



## German robo-advisors

### Rapid growth, robust performance, high cost

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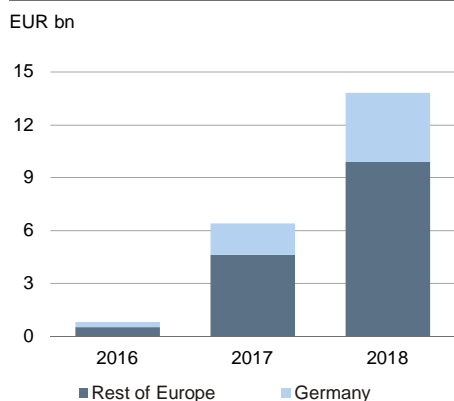
Robo-advice is a new breed in asset management. Robos' assets under management have been growing quickly in Germany. However, the market is increasingly becoming concentrated and competitive.

Robo portfolios have shown relatively robust performance recently. Yet the high costs of robo-advice in Germany are a drag on returns and may alienate potential customers. Current clients, meanwhile, are mostly middle-age, higher-income men rather than millennials.

Advances in financial technology (FinTech) have enabled full automation in a range of asset management services, from client onboarding to portfolio management and rebalancing of these portfolios. The combination of these automated services – by robo-advisors, as they are known – is often regarded as a true innovation in asset management with significant growth potential. Accordingly, there is growing interest in providing robo-advisory services from start-up FinTech firms to traditional banks and established asset management companies, which calls for a closer look.<sup>1</sup>

Adoption of robo-advice in Europe has been fast over the past three or so years. With some EUR 14 bn in assets under management (AuM) at the end of 2018 and around 900,000 clients, the market size and client base of robo-advisory services have about doubled in the past 12 months. Within Europe, the UK has the largest robo-advisor market, followed by Germany. Similar to the European market as a whole, the German market has evolved quickly. Following the first domestic launch in 2013, the number of institutions offering robo-advisors jumped to 40 in just a few years' time. With takeovers and consolidation though, the number of providers came down to some 25 recently. Meanwhile, German robo-advisors' AuM have surged from only EUR 0.3 bn in 2016 to around EUR 3.8 bn in 2018, a tenfold increase. This equals 27% of the total European market. This strong growth has been driven by few large actors. Scalable Capital alone manages more than EUR 1 bn and has a market share of approximately one-third. Following start-ups, banks have also started to expand their robo-advisory footprint, either via their own offerings or via the acquisition of existing start-ups. The fact that institutional players with large and established client networks are entering an already concentrated market points to enhanced competition and a more challenging environment, especially for small start-ups.

AuM of robo-advisors



Sources: Statista, Deutsche Bank Research

<sup>1</sup> For a detailed analysis, see Kaya (2017). Robo-advice – a true innovation in asset management. EU Monitor.



## Robust robo-advisor performance

Robo-advisor returns and their benchmarks\*

	2017 returns	2018 returns
Robo-advisors	3.9%	-5.5%
Actively managed funds	2.9%	-8.5%
Individual ETF investors	8.4%	-5.7%

\*median annual returns (net of fees) for the 8 largest robo-advisors and multi asset funds in Germany.

Source: Deutsche Bank Research

What are the investment strategies of German robo-advisors, and how do they perform? Like their international counterparts, they mainly invest in exchange-traded funds (ETFs). They construct portfolios consisting of equity and bond ETFs whose risk-return parameters or portfolio weights are defined during the client onboarding process when prospective clients fill out online questionnaires. A typical portfolio contains slightly more stock than bond ETFs. For such a portfolio, German robo-advisors achieved an average return of around 4% net of fees in 2017 (data availability prevents an analysis prior to this date). By comparison, actively managed funds with a similar risk-return profile achieved an average return of 3% net of fees. In 2018, when markets were more challenging, a robo-advisor portfolio returned -5½% on average, yet the value of a typical actively managed fund fell by 8½%. Even though actively managed funds yield a greater variety of returns and some of them outperform the average robo-advisor by far, picking the “right” fund is not easy. This is especially true, as active funds often lack a consistent relative performance and may outperform in one year but underperform the next.

As a third alternative, investors can directly participate in ETF markets themselves with little effort. For example, a hypothetical benchmark portfolio may consist of 50% global equity and 50% global bond ETFs. This is relatively easy to construct and would have yielded an annual return of 8% in 2017. In 2018, performance also would have been negative, with a return of almost -6%. Overall, the average returns of robo-advisors over the past two years have been higher than those of actively managed funds, but not necessarily higher than those of self-directed portfolios.

If there is no clear outperformance of robos, why would clients want to delegate management of their financial assets to robo-advisors instead of investing themselves? First, of course, it saves them time and effort in taking care of their portfolio. But more importantly, delegation might help reduce investment mistakes related to financial illiteracy or behavioural biases. For example, individuals often devote limited attention to their portfolios and fail to actively manage their finances. As robo-advisors offer portfolio rebalancing services, they may address the inertia problem of individual investors. Moreover, individuals frequently fail to diversify geographically or across asset classes. They tend to invest in home-country or regional ETFs. Due to overconfidence and extrapolation, they often exaggerate the likelihood of good events and systematically overstate correlations between certain ETFs. As robo-advisors have a more neutral approach to regional assets and diversify globally, they lower potential home-bias. Furthermore, they update correlations almost instantly and minimise systematic biases in favour of certain ETFs.

Robo-advisors have drawbacks, too. Due to their short history, they have no proven track record over a longer period of time. It is particularly uncertain how they might react during times of crisis when volatility is high, correlations are different than under “normal” circumstances and there is general downward pressure on markets. For German robo-advisors specifically, high costs for managing client funds are the most important disadvantage. With a median annual fee of around 1% (plus the ETF cost of about 0.25%), German robo-advisors are much more expensive than their US counterparts with an annual fee of only 0.3%. Obviously, the high costs of German robo-advisors reflect the fixed expenses of setting up such a platform and the so far limited economies of scale. With AuM growing, fees might come down. Another drawback is the fact that passive investing as a concept has its limitations. As individuals become older and wealthier, they may need more complex investment strategies that – by definition – cannot be fulfilled by ETFs and robo-advisors. Yet with the help



of machine-learning tools and big data, algorithms of robo-advisors might still become more sophisticated and thereby address clients' needs better over time.

### Clients are usually not millennials

German robo-advisor clients

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Average age	48 years
Gender	90% male
Median income	EUR 54,000 p.a.
Robo investments	EUR 1,000 - 1,500 p.a.

Source: Deutsche Bank Research

Who are the clients of German robo-advisors to date? Information on their socio-economic background is scarce. First estimates indicate that they are 48 years old on average and therefore not primarily the often-mentioned millennials. About 9 out of 10 robo-advisor clients are men, with annual median income in excess of EUR 50,000. A typical customer invests between EUR 1,000 and 1,500 annually in their robo accounts, a relatively meaningful amount. However, interest in these tools is still modest: only 4% of Germans have so far used a robo-advisor platform, according to an online survey (see Postbank Digital Study 2018). Robo-advisors' AuM correspond to 3% of the volume of the German ETF market. The market for robo-advisors seems to find itself more on the supplier side for now, though this is not uncommon for a new, evolving market.

All in all, several robo-advisors have managed to establish themselves in the German market, but they still have a long, bumpy road ahead of them. For new entrants, it is getting increasingly difficult. To be profitable, all robo-advisors – whether offered by start-ups, banks or asset managers – need to boost their AuM significantly within a few years. On the demand side, Germans to date have shown modest interest in robo-advisor services. Still, 75% of them report interest in financial advice. If robos can add true advice features to their offering beyond financial management, this may strengthen their appeal. Germans are also increasingly using financial technology. For example, 20% of them have a financial app on their smartphone. This means that if German robo-advisors can win over these tech-savvy customers who are keen on advice, they may have considerable growth potential.

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