BANCA D'ITALIA

EUROSISTEMA

Quaderni di Ricerca Giuridica

della Consulenza Legale

Competition and Payment Services

Conference Papers

Banca d'Italia, Rome, 16-17 June 2022

Collection of contributions and writings by Vincenza Profeta

December 2022

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Foreword

Vincenza Profeta

In June 2022, the Bank of Italy had the honour to host the fifth event of the international research project about *European legal strategies for payment systems in the open banking age*, led by Siena University, with the participation of Universitad de Alcalá de Henares (Spain) and Warsaw University (Poland), funded by the European Commission. The legal department of the Bank of Italy has also taken part in this research team contributing from the privileged point of view of the National Authority in charge of the smooth functioning of the payment systems.

The research explores multiple aspects of payment services digitalization following the enter into force of the Payment Services European Directive (PSD2) and aims at raising awareness about the benefits and risks of the current EU strategies in the field of digital payment services, with specific regard to the open banking regulatory environment, which involves public and private actors playing a role in different areas, including policy-makers, competent Authorities, credit institutions, providers of payment services, consumers' organizations.

As part of this research, the conference organized by the Bank of Italy focused on the interconnection between payment digital services, open banking and antitrust profiles.

The opening of the banking accounts to new categories of payment institutions, such as Payments Initiation Service Providers and Account Information Service Providers, allows the knowledge and the use of data that were inaccessible in the past. New digital instruments help the evaluation and the classification of a large amount of data that become new fundamental assets for many economic activities in the modern communications society.

In the new payment data market, incumbents and new entrants live together and the competition comes in new forms and with new challenges. The role of banks and their relationship with those that perform new services with technical content may need to change.

The conference was opened by the broad welcome address of Piero Cipollone, deputy Governor of the Bank of Italy, who mentioned the Communication of Bank of Italy published just some days before the meeting, where the Bank of Italy draws attention to the various risks regarding crypto-assets, fraud risk, especially because of the lack of a specific uniform European legislation on this subject at that time.

Four sessions characterised the holding of the conference: the first was dedicated to opportunities and risks linked to new payment services regulated by PSD2*;* the second ("*Beyond PSD2*") was focused on the new European Regulation on Crypto-asset (MiCAR) that was working in progress at that time; the third ("*Banking sector and competition in the age of digital platforms*") explored the innovative role of digital platforms; the fourth ("*The global rise of open banking: new challenges for competition*") was dedicated to new business prospects in the open banking age.

Some Italian and foreign professors took part in the meeting, while many lawyers and public managers of the Bank of Italy and of the Italian Competition Authority also participated with different very interesting speeches. This is the fruit of the excellent tradition of cooperation and exchange of experiences between Bank of Italy, notably its Legal Services Directorate, and the Academia, both Italian and European.

This volume collects the majority of the papers presented at the conference with the purpose to quickly disseminate the results of the reflections made and to contribute to keeping pace with the fast development in the fields of finance and technology, even if we are aware that this work implies the need of endless studying to update our knowledge.

The collective work retraces all the different topics dealt with in the summer meeting. The new services regulated by PSD2, discussed during the first session of the conference, are the general issue common to the first three articles. In particular, the professor Gabriella Gimigliano's article talks about new European governance models in the sector of money and payments; professor Maria Cecilia Paglietti focuses on vulnerability of the digital-financial consumer in the retail digital payments market, and Francesca Provini, executive of the Bank of Italy, analyses the PSD2 rules regarding innovation in retail payments and the market needs from a supervisory Authority's prospective.

Four articles are devoted to the European proposal Regulation on Market in Crypto-asset (so-called MiCAR), which is the first Union attempt to regulate such new intangible asset and particularly the one functioning as private payment instrument: Donato Salomone and Giuseppe Pala, lawyers of the Bank of Italy Legal Services Directorate, examine in depth the new concept of "stablecoins" and the new large category of Fintech service providers with particular reference to those who perform services in crypto-assets, respectively; the professor Maria Rosaria Maugeri's paper is devoted to the consumer protection rules in the crypto-assets' (smart) contracts and the one of professor Filippo Dami deals with tax law aspects.

Competition in the banking sector in the age of digital platform is the issue examined by professors Wolf-George Ringe and Luca Enriques, who analyse very different types of outsourcing and bank-Fintech cooperation and propose some original solutions of supervision. The new antitrust challenges in payment systems are also the topic of the work of the Italian Competition Authority executive Vito Meli. The functioning of the Euro-system platform for instant payment (TIPS) is explained in the essay of Francesco Di Stasio, Bank of Italy's expert, who also analyses some aspects regarding competition between operators in Euro and in other currencies.

