

# Tech in finance: opportunities, challenges and policy approach

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## 1. Ongoing digitalisation trends in the financial services sector

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### 1.1. Opportunities from digital transformation in the financial sector

A public representative highlighted the significant acceleration of digital transformation and technological developments that has happened over the last two years, with the Covid crisis, in particular in the financial sector.

At the most macro level, an industry representative explained that the financing of the \$100 trillion world economy is facilitated by a \$6 trillion group of capital markets intermediaries and infrastructures, which are undergoing fundamental change. Particularly in Europe, but also at the global level, building deeper, more integrated and vaster capital markets is a major objective in which digitalisation has a key role to play. One of the tenets of this evolution is to build more democratic markets engaging a greater number of stakeholders and individuals. Digitalisation also involves multiple technological solutions implemented by financial services firms and market infrastructures, which have been investing in core digital systems for decades, and also third-party service providers such as cloud service providers (CSPs) which are playing an increasing role. This is why digitalisation needs to be implemented with an open architecture and in an interoperable way, with partnerships becoming a cornerstone of this evolution.

Another industry representative emphasized that the best way to drive opportunity and growth around data-led innovation is to bring data that is held in different siloed parts of organisations together, harmonise it and use it to benefit the end customer. The industry speaker stressed two key opportunities associated with digitalisation in the financial services sector. First is the creation of new products and services which can be supported by the 'mining' of the data held by financial institutions to gain insights on customer preferences and needs and their potential evolution in the future e.g. in respect of issues such as ESG, which is a key strategic area for many financial services companies. This effort can also be supported by connections with other data sources such as the Google Earth Engine and the related Climate Engine. Embedded finance, with financial services such as credit included in the purchase processes of digital platforms, is another area of growth leveraging digitalisation on the retail side. This provides customers with greater convenience, but it also generates data on customer spending habits and preferences which can be used to drive further business development and new products answering customer needs. This integration of financial services in purchasing processes however needs to be provided in a

safe and compliant way, for which rules around digital identity for example can play an important role.

The industry speaker added that secondly, technology also provides many opportunities for improving risk management to the benefit of consumers. A first example is the use of high-performance computing in the cloud, enabling complex models to be assimilated at high speed, for conducting risk simulations in capital market activities such as trading and asset management. A second example is liquidity reporting. The financial crisis in 2008 showed the importance for central banks of having quick access to liquidity reporting in order to evaluate the liquidity positions of banks. That data can be moved into the cloud, allowing reporting to be performed in hours rather than days.

A policy-maker agreed that there are multiple benefits associated with using digitalisation to its full potential in finance. Digitalisation offers many opportunities in terms of development of new financial products for consumers, including for those who cannot currently access financial services, and also of new forms of funding for businesses, in particular for SMEs, thus contributing to the economic recovery and the building up of Europe's open strategic autonomy. Digitalisation can moreover contribute to enhancing financial stability and market integrity by supporting regulatory and supervisory activities and also help to overcome the fragmentation of capital and banking markets across the Union.

### 1.2. Challenges associated with digitalisation

An industry representative emphasized two key challenges from increasing digitalisation. First, cybersecurity, which is an increasing concern for individuals, institutions and governments and which cloud usage can contribute to tackling thanks to the state-of-the-art security systems and processes used by CSPs for e.g. blocking spams, scanning webpages and testing security protocols. Secondly, data sovereignty is an important issue for European customers that can be addressed through partnerships at a regional or domestic level between CSPs and European tech companies for example, and which may also contribute to enhancing operational risk mitigation.

Another industry speaker concurred that managing data ownership rights and data privacy, so that people are able to have trust in the security of the financial system, and also cybersecurity, are key challenges that need addressing in the perspective of growing digitalisation.

A policy-maker stated that digitalisation should be conducted in a safe and compliant way, with an appropriate mitigation of risks and based on European values. The potential disruptive effect that digital finance may have on business models needs considering in particular. Formally integrated value chains are breaking up with digitalisation and the increasing role of

third-party providers and new companies, such as fintechs, are entering the financial sphere.

## 2. Issues to consider in the policy approach to digitalisation

### 2.1. Finding an appropriate balance between supporting innovation and mitigating risks

An industry representative stated that with rapid digital transformation, the right balance needs to be found between supporting data-led innovation and growth on the one hand and preserving financial stability and customer protection on the other.

