

# Implications of digitalisation for the EU financial sector

## 1. Opportunities and challenges of digitalisation

A speaker noted that technological innovation and digitalisation have had one of the most profound effects on the industry and it will become even stronger in the EU. Fortunately, it is one of the key overarching priorities of the new European Commission. The issues have sometimes been discussed in the EU from more siloed perspectives, which should be brought together to define which priorities Europe should adopt for the next five years.

### 1.1. Adapting to fintech agility and encouraging a cultural shift to catch the true opportunities

An industry representative explained that while technology is becoming easy of access for everybody, access to talent is becoming a challenge. Some of the biggest investors in the fintech revolution are the big US banks. Not all fintechs have developed their products fully, and there is a sudden shortage of capacity because the big institutions have decided that it is much easier and cheaper to use the fintechs. The cost-to-serve that the fintechs have brought the banks is very different, so the customer should be benefiting, but the labour cost itself is starting to increase as the same talent is needed. There is a run on talent and technical capacity.

A policymaker shares many of the sentiments concerning convincing FinTechs and BigTechs that moving into the mainstream is the right thing to do. But there is a need to act differently. 'Digital skills' are probably the real challenge for the financial services industry. Some of the talent is not staying in universities, because they can go out into the workplace very quickly and earn plenty of money, and probably not in the financial services sector. The other question to ask is what mix of skills is needed. More than ever in the past, what is needed now is people who can think outside the box and who have different backgrounds.

An industry representative noted that incumbents are trying to adapt. The cultural transformation is probably the most challenging aspect for banks. There is a new environment, with a much more diverse ecosystem and many different types of players. There will be very different types of relationships. It is a very rapidly changing landscape. There is a blurring of the boundaries between sectors. Competition used to be seen from a sectoral and national perspective, but what is happening now is cross-sectoral and cross-border.

An essential issue is the cultural mind-shift, particularly at board level. Boards have traditionally approached projects in a very linear fashion, which is not how fintechs work. Getting the boards to understand and adapt to an agile sprinting methodology is important. In this area, a framework like the UK Senior Managers Regime, is very effective at bringing focus to the board, and there is an opportunity for the regulators to provide an appropriate framework.

Finally, there is the question of managing the new suppliers themselves. Some of the Fintechs understand the new European Banking Authority (EBA) guidelines, but not all. Trying to contract with the fintechs when a banking licence is at risk can

result in difficult conversations, notably with some of the big cloud providers.

It should be pointed out to boards that technology is everything now. There has been a great deal of talk about data and the cloud, but the now real thing to talk about now is artificial intelligence. The new president has issued a challenge for someone to come up with a regulatory framework for AI in the first 100 days of the next European Commission. This presents a blank sheet of paper, and help will be needed to get it right.

### 1.2. Policy priorities to address current challenges

A public sector representative asked what topics, other than cybersecurity, should be on the agenda of the next informal Economic and Financial Affairs Council (ECOFIN).

A policymaker noted that the regulatory framework needs to be fair. That means looking at the plumbing and the issues in terms of data. A more fundamental question refers to the market power of the Bigtech platforms. Over the last five years there has been tinkering with and amendments to the basic regulation that deals with online services, but the fundamental issue of network effects and competition in the market as a whole has not yet been addressed.

On artificial intelligence, there exists also the chance for detaching governance processes from the way that data builds information. Perhaps it is not people but data driving it and AI deciding what goes under which category. If there is a bias, the question is to identify how the system is becoming sociopathic rather than something else.

The current quickness comes from the idea the fintechs can ignore governments. However, governments do matter. Perhaps the new framework for data still requires protection and if everything else that governments do is taken away: it is the protection of citizens that is key. Nonetheless, because regulation is slow it will slow down things. The regulatory technology is also an extremely important aspect. It has to be developed in order to match the data development that is going on.

To make things more difficult, there are no vertical financial services anymore. They are completely horizontal. Perhaps EU governance structures are also challenged by this, because they too are in silos.

An official suggested that all of the topics raised by the panel would probably require several more years. There are many technical details and technical discussions about platforms, technologies and so on, which are extremely relevant, but one question to return to is what the framework is about. The monetary system was created to control the creation of money. There are now attempts to fit into this system the creation and usage of data. That may not work. There may be very fundamental questions about how to develop or evolve existing entities into something completely different.