Banking data sharing and new business models linked to application programming interfaces (APIs), which are the main technological engine to develop digital products and services, are examined in depth by professor Markos Zachariadis; instead professor Maria Casoria gives us an overview on the

approach to open banking and to principal competition-related issues in European Union and in others selected Jurisdictions outside the Union.

Finally, professor Ciro Gennaro Corvese summed up excellently, *sewing with needle and thread,* the conclusions of the huge number of speeches, and added some interesting final considerations about two of his specific research profiles relating to the insurance perspective and the corporate governance in open finance.

Welcome Address of the Deputy Governor of the Bank of Italy

Piero Cipollone

Ladies and Gentlemen,

I am delighted to open this conference on *Competition and payment services* jointly organised by Banca d'Italia and the law department of the Siena University. I would like to welcome all the participants and the speakers joining us today and tomorrow from many countries. I am also glad to see such a wide and broad geographical representation.

Introduction

The conference is the fifth event of the international research project on European Legal Strategies for payment system in the Open Banking Age (so-called ELSOBA project),[1] led by the University of Siena in which Banca d'Italia also participates. Indeed, the current research topics are of particular interest for us as Central Bank in the light of our institutional functions.

The project aims at raising awareness about the benefits and risks of the current EU strategies in the field of digital payment services, with specific regard to the Open Banking regulatory environment which involves public and private actors who play a role in different areas, including policy-makers, competent Authorities, credit institutions, providers of payment services, consumers' organizations.

This conference will focus on the intersection between payment services and antitrust.

The second Payment Services European Directive (PSD2), adopted in 2015, has allowed third parties to obtain real-time data relating to customers' online payment accounts. This legislative measure encourages competition by promoting access to data and facilitating data sharing without any previous agreement with the bank or the payment institution that provides the payment account.

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[1] The opening event, held by the University of Siena, was conceived as an illustration of the Project and its goals. The subsequent events have been devoted to the analysis of more specific topics covered by the Project: the conference organised by the University of Warsaw (Poland) addressed critical issues pertaining to contracts and payments in the current digital scenarios; the workshop organised by Universitad de Alcalá de Henares (Spain) was devoted to Payment Services entities. The fourth event was a *lectio* given by Prof. Vittorio Santoro about "*la moneta…le monete*".

From a broader perspective, PSD2 lays the foundations for Open Banking, which has proven to be a new competitive paradigm: it allows firms and consumers to enjoy simultaneous and frictionless services and products offered by different providers, so-called Third-Party Service Providers (TPP).

However, sharing account information may also favour the entry of large online platforms and technology companies. Therefore, concerns have been raised over the effectiveness of data portability in fostering market competition.

The use of digital technologies is disrupting existing value chains across the financial services sector, primarily because it is exposing the industry to an increased competition level through innovative digital business models. Furthermore, it empowers consumers and businesses in novel and engaging ways, increasing access, confidence, and overall efficiency.

PSD2: New Payment Services and New Actors

The new payment services explicitly regulated by the PSD2 include payment initiation services and account information services, which provide direct access to online payment accounts. Nevertheless, the opening achieved through these services allows for the possibility of secondary use of payment data, also by other operators, with the owner's consent.

In order to guarantee fair competition across the European Union and to ensure adequate protection for the end-user, a harmonised set of rules has been developed.

The actors willing to provide these services (unless such actors are banks or duly authorised electronic-money institutions) must obtain authorisation from the competent Authority as payment institutions and they will subsequently be under the supervision of the same Authority.

Although the new providers do not manage funds, the risks connected with their activity are significant and arise from the threat of unauthorised payments, computer frauds, fraudulent or misuse of the data.

The legal control over these new actors and their activities aims at verifying their technological capacity, at adequately protecting end-users in terms of correct execution of their payment order and at ensuring protection to payment data accessed by the new providers (AISP e PISP, i.e., TPPs).

The Role of Banca d'Italia as National Competent Authority

In the national context, Banca d'Italia is committed on multiple fronts to maintaining the smooth and efficient functioning of the payment system as a whole. Safe and secure electronic payment services represent a vital condition

for a modern well-functioning payment services market. They are essential for ensuring the protection of users and the development of a sound environment for e-commerce as well as other businesses which leverage payment services.

As the competent Italian Authority according to PSD2, Banca d'Italia is involved in the licensing regime of the Third-Party Service Providers to ensure the new entities comply with all new requirements laid down for them in PSD2. Its supervision activity is carried out continuously and is enforced by the power to impose penalties where the payment service provider does not comply with the rights and obligations foreseen in this Directive or included in the regulatory technical standards.

