Financial Technology
A push for passive investments?

19 February 2020
Passive investments surge on both sides of the Atlantic

Huge ETF AuM in the US

<table>
<thead>
<tr>
<th>Year</th>
<th>US (bn)</th>
<th>Europe (bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>785</td>
<td>200</td>
</tr>
<tr>
<td>2019</td>
<td>4,000</td>
<td>1,150</td>
</tr>
</tbody>
</table>

ETFs AuM:
- In the US: USD 4,000 bn in 2019, up from USD 785 bn in 2009
- In Europe: USD 1,150 bn, up from USD 200 bn
- In DE: USD 160 bn, up from USD 60 bn

Small absolute size of the ETF market in Europe
- ETF arrived in Europe later than in the US
- Limited participation of retail investors.
  Retail clients hold
  - 45% of ETFs in US
  - 15% of ETFs in Europe

Sources: Morningstar, Deutsche Bank Research
Broader picture: Household wealth in Europe

— Saving money is near and dear to Germans. Household saving rate
  - DE: 11%
  - Euro area average: 5%

— Cash and deposits in % of households’ financial assets in Q3 2019
  - DE: 42%, a more or less stable figure since 2008
  - IT: 40%, FR: 33%, UK: 26%

— Mutual fund shares in % of households’ financial assets
  - DE: 11%
  - IT: 14%, FR: 6%, UK: 5%

Excludes the category “unlisted shares and other equity” due to significant cross-country differences in measurement and valuation.

Sources: ECB, Deutsche Bank Research
ETFs were not able to replace mutual funds to date in Germany

ETF investments of Germans: Only a fraction of mutual funds

EUR bn, Q3 2019

- In Q3-2019, retail clients held
  - EUR 633 bn in mutual funds
  - EUR 35 bn in ETFs

why were ETFs not able to replace costlier and less liquid open-ended funds to date?

- Mutual funds
- ETFs

Sources: BVI, Deutsche Bank Research
Pay-as-you-go pensions and financial advisory services

— Pay-as-you-go pension plans
  - guarantee certain benefits in retirement and cause low capital accumulation for retirement
  - German retail investors not familiar with newer financial products
    - tend to invest in more traditional alternatives: individual stocks or open-ended retail funds
  - US retail investors more accustomed to managing their retirement funds themselves, thanks to defined contribution retirement plans

— Financial advisory services
  - dominance of the universal banking model
    - banks usually have their own asset management divisions
    - or cooperate closely with external asset management firms
  - favour retail funds of their financial firms or of their partners
Advancements in FinTech may make a difference in ETF investments

— Robo-advisors: digital platforms that offer online advisory services
  ▪ scalable, digital business models
  ▪ cheaper and more efficient compared with traditional financial advisors
  ▪ continuously monitor client portfolios and rebalance
  ▪ limited offer spectrum and investment strategies

— Robo-advisors invest mainly in ETFs, thanks to ETFs’ low cost, transparency and liquidity features

— Most of the early robo-advisors in Germany were FinTech start-ups
  ▪ an increasing number of traditional financial institutions with their own offers
  ▪ after consolidation and takeovers, some 25 robo-advisors in 2019
  ▪ AuM at around EUR 4 bn in 2019, up from EUR 0.3 bn in 2016
Robo-advisors invest mainly in ETFs

ETFs: Robo-advisors' key investment instruments

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ETFs only*</td>
</tr>
<tr>
<td>44</td>
<td>ETFs and other index funds**</td>
</tr>
<tr>
<td>6</td>
<td>Other instruments</td>
</tr>
</tbody>
</table>

*include both ETFs and ETC, **include both active and passive funds

Source: Deutsche Bank Research

Top-down approach to ETF selection

1. Universe of all investable ETFs
2. EXCLUDE ETFs that are/have
   - Leveraged, not diversified, niche coverage
   - Short history
   - Insufficient market liquidity
   - Poor performance

FINAL SET: 3-6% of investable ETFs

Sources: Company reports, Deutsche Bank Research
Who are robo-advisors’ clients? Mainly male and middle-aged …

**Robo-users: Mainly male**

% of clients

- Robo advice
- Asset management

Source: Deutsche Bank Research

**Robo-advisor clients: Mostly middle-aged**

% of clients, age in years

Source: Deutsche Bank Research
… high-income and digital

— Median robo-client income is 3x that of a typical bank client
  - Low-income individuals
    - have limited access to financial services
    - might save on search costs via tapping robo-advice services

— Robo-advisor clients are primarily digital investors
  - eliminate the middle man in the investment process
  - value the autonomy and full control in investment decisions

Source: Deutsche Bank Research
Robo-clients: Approximation of how future generations will deal with financial matters and interact with banks

Robo-clients contact their bank not only online

% of clients

- Online banking login*: 70% (Robo advice), 30% (Asset management)
- Branch visits*: 50% (Robo advice), 50% (Asset management)

*at least once during last 6 months.

Source: Deutsche Bank Research

How do robo-clients receive and process information?

% of clients

- Online information services: 30% (Robo advice), 10% (Asset management)
- Research subscription: 20% (Robo advice), 20% (Asset management)

Source: Deutsche Bank Research
Summary

— Robo-advisors make inroads in Germany
  ▪ Retail investors might partially shift investments from actively managed funds to ETFs
— Current robo-clients are a rather small subset of the potential clients
  ▪ client base will be enlarged by a larger participation of
    ➢ female or low-income clients
    ➢ intergenerational wealth transfers such as inheritance and gifts etc.
  ▪ Robo-advisor might fill the financial advice gap for those who
    ➢ invest smaller sums in financial markets
    ➢ have limited financial market knowledge
— Preferences of current robo-advisory clients a good approximation for future bank clients. Banks should
  ▪ increase their digital offerings
  ▪ invest more in speed in their services
  ▪ keep their traditional access points
Thank you

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