A Central Bank official added that central banks may, in the future, take over also roles somewhat apart from monetary policy. There could be the consideration of a central bank role as a trustee in establishing public data services, be it a registry for blockchains or a European cloud.

### 1.3. The systemic issues posed by new business as well as technological value chains

An industry representative noted that cloud adoption is becoming mainstream for financial institutions. They are coming to the cloud because they see it as a vehicle to innovate and co-innovate with cloud providers. The cloud is also seen as an opportunity to improve productivity and collaboration within organisations, and to improve security and system resilience.

The cloud has been enabling access to artificial intelligence and machine learning. Much of that technology is used to tackle financial crime and anti-money laundering. The Cloud is becoming a strategic imperative for banks.

Financial institutions were early adopters of private cloud, but the uptake of public cloud is still relatively low. Financial institutions are dealing with the complexity of their legacy infrastructures, and there are nuanced regulatory and compliance regimes. Even compared to other regulated verticals, there is much specificity in finance. On the cultural mind-shift and attitude of the boards and Senior Managers Regime, there are many senior decision makers who ultimately make assessments on the safety and security of cloud solutions, and much trust and education is required to address perception issues. Even in the past few years there has been an increased understanding of the benefits and security capabilities of cloud. Cloud providers have improved and strengthened their compliance programmes. Regulators have also increased their understanding and issued guidance on the outsourcing.

A Central Bank official noted that it can be difficult to understand what should really happen in the industry, which is necessary in order to have the appropriate supervisory approach.

For central banks, as supervisors, supervised entities change quickly and in various respects business models are changing, and operating models are also changing, there are new entrants into the market and the challenge is to keep the risks in the financial sector are still under control in this new environment. The changes are so immense that it has to be a question of whether the supervisory and regulatory environments will have to be adapted to cover the risks in the future.

One example is the unbundling and fragmentation of the value chain. Supervisors might no longer grasp everything that happens in the banks, because elements of the value chain are outsourced to other entities. The outsourcing framework is the bridge which states that the banks cannot outsource their responsibility, but some participants see this as a kind of illusion. When a small bank outsources its core banking system to a cloud provider, they can be asked to have the outsourcing to the cloud provider under control by overseeing all risks and managing the outsourcing arrangement but in practice they may not.

An industry representative noted that fintechs are trying to unbundle the banking business and banks are trying to re-bundle. The eruption of Bigtechs is especially disruptive, because they tend to create digital ecosystems that have several special features. One is based on network effects. They play a gatekeeping role for the ecosystem.

The Financial Stability Board (FSB) and the Bank for International Settlements (BIS) have started to discuss the impact of this on market structure, competition and financial stability. Bigtechs are key providers of critical infrastructure. Cloud is critical; it is not an option but a necessity, and there is systemic implications from this reliance on a few providers of critical financial services.

A particular concern arise from data, because it is the basic element in all of this cross-sector and cross-border competition. There is an asymmetry in regulation, which is a concern. Europe has been the leader as regards privacy regulation, with the general

data protection regulation (GDPR), and as regards open banking, with Payment System Directive 2 (PSD2). While PSD2 requires banks to open access to data to third party providers in standardised terms and real time, GDPR does not imply a similar obligation on the part of other players, including bigtechs. An extension of the open banking standard to other sectors is recommended. To offer value-added services to end users, this data sharing framework must work, and that means a much more ambitious, cross-sectoral and cross-border approach to data sharing.

### 1.4. Supervising technological risks in the new and ever-evolving environment

A Central Bank official explained that the situation is relatively new for banking supervision, which generally takes care of the financial soundness of a company. The technological risks become at least as important as the traditional financial risks, yet supervisory staff are often not yet IT experts.

There is growing interconnectedness between financial services, which is a risk. In addition to PSD2, APIs are an issue. The whole concept of the entity-based supervision, which is the rule in banking supervision, is questioned and challenged by some actors. Proposals to switch to activity-based supervision have been made.

Nonetheless, there are opportunities, and technology can make banks safer than before. From the European point of view, regulation and supervision should not be insurmountable obstacles for innovation. There is also an opportunity here to develop the process of supervision into a system of supervision, where financial stability can be monitored by the authorities with a kind of real-time monitoring.

### 1.5. Sustainability of new techs is an additional regulatory aspect to be considered

An industry representative noted that another big piece is sustainability, which is a critical part of the European agenda, and cloud has a role to play there. When financial institutions are considering their cloud strategies, they need to be looking at sustainability criteria as part of the selection process.

## 2. Key priorities for the political cycle

### 2.1. The importance of regulating data sharing in the new context of AI, contrasting GDPR and PSD2

An industry representative stated that the asymmetry regarding data availability needs to be fixed. The desire is to offer what customers are demanding, which is more and better services. They are used to having things that are immediate, real-time, sometimes free and very user friendly wherever they are. If banks want to provide that then they need to have access to data. Of course, that must be with the consent of the client. Clients should be at the core of all of this. The expectations of GDPR did not realise such a framework.

This idea of extending something inspired along the PSD2 framework, with standardised access to data based on APIs and real-time, to a cross-sectoral framework with users allowing companies to have a complete picture to offer better services is what is needed to improve the insight companies have and the trust of the customer in the services offered. The European Commission is doing a great job on this. There is a regulation of the free flow of data, for example, but there are elements still missing.

It is no doubt not possible to go all the way at once. A more gradual approach is likely needed and more realistic objectives, perhaps focusing on some type of data or some sectors where standardisation is easier to implement.

A policymaker added that GDPR is probably not enough. GDPR has been difficult in practice. The point about business to business data is the right one. The European Commission is onto that. The incoming President's speech talks about AI and

then about using big data and how to approach that. Part of it will be linked to AI, because for a cloud it is important to have data quality and data interoperability for AI to succeed, and that will be facilitated through the cloud in terms of data storage.

The challenge is going to be about the extent businesses should be obliged to share data or be encouraged to share data. Out of the box thinking is needed. Telcos had significant market power as incumbents, and then asymmetric regulation was imposed on them to rebalance the market. In terms of ex ante regulation, it must be done, and competition rules must be used. Commissioner Vestager now has a mandate to look again at the competition rules. The real issue is what is happening upstream because, by definition, the competition rules will remain rather case focused, so there is a need to look ex ante at what needs to be done.

It is provocative to say to banks that they have to get their acts together on payments. The regulatory framework is challenging for them; it takes them longer to get their products approved. There may be a need to look at some of the rules again, such as the e-money directive. There is work to identify what needs to be done to make the playing field fairer in that respect.

A Central Bank official noted, regarding the existing legislation, that things are moving very quickly and the initial ideas for GDPR and PSD2 are from an age before big data. Some elements of the financial regulation might not take into account the new needs for the banks, so there should be a review of all of the legislation under the perspective of digital readiness.

On setting standards, the world is looking to Europe's regulatory measures and initiatives. They are expecting Europe to take the lead to a certain extent, because they might not fully trust the Chinese or American systems in this regard.

An industry representative stated that it ultimately comes down to trust, addressing the skills gap and addressing issues around responsibility. It is a very different topic when talking about AI frameworks, but cloud underpins much AI innovation. A great deal of effort has been invested into developing a responsible framework for an ethical development of AI, and the European Commission has been worked with closely to share some of that work.

A policymaker noted that the AI piece has to come quickly as it is part of the 100 first days of the new EU Commission. It really will be a question of analysing markets. The digital platforms are restructuring the whole economy, so how to frame that has to be queried. It will not be possible to deal with all of the issues, but there can be better framing and then a check of what it means in practice. There is pressure on the big platforms asking what data they will provide. They have data that can stop epidemics, and one question is whether public authorities should have access to that data to be able to do their job of protecting citizens.

The role of governments also appears in the President-Elect's speech on democratic legitimacy. Young people do not believe in going out to vote in the same way the previous generation did. Many people were mobilised for the European Parliament elections, so there is now a reasonably good situation, albeit probably a fairly difficult and unpredictable European Parliament for the next five years.