Payment service providers are responsible for security measures and have to mitigate risks and maintain effective incident management procedures. In this regard, Banca d'Italia takes part in the reporting mechanisms to ensure an updated assessment of their security risks and their measures to respond to these risks.

More generally, to ensure that financial market infrastructures have a high level of cyber resilience, Banca d'Italia is taking action to apply in Italy the EU cyber-resilience testing framework promoted by ECB. At the same time, it waits for the adoption and the entry into force of the DORA Regulation.[2]

The Challenges and Risks of Open Banking in the European Context

The combining of a wealth of data in digital form, the so-called big data, and of progressing in artificial intelligence in data science is fostering the development of a new way to identify with a greater granularity and accuracy consumer habits and preferences.

Open banking is still at the initial stage. It is necessary to consider if the current regulation is an adequate and suitable instrument for addressing the challenges arising out of new technologies or if it should be refined and strengthened.

This is even more urgent if the ambitious 'open finance' framework announced by European Commission will be developed. Such a framework aims to allow customer data beyond the scope of PSD2 to be shared and re-used by financial service providers for creating new and improved services as well as to ensure the implementation of data protection rules and security safeguards.

The level playing field for incumbent and new entrants thought and regulated by PSD2 could be insufficient to guarantee an effective competition among these subjects.

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[2] European Commission Proposal for a Regulation of the European Parliament and of the Council on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014 and (EU) No 909/2014.

In this regard, the recent political compromise between European Council and Parliament about the Digital Market Act and the Digital Service Act could introduce some new useful rules.

Furthermore, in this framework, the European Commission launched a public consultation[3] to gather evidence for the PSD2 review and inform its work on open finance.

Beyond PSD2

In the realm of financial technology, we all are witnessing the spread of crypto-assets that use either distributed ledger technologies (DLT) or equivalent technologies as complementary money. Some of these crypto-assets are developed under the expectation to provide cheap and fast payment services, especially for cross-border and international transactions, in competition with those offered by regulated players, namely payment service providers authorised under PSD2 and payment systems that use legal tender currencies and standardised payment schemes approved by the EPC.

The European Commission proposal for a Regulation on Markets in Crypto-assets (so-called MiCAR), currently at its final stage, provides for regulating all the crypto assets which do not constitute a financial product and establishes specific requirements for asset-referenced tokens, commonly indicated as stablecoins, and e-money tokens as well as providers of related services.

This is a first step towards establishing a system of rules and controls of crypto assets that fosters good innovation and guarantees market stability and customer protection. The political objective is to stimulate innovation and competition between financial service providers, reduce the fragmentation of the digital single market, and ensure that the EU rules on financial services are fit for the digital age.

However, MiCAR addresses only in part the question of how to regulate the platforms and the arrangements, which are the new entities through which technology binds together different participants and affects both the governance and the profiling of financial products and services. It is important to keep thinking how to apply the new regulations in practice and to evaluate whether and how the current set of rules can be deployed to anticipate the coming into force of the MiCAR.

This line of reasoning is fully developed in our communication on the usage of DLT in finance crypto-assets published yesterday (15th June 2022) on our website.

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3 The feedback period lasted from 10th May 2022 to 2nd August 2022.

I strongly encourage and recommend reading it to those interested in the topic.

Finally, I would like to underline that the responsibility for ensuring that infrastructures and arrangements are fit for the needs and preferences of end-users and intermediaries lies primarily with private market forces. Nevertheless, the authorities' role is to ensure infrastructures' safe and sound operation, to counter competitive distortions and market failures, to promote growth-enhancing innovation, to protect end-users and to provide public goods. In the field of payments, this has often led public authorities to resort not only to traditional means as regulation and oversight, but also to investment in key infrastructures. The reference here is to the launch of the TARGET Instant Payment Settlement (TIPS) Service, which will be discuss in depth during the conference.

Conclusions

Let me conclude my speech by thanking, once again, all the speakers and participants for joining us today, in person or remotely. Special thanks go to those who have helped to organize this meeting, especially prof. Alessandro Palmieri, leader of the international ELSOBA project.

This conference brings together leading legal experts from Universities in different countries and government agencies. This will ensure a wide variety of perspectives and a lively discussion. I am sure that you are going to attend a very interesting and productive meeting.

European Law of Money and Payments: Looking across Governance Models

*Gabriella Gimigliano**

Summary: *1. Preliminary Remarