Issues of regulation and oversight in relation to FinTechs and the digital revolution

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Abstract:
The digital revolution is disrupting the financial sector: competition is increasing while uses and practices, as represented by FinTechs, are changing fast. All stakeholders in finance must adapt to a market in the throes of change. New uses are diffusing faster. The lowering of technological barriers is stimulating competition, while changes in regulations are making it easier for innovative newcomers to enter the market. To keep up on these changes while upholding high standards for security, stability and consumer protection, more agile and proportional forms of regulation must be established through closer cooperation among public authorities. Given the changing financial sector, the new technology will be a lever of innovation for regulatory authorities, too.

FinTechs: Players, risks and opportunities

The Financial Stability Board (FSB) has defined FinTechs as "*technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services*".[1] FinTechs are often seen as vectors of innovations for finance.[2]

Despite a still limited volume of business, FinTechs are catalyzing the digital transformation of finance

Though active throughout the financial sphere, FinTechs, taken separately, are often concentrated in specific activities for which they try to offer a comparative advantage in terms of quality or price. They frequently react to market imperfections (frictions, rent-seeking, unserved niche markets). Even though they might propose the financial product or service as traditional establishments, its commercialization, use or the underlying business model are often different.

[1] From the Web page "Monitoring of FinTech" at https://www.fsb.org/work-of-the-fsb/policy-development/additional-policy-areas/monitoring-of-fintech/.

[2] This article, including any quotations from French sources, has been translated from French by Noal Mellott (Omaha Beach, France). The translation into English has, with the editor's approval, completed a few bibliographical references. All websites have been consulted in May 2019.

FinTechs first proved themselves in payment systems. The EU's first directive on payment services (PSD 1 in 2007) allowed businesses other than banks to offer new payment services under an adapted framework of prudential regulation.[3] These "neo-banks" could thus offer everyday banking services without necessarily having bank accreditation (which cost more). Since January 2018, the second directive on payment services (PSD 2) has set up a regulatory framework for the aggregators of online information about payment services and "*payment initiation services*".[4] These players, active in France, run platforms that have gradually expanded into other services: financial advice, bookkeeping, multiservice intermediation, etc.

FinTechs have moved into various financial instruments (loans, bonds, equity…). Often turning away from the analysis of financial statements, they prefer platforms for bringing in touch the parties looking for funding and those able to deliver funds. France's crowdfunding regulations, introduced in 2014, have stimulated this trend.[5] Given network effects and stiff competition, a consolidation of the sector is now expected. To compete with traditional establishments, these new platforms ever more often turn toward institutional investors in order to speed up their own growth and stay competitive in an environment with low interest rates.

FinTechs have also shown interest in investment services. Many of them are trying to improve their investment counseling via new interfaces and innovative algorithms. In addition, blockchain technology could renovate postmarket activities and security trading. In another field, several startups are offering services to insurance companies and brokers: proposals for using big data for setting fee schedules, underwriting or detecting fraudulent activities, or for using connected devices for risk prevention or the development of new sales tools (such as chatbots).

As in payment services and crowdfunding, regulatory trends have been conducive to the emergence of new forces of competition. Cultural and technological factors have also helped lower the costs of market entry. Having reckoned with the massive use of smartphones and high-speed Internet connections, FinTechs have centered the main of their activities around the Web and mobile telephones. As a consequence, they have much lower operational costs than what is needed to run a network of agencies or pay a staff heavy with personnel. Many FinTechs also resort to cloud computing services for their data processing and even lodge their information systems in the cloud.

FinTechs still have a limited share of the market. Many of them carry high historical costs and are having trouble sighting the break-even point. Compared with the mature French market, FinTechs have developed much faster in strongly growing regions (Africa or southeastern Asia), where they bring into the financial system people and businesses who used to be on the outside.

Despite this qualified success of FinTechs, we should not underestimate the digital revolution. As during the Internet's development, the failure of several firms will not keep others from becoming large-scale success stories. Multinational high tech firms are already staking out positions in payment services, group insurance or even loans to e-retailers. Besides, FinTechs, owing to their innovations, are a powerful force spurring the digital transformation in the finance, as the parties active in this sector are well aware. In order to change and innovate, these parties are intensifying their cooperation with FinTechs.

[3] Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market, available at https://eur-lex.europa.eu/eli/dir/2007/64/oj.

[4] Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, available at https://eur-lex.europa.eu/eli/dir/2015/2366/oj.

[5] Order n° 2014-559 of 30 May 2014 on "*participatory financing*", available at https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000029008408&fastPos=1&fastReqId==-704177064&categorieLien=cid&oldAction=rechTexte.

Banking and insurance: Reassign responsibilities all along the value chain

Three factors are shaping the financial sector's evolution:

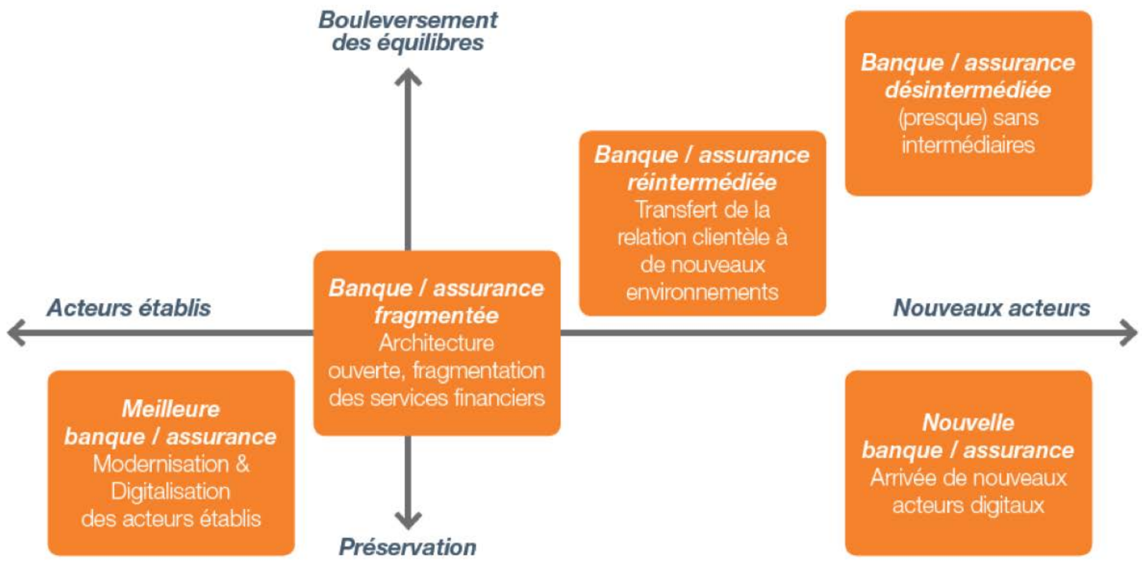
- CUSTOMER RELATIONS AND BEHAVIOR PATTERNS, which are undergoing significant changes. Are financial services ready to switch to a model based on "telerelations" with clients via online connections? Or do clients still expect human advice? Do clients, now more mobile, want to deal with several providers of financial services, or will they still prefer having a single major provider?

- INNOVATIVE USES OF DATA. Given the issues related to data protection (privacy for individuals, trade secrets for firms), how far will clients go in allowing new uses such as cash-back and scoring practices, or methods for detecting fraud?

- THE MODERNIZATION OF INFORMATION SYSTEMS: Can businesses in the financial sector overhaul their information systems — the outcome of a gradual sedimentation of layers of applications — so as to endow them with the flexibility and security necessary for responding to the digital revolution?

We are unable to come up with a single answer to all three questions. However five scenarios can help us better understand the implications of the digital revolution for established businesses in finance (*cf*. Figure 1).

Figure 1: Five scenarios for banks and insurance companies: improvements (modernize and digitize); fragmentation (financial services), re-intermediation (customer relations transferred to new environments), dis-intermediation (quasi absence of intermediaries), newcomers (from high tech firms)



Players in finance have currently aided their strategies at preserving current business models while digitizing processes and incorporating innovations from the outside. Like the Internet revolution, which ultimately consolidated the positions of established players (who invested in online banks), this seems to be a scenario for a successful transformation, for better banking and insurance practices. However some businesses could fail while undergoing this transformation; and newcomers from information and communication technology might replace them, whence a second scenario: newcomers entering the banking and insurance industry.

Rather than copying the integrated, universal banking model, FinTechs are more specialized. This holds, in particular, for payment services, where they have focused on certain services and categories of clients (money transfers, services for e-retailers, etc.). This could lead to a third scenario of a fragmentation of financial services, even more so since consumers tend to play the competition and traditional establishments are opening their business to outside partners — what some pundits call "open banking".

A fourth scenario, more disruptive, could probably result from platforms forming a new layer in between clients and their financial service-providers. Evidence of this "reintermediation" comes from the burgeoning plans for using robots (chatbots, etc.) as intermediaries for taking out insurance policies and aggregators (financial "coaching", etc.). Further evidence is the launching of FinTechs by multinational high tech firms. As shown by the development of Tencent and Alibaba in China, these firms do not seek so much to take risks, which will weigh on their financial statements, as to stake out positions in a stream of business processes (payment services, data processing, brokerage) so as to reinforce customer loyalty.

Finally, some forecasters have imagined an even more disruptive scenario: the very principle of intermediation would be jeopardized by new forms of technology that tends effects an actual "disintermediation", *e.g.*, cryptocoins for payments, crowdfunding in its original form, and other activities in the "sharing economy". At present, this fifth scenario seems less probable given technological limitations as well as the inevitable need to change the handling of risks and market imperfections.

Ultimately, finance will probably still be largely based on intermediation. But the forms taken by this intermediation and the distribution of roles all along the value chain will probably make it evolve.

Implications for regulation and oversight

Set up an adapted, well-proportioned regulatory framework

Regulations are an asset in terms of client and investor confidence. It promotes the sustainable growth of FinTechs. Proof of this comes from the payment services and crowdfunding, which have benefitted from an adapted, well-proportioned set of regulations. Under conditions set by regulations, FinTechs also benefit from the "European passport", which opens access to the markets of other European lands.

Regulations are, however, complicated, in particular for entrepreneurs without experience in the financial sector. These difficulties might form a major barrier to market entry. To orient FinTechs, the ACPR (Autorité de Contrôle Prudentiel et de Résolution, the French regulatory authority which oversees the banking and insurance industry) set up a pole "FinTech-Innovation" in June 2016; and the AMF (Autorité des Marchés Financiers, which regulates the stock market) also has its pole.

The development of FinTechs requires firmer grounds for the principle of proportionality in the regulation of finance. The rules and practices hampering this principle must be identified and analyzed to eventually propose changes or their abolishment. Since the regulation of finance is mainly European, the ACPR formulated such proposals in its response to the European Commission in June 2017.[6]

[6] "European Commission's Public consultation on FinTechs: A more competitive and innovative European financial sector: Joint answer from Banque de France and Autorité de Contrôle Prudentiel et de Résolution (ACPR)", 13p., available via https://acpr.banque-france.fr/sites/default/files/medias/documents/20170615_reponse_consultation_europe_0.pdf.

Boost cooperation among public authorities

The digital revolution raises new issues that cross several spheres of competence for regulatory authorities in the financial sector. In France, the AMF and ACPR have reacted not only by setting up FinTech poles but also by cooperating in the Forum FinTech, a place of dialog and work that, created in July 2016, brings together FinTechs, their partners and public authorities. In effect, some FinTechs or certain activities fall under the oversight of both the AMF and ACPR. For this reason, the CNIL (Commission Nationale de l'Informatique et des Libertés) and ANSSI (Agence Nationale de la Sécurité des Systèmes d'Information) have accepted to be associated with this forum.

The issues related to protecting data and regulating the algorithms used in artificial intelligence are becoming more incisive since the new EU regulation on data protection.[7] Furthermore, the increasing digitization of business processes exacerbates the implications of a large-scale cyberattack on an establishment or information system.

Make more agile regulations with the help of RegTechs

The speed of the technological transformation creates a tension between the stability expected of regulations and the need for agile regulations that boost growth and the diffusion of innovations. In this context, a form of regulation based on principles rather than rules would avoid — without diminishing the innovativeness of firms or the control exercised by authorities — a narrow focus of the regulatory framework on forms of technology or organizations that will soon become obsolete. French regulations about the "internal control" of financial establishments provides a good example of this.[8] They stipulate the basic principles for internal control but place the responsibility for organizing and applying them on the establishment.[9]

Since the new financial ecosystem arising out of the digital revolution has not yet been stabilized, it is normal that regulatory authorities try to feel their way toward reaching a new equilibrium. This gradual maturation must more systematically entail both *ex post* assessments of the existing regulatory framework and an experimentation with new regulations prior to their generalization. French authorities followed this approach for crowdfunding. Using feedback from the experiences acquired since the initial regulations in 2014, they adjusted this regulatory framework in 2016 by providing for "mininotes" (*minibons*) and loosening a few other rules.[10] This method was also used when lawmakers introduced "windows" for experimenting within set limits on new forms of technology, such as blockchains,[11] under the program France Expérimentation.

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[7] The GDPR (General Data Protection Regulation): "Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data", available via: http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1478961410763&uri=CELEX:32016R0679.

[8] Decision (*arrêté*) of 3 November 2014 "*on the internal control of firms in the banking sector, of payment services and of investment services subject to the ACPR's control*", available at https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000029700770&categorieLien=id.

[9] Internal control has to be adapted "*to the size, volume of their activities, their locations and the nature at the scale and in line with the complexity of the risks inherent in their corporate model and their activities*" (Article 4).

[10] Decree n° 2016-1453 of 28 October 2016 on "*securities and loans proposed in the case of crowdfunding*" available at https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000033317337&categorieLien=id.

[11] Order n° 2017-1674 of 8 December 2017 on "*using the arrangements for shared electronic records for the clearing, settlement and transmission of securities*", available at https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000036171908.

In this quest to find a new point of equilibrium, the authorities that enforce regulations and exercise oversight will have to draw on new technology. RegTechs can help financial establishments better meet regulatory requirements. They offer, for example, improved techniques for detecting fraud or suspicious transactions, or biometrics for reliably identifying clients. What is important is for regulatory authorities to accept new forms of technology without attenuating the responsibility of financial establishments for controlling this technology. The authorities that exercise oversight can also benefit from new forms of technology to carry out their assignments (*e.g.*, about the processing of big data in relation to reporting requirements). Since July 2018, the ACPR has taken steps in this direction by relying on the pole FinTech-Innovation and LAB of the Bank of France.