A public representative regretted that the industry and regulators often have different views concerning digital and technological evolutions. Regulators tend to be behind the curve, especially with the recent acceleration of digital developments. The challenge for regulators is balancing regulations in order to promote the progress of digitalisation, while ensuring consumer protection in a context where customers are exposed to a new range of risks. There is also the objective to maintain a fair competitive environment among the different players operating in the market i.e. regulated financial firms, tech companies.... This requires notably, preserving data ownership and data protection, preventing fraudulent behaviour and other cyber-risks and ensuring sufficient transparency e.g. in the way data is handled.

A policy-maker suggested that digitalisation requires a new way of looking at regulation because innovation is constant. The current MiCA (Markets in Cryptoassets) proposal, for example, does not explicitly cover decentralised finance (DeFi), which has developed since the initial drafting of the proposal, illustrating the challenge that legislators are facing in terms of adapting legislation to innovation. Building on the principle of 'same risk, same activity, same rules', it is important to carefully consider Europe's system of regulation going forward to ensure that digital finance remains a well-regulated space.

### 2.2. Supporting a democratisation of finance in coherence with European values

Answering a question from the Chair about the implications of democratisation and respecting European values for the financial industry in the context of increasing digitalisation, an industry speaker explained that people in most societies, including Europe, increasingly want to have access to and be involved in wealth creation opportunities. For that to happen, current mindsets and approaches need to evolve in a number of areas. A first area concerns transparency on the way customers' money is handled and used. An increasing number of customers want to make sure that their money is appropriately used e.g. to fight climate change. This involves greater transparency and also the provision of adequate and reliable information about the companies in which savers' money is invested and the actions they are undertaking. Secondly, democratisation also means that customer data itself has become an asset and has value. Solutions need to be

found so that some of the benefit that companies have obtained in using customer data can be given back to these customers. Given the work underway in the areas of ESG and data usage and sharing, Europe has the potential to be at the forefront of these developments.

A policy-maker stated that while the European model aims to achieve better outcomes for citizens on the whole, this is not a reason to overlook or hinder disruptive innovation. Many questions have been raised about how data is collected, handled and shared and who owns it, but in a platform economy it is important for regulators to focus on key issues such as market power and the risks around the use of algorithms in AI based processes.

A public representative agreed that a change is needed in terms of mindset around financial services and markets in Europe and believed that financial regulators and the industry are on the right track for supporting this evolution. First, citizens must be encouraged to put their savings regularly in appropriate investments with a long term perspective in order to avoid losing money on their savings in the current macroeconomic environment. In order to achieve this objective, it is essential to ensure that information is provided in a transparent way and that trust is created, so that more people are inclined to look into the opportunities offered by long-term investment and understand the potential benefit of this for their own wealth, as well as for Europe's economic growth. Secondly, financial institutions must be encouraged by the public authorities to innovate, which is happening with the current focus put on digital developments in European policy proposals. The public representative also noted that a digital euro is now under discussion. This could encourage the start-up industry and SMEs in Europe to start developing solutions for how to implement that in the market. Digital currencies are also an opportunity to attract the younger generations, who are more familiar with these developments, to financial markets.

### 2.3. Allowing a 'test and learn' approach to digitalisation and a right to fail

Answering a question from the Chair about what kind of regulation is needed to support these evolutions, an industry representative explained that the outcome of regulation is best when it fosters innovation, noting that one key element here is the degree to which waste and error are allowed. The global economy is in transition, some new technologies will succeed and some others will fail. In terms of innovation there is therefore a question around the degree of risk-taking that is allowed. Allowing failures is the most effective way to make the European market more competitive, as long as it does not harm individuals beyond an acceptable level. The role of regulators should be to increase the level of participation in financial markets by creating adequate 'rules of the road' that will allow risk-taking without severe damage for customers. In addition it is essential to understand that regulation is not fixed, but must evolve with the market and the understanding of the implications of innovations for customers.

