EUROPEAN CENTRAL BANK

BANKING SUPERVISION

Bank-related risks of robo-advisory services

Fintech HO2020 workshop

15/11/2019

Thomas Barkias
European Central Bank

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The views to be presented do not necessarily reflect those of the European Central Bank

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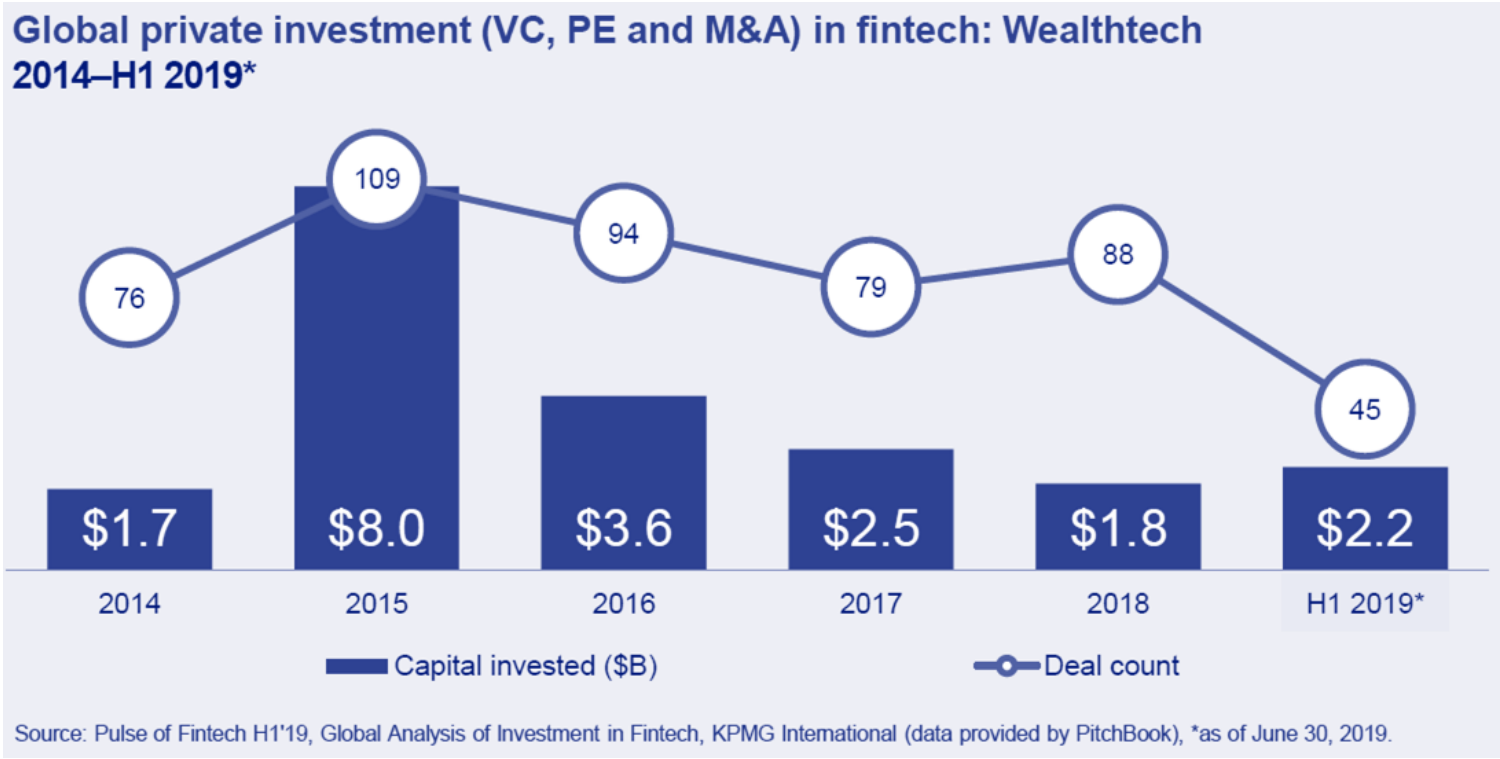
State of play

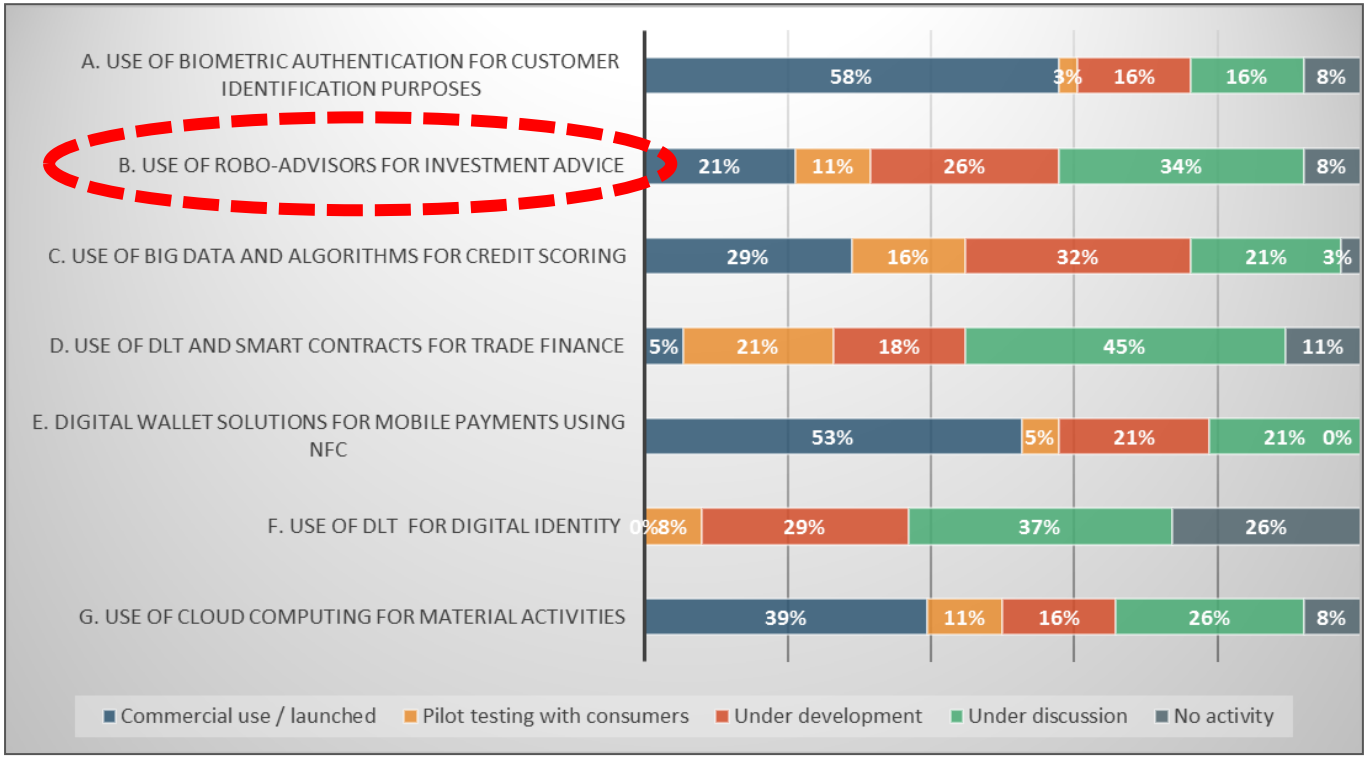
- In recent years, the rapid emergence and growth of robo-advisory services has been partly fueled by digital start-ups looking to expand their capabilities and services

- Dramatic increase in venture capital funding is attested in 2019, mostly powered by several large deals by challenger banks (KPMG)

Robo-advisory investing



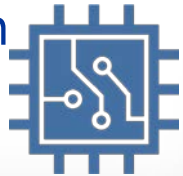
Robo-advisors in the EU



EBA (2018)

Partnerships seem increasingly attractive

Robo-advisory companies receive **necessary funding** and **credibility** from established banks with worldwide presence



Robo-advisory companies

Large and well-established banks get access to **valuable technology and expertise**, with no legacy concerns

Banks

SSM internal analysis

Definition

Robo-advisors (automated investment advisory services) are applications that combine **digital interfaces and algorithms**, and can also include **machine learning**, in order to provide services ranging from automated financial recommendations to contract brokering to portfolio management to their clients, with limited human intervention or none.

Such advisors may be standalone firms and platforms, or can be the in-house applications of incumbent financial institutions (BCBS, 2018)

SSM internal analysis

Potential business model implications for banks

Revenue – robo-advice services are often open to clients with a much lower level of investable capital, especially when compared with more traditional private banking services, and so this could i**ncrease the client base**.

Cost of operations – robo-advisors often invest in exchange-traded funds or mutual funds which enable the construction of globally diversified portfolios, and may therefore **enhance cost efficiency**.

Supervisory focus

Governance and risk management

- ✓ How do banks **oversee the development and implementation** of the robo-advisory model?
- ✓ Have banks **sufficient oversight of third-party tools/providers**?
- ✓ If the development of the algorithm has been **outsourced**, is the **governance process robust**?
- ✓ Has the robo-advisory's **remuneration policy in place and audited**? Does it include a review of the principles of the **fee structure**?

Supervisory focus

Business model risk

- ✓ Do banks include in their business plans an **assessment of vulnerabilities** related to the use of robo-advisory services?

Operational risk

- ✓ How do banks perform **monitoring and testing of the algorithm** that underpins the advice?
- ✓ Have banks effectively implemented **precautionary mechanisms**? (these could include halting services in the event of errors or bias, as well as business continuity plans)

Further considerations

AI-powered robo-advisory tools should be **properly designed**.

Safeguards should be in place to ensure that the advice and services provided are **suitable and affordable for the customer**.

Mis-selling and reputational risks may also have **prudential consequences**.

Currently, mostly **hybrid models** are in use.

It is still too early to tell how such models react in a market downturn – no **full credit cycle** yet.

Questions

Thomas Barkias

European Central Bank

Thomas.Barkias@ecb.europa.eu

DGMS3-Fintech@ecb.europa.eu