## 2.2. The need for an effective openness in the ecosystem in the global context

An industry representative explained that from a cloud perspective there are already many debates about the upcoming regulation. Very different models are being discussed at the pan-European level of direct oversight as part of the fintech action plan, and at the global level where FSB is looking at a potentially critical infrastructure designation type of regulation. There are conversations at the national levels with the regulators and central banks. There should be a very practical debate with all of

the stakeholders on what is workable and what would not only mitigate the risk but would also lead to innovation in the markets and encourage competition.

The key focus areas need to be concerned with the openness of the ecosystem. Vendor lock-in is a real problem. Build for open source and for different multi-cloud strategies. The European Commission has been doing fantastic work on the portability code of conduct for cloud providers, but that is probably only an initial step. Much more needs to be done to protect the open ecosystem and to build for a multi-cloud at the policy and legislative level.

An industry representative added that there is also an issue regarding global governance. The case of digital identity in India is very interesting. The programme being pointed to affects many different types of authorities, so it is not only about financial stability. The FSB is doing a great job, but the Japanese G20 presidency suggested that the World Trade Organisation (WTO) should have a role. The Organisation for Economic Co-operation and Development (OECD) also did something in the past. A forum where all of these issues can be looked at together is required.

## 2.3. Catching up with BigTechs, keeping pace with the rest of the world while preserving the EU's technological sovereignty raise essential and urgent regulatory and supervisory topics

An industry representative suggested that what is needed is the sharing of information and a meeting of minds. There are other parts of the world that are very far ahead, and there is a need to perceive what is happening.

A policymaker explained that the answer that the European Commission is giving to the issue of keeping pace with elsewhere is under the idea of technological sovereignty. There is a strategic realisation, which can be seen very acutely in the 5G space in relation to Huawei and what is done in terms of security measures.

A collective European response is being worked on. The new Commission has said that there will be a new industrial policy strategy, and part of that will be about technological sovereignty. The question will be what technological sovereignty means in practice, and also how to be open. It is the big geopolitical challenge currently, especially given what is happening in the rest of the world and the polarisation between the US and China.

An official noted that data has to be opened up and made available to companies in order for them to catch up with BigTechs and the world development, but at the same time there must be caution regarding security. With geopolitics, the hope is to remain open to the extent that technologies can be developed and benefited from. The industrial policy should be about securing things, making sure that consumers are safe, that money is not laundered, terrorism is not financed and that the financial system is stable. Once that is figured out through the institutional changes, then there can be focused thought about how the data is freed and how to get benefits from it.

In this context, the competition policy is very interesting. Those difficult in-between areas should be approached on a free flow of data, scale economies for banks and other entities, and made secure. However, there is the question of how to do that, and the governance on the public side of how to manage that. If the scale of economies is destroyed for the BigTechs, the question is whether that would not also apply to financial institutions. Control should not be lost to AI. For entities, regulation will remain, but activities will have to be figured out very quickly on how to regulate them.

A representative of the industry stressed in this respect, that digitalisation challenges are permanently evolving. In this area there is a huge threat for financial institutions, that adds to the various challenges faced. In such a context finally, the urgent need is for regulation and legislation to catch up quickly, since at the speed the tech industry works at, it will leave regulation behind.

For instance, some recent regulation on payments will soon be superseded. Libra is a wakeup call for the financial services industry, in terms of what is happening on payments. Most of the time, disruptive innovators are trying to serve the market. Consumers are becoming fed up with not having facilities. Consumers want choice, but if they have one way of doing things, and if it is very easy and they can plug everything together, then that is what they are going to opt for. For central bankers, crypto currencies are very challenging, but they need to react quickly, because otherwise the market will try to provide them.

The Chair asked an audience question querying what banks are intending to do with their customers' data coming from Bigtech platforms, since they do not seem to be able to use their proprietary data properly at present. An industry representative answered confirming that the banks are trying to improve the way they do things. Thus, in this challenging environment, banks that try to do their homework should have to opportunity to do things better and compete in this difficult ecosystem. This requires a level playing field. Otherwise, even banks that do their homework will have difficulties competing. What is being asked by financial institutions is to have the opportunity.

However, in addition, the magnitude of the potential financial stability problems stemming from digitalisation, will depend on the extent to which there is an effective level playing field. That is also an issue for regulators. ●