed and accuracy of processes.

Second, Automated investment decisions: Deep learning can be used to find patterns that allow investment managers to make automated investment decisions that go beyond algorithmic trading in terms of their complexity. Algorithmic trading is the use of computer algorithms to automatically make trading decisions as well as submitting orders [2]. These algorithms react within milliseconds to market updates and new information. Nowadays, those algorithms represent the majority of trading volumes in markets [3]. The key difference AI-centric trading systems exhibit vis-à-vis traditional algorithmic trading is self-learning. In traditional algorithmic trading, the models remain the same and change only by human--hand, while AI-empowered systems use deep learning to adapt the models based to new information. The algorithms are trained in such a way to look for predictive patterns, which getting more accurate as they recalibrate based on past trading successes and failures. Third, Improve advisory relationship through chatbots: Automation can decrease costs too serve customers while increasing speed and availability. This can serve as a differentiator for mass market investment product offerings. Advanced analytics dashboards and reports can be used to both enable the relationship manager to better serve the client as well as better inform the clients through real-time, personalized reports.

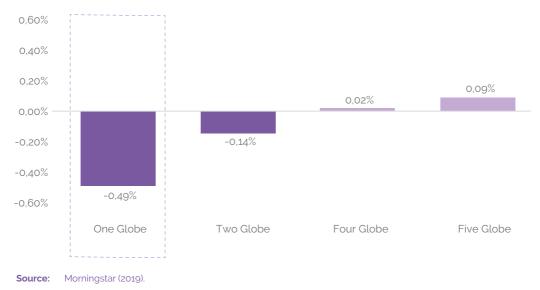




Purpose-driven Investments

Values matter. A study by Morningstar suggests that nearly 75% of investors intend to incorporate sustainable investing into their portfolios [1]. Indeed, sustainable investment strategieshave evolved from focusing only on negative exclusion (e.g. avoiding "sin-stocks" like tobacco or gambling) to positive inclusion (actively seeking responsible investment opportunities) with the goal of outperforming the market while also steering money flows towards companies doing a better job of managing the ESG risks and opportunities. Interesting, the negative exclusion strategy still plays a big role (see Chart 8).

8 Investors rather avoid funds with poor sustainability ratings than seeking funds with high ratings (Morningstar)



Flow Premiums for Morningstar's Sustainability Rating (OneGlobe = worst sustainability rating, FiveGlobe = best sustainability rating)

Purpose-driven Investments.

A further driver of purposeful investment is likely to be the European Commission's (EC) sustainable finance action plan, which purports the following:

- Financial market participants must improve disclosure of how ESG factors are integrated in their investment decisions.
- 2 A unified EU sustainability classification system must define sustainable economic activities.

- 3 The EC will create a new category of benchmarks enabling investors to compare their investments' carbon footprint.
- Existing legislation has to be amended to include ESG preferences of end clients into the investment process.

That would elevate ESG analysis to a legal obligation to fund managers compared to its current matter of professional judgment. [2] As such, the future looks bright for the growing practice of integrating ESG factors into the mainstream investment process.



Robo-Advisory and the disruption of the holy trinity between Brokerage, Asset Management and Wealth Management

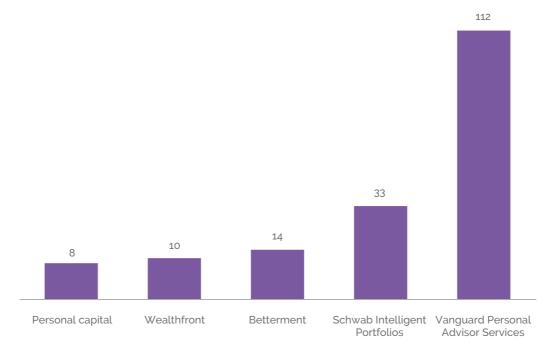
The asset management industry is threatened by increased competition from new entering FinTechs offering robo-advisory services. Robo-advisors are digital investments tools that automate the asset allocation and portfolio selection process for investors based on information they gather through customer profiling.

The advantages of robo-advisory services are lower costs, constant availability and a transparent investment process. As such, they target the mass market and require scale. Robo-advisory Fintechs beat incumbents in terms of customer experiences with seamless digital offerings but they struggle to win clients and gain market share from incumbents. As it turns out, robo-advisory clients generate very low revenues per customer. In addition to that, customers have turned out to be stickier and acquisition costs for Fin--Techs higher than expected. As the revenue per customer can be as low as USD 100 per year, customer acquisition costs (CAC) for most robo-advisors are between USD 300 to USD 1,000 per client [1]. Nevertheless, a number of studies project significant growth of robo-advisory platforms in the future. For example, one study projects AuMs of robo--advisory to increase from USD 330 billion in 2017 to USD 4.1 trillion by 2025 [2].

As a reaction, banks and asset managers have built their own robo-advisory products, combining them with human-based advisory in hybrid models [3]. As the services they offer are standardized, it becomes more difficult for robo-advisors to differentiate themselves from competitors. In fact, while robo-advisory services were first offered by FinTechs, currently the two largest robo--advisors (as measured by AuM) are run by incumbent firms Vanguard and Charles Schwab (see Chart 9) [4]. This suggests that the threat posed by Fin-Techs in the investment management sector is manageable. In fact, building robo-advisory capabilities even offer incumbents an opportunity to cut costs, increase efficiencies, and increase their addressable markets.

(9)

Vanguard dwarfs its competitors in the Robo-Advisory space Robo-Advisory with most AuM (in USD billion) as of August 2018



Source: Robo-Advisor Pros.

Summary and Outlook

The asset management industry is in the midst of an aggressive price war. Indeed, the primary determinant for investor asset allocation is currently fees - ahead of even performance. The big providers Vanguard, Fidelity and BlackRock continue to lower their fees, with new players such as SoFi or Robinhood following suit. Moreover, innovative technologies such as artificial intelligence and robo-advisory further question the existing operating and distribution models, while new regulations affecting investor protection and ESG integration are reshaping the regulatory landscape. Both sides of the cost equation - eroding fees and rising costs -- put enormous pressure on the industry's margins. There are two ways to fight this margin-erosion:

 gain scale, which will likely lead to a more consolidated, commoditized market; or

2) develop niche-products, such as factor investing.

It is in this context that we believe

the trends highlighted in this report are set to further gain momentum.

Redesigning Financial Services, Spring 2019

Appendix: Sources

Chapter 3: The Economist. (2019). MiFID 2 turns one.

Bloomberg (2019). Retrieved on https://www.bloomberg.com/opinion/articles/2018-11-22/autonomous -equity-analysts-give-up-some-autonomy

EY (2016). Retrieved on https://www.ey.com/Publication/vwLUAssets/ey-mifid-ii-the-front-office-impact t/\$FILE/ey-mifid-ii-the-front-office-impact.pdf

Chapter 4: [1] Mercer Capital. (2018). Retrieved on https://mercercapital.com/riavaluationinsights/asset-manager-ma -trends/

[2] Bloomberg. (2019). Retrieved on https://www.bloomberg.com/news/articles/2019-02-25/etf-fees -are-falling-to-zero-as-sofi-plans-first-no-cost-funds?utm_source=Triggermail&utm_medium=email&utm_ campaign=Post%20Blast%20%28bii-fintech%29:%20SoFi%20to%20launch%20free%20ETFs%20%7C%20Singa pore%20P2P%20lender%20nabs%20%2415.2M%20%7C%20Go-Jek%20partners%20with%20insurtech%20 for%20driver%20benefits&utm_term=BII%20List%20Fintech%20ALL

and

Bloomberg. (2018). Retrieved on https://www.bloomberg.com/professional/blog/global-asset-manager -2019-outlook/

Chapter 5: [1] Chandrashekar, A., Kumar, A., & Saxena, A. (2017). Top 10 Trends in Retail Banking 2018 - What you need to know. Capgemini.

[2] Hendershott, T., Jones, C. M., & Menkveld, A. J. (2011, January 6). Does algorithmic trading improve liquidi ty? *The Journal of Finance*, 66(1), pp. 1-33.

[3] Boehmer, E., Fong, K. Y., & Wu, J. (2012). Algorithmic Trading and Market Quality: International Evidence. AFA 2013 San Diego Meetings Paper.

Chapter 6: [1] Morningstar. (2018). Quantitative Analytics Quarterly, August 2018.

[2] European Commission (2018), Retrieved on https://ec.europa.eu/info/publications/180524-proposal -sustainable-finance_de#investment

Chapter 7: [1] Becchi, S., Hamaloglu, U., Aggarwal, T., & Panchal, S. (2018). *The evolution of Robo-advisors and Advisor* 2.0 model. Report, EY.

[2] Silverstein, E. (2018, January 10). *Robo-Advisors Key to Snagging Millennials for Wealth Managers*. Retrie ved October 29, 2018, from Thinkadvisor.com: https://www.thinkadvisor.com/2018/01/10/robo-advisors -key-to-snagging-millennials-for-weal/?slreturn=20181015133933

[3] Neal, R. W. (2016, December 13). *Schwab Announces New Robo-Hybrid Service*. Retrieved November 7, 2018, from WealthManagement.com: https://www.wealthmanagement.com/technology/schwab-announ ces-new-robo-hybrid-service

[4] Statista. (2018, June). Value of assets under management of selected robo-advisors worldwide as of June 2018 (in billion U.S. dollars). Retrieved October 21, 2018, from Statista.com: https://www.statista.com/statistics/573291/aum-of-selected-robo-advisors-globally/ https://www.roboadvisorpros.com/robo-advisors-with-most-aum-assets-under-management/

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