Another industry representative observed that the regulatory regime is evolving and that some tools that enable the process of testing and failing exist. The public

authorities in the EU have created sandbox environments which allow the testing of new digital solutions such as distributed ledger technology (DLT) and crypto ledgers for instance. In this environment, it is possible for supervisors to oversee what is being tested and learn alongside market participants, without waiting for the technology to be fully mature. This approach fosters a shared understanding between the industry and the authorities of the opportunities and challenges associated with these technologies in a transparent and trustful way. The very fast pace of digitalisation across almost every sector since the beginning of the pandemic has produced a huge amount of information that market players together with the regulators need to understand and assimilate, in order to provide regulation that delivers trust and transparency, as well as growth and innovation.

A policy-maker was favourable to allowing a right to fail and setting up sandbox environments where innovations can be safely tested. The MiCA legislation is a good example of this. Provided certain requirements are respected and that the risks are appropriately explained to the customers, anyone can develop and offer a cryptocurrency in the market and can fail in doing so. For a stablecoin claiming to be linked to the euro, stricter guarantees will be needed for customers. These developments including also central bank digital currencies (CBDC) will potentially lead to a great deal of innovation when they are connected to digital platforms and new mechanisms such as smart contracts and should be encouraged. There are however some cases in which it is not possible to grant the right to fail, for example when there is a breach of personal data privacy or if the output of an Artificial Intelligence (AI) system may threaten people's lives. This is why the EU approach to AI is risk-based and the OECD is moving in the same direction. Concerning AI, data manipulations with algorithms should be allowed above a certain level of caution. For example, using AI for marketing purposes is allowed, because customers make the final decision, so long as this concerns consenting adults and not kids, but some other applications that are more intrusive in people's lives may be forbidden.

### 3. EU legislative proposals underway

Comments were made by the panellists on the main EU legislative proposals underway concerning digitalisation in finance.

A policy-maker explained that the Commission published in September 2020 a Digital Finance Package including a digital finance strategy and legislative proposals on crypto-assets and digital resilience, aiming to support digitalisation in the financial services sector. This is part of the broader digital and data strategy being developed by the Commission (which includes the Data Act, the AI Act etc...) and complements it with a more specific focus on finance i.e. sector-specific provisions based on the broader principles of the European horizontal digital policies and cross-references to these horizontal policies. The

Commission is seeking to regulate digital finance with the appropriate mindset, in an innovation-friendly way. An important objective is to clarify the rules for consumers, businesses, service providers and the financial industry in this evolving context, because regulatory certainty and stability are essential for supporting innovation.

This is the approach that was used for example for cryptoassets with the MiCA proposal, where the EU was a first-mover, the policy-maker stressed. There was a deliberate choice to regulate this market so that it could develop quickly within a clear set of rules. Progress is being made on the different proposals of the Digital Finance Package. The dialogues on MiCA will be able to start shortly and hopefully conclude quickly. The dialogues have also started on the DORA (Digital Operational Resilience Act) proposal, with the objective of concluding the legislative process in the next few months, adding an important dimension to the EU regulatory framework on cybersecurity in the financial space. Moving forward, work will also be initiated on open data and what it could mean in the financial sector, in conjunction with the review of Payment Services Directive 2 (PSD2). Open finance opportunities are also being considered for capital markets in the context of the Capital Markets Union (CMU) initiative.

A second policy-maker noted that European regulation is progressing in a number of areas that are important for the digitalisation of the financial sector and will further support innovation in the financial sector. In the same way as the Digital Finance Package, the overall objective of these legislations is to mitigate risks while facilitating innovation and the realisation of the opportunities offered by digitalisation. These initiatives include the proposed Data Act and the previously approved Data Governance Act, which address key issues around data ownership and sharing; the European Digital Identity framework, which will notably facilitate the access of European citizens to online financial services throughout the Union; the AI Act (for financial services, requirements will concern mainly loan provision, for which AI use is considered as potentially 'high-risk' for EU citizens); and cyber-resilience frameworks.

A public representative considered that the legislative process in Europe regarding digitalisation in finance is on the right track. In the Digital Finance Package, the Commission has established the groundwork for supporting on-going digital developments in the financial sector with rules addressing cryptoassets, DLT and digital operational resilience in particular. The fast pace of evolution of technology and digital solutions is however a challenge that will require effective cooperation between the industry and the public authorities.

An industry representative concluded that Europe is leading the way in defining regulation that supports digitalisation while preserving financial stability and benefiting end customers. DORA is a great example of this, particularly in the process that was used to build this legislation, with interaction with and input from the key stakeholders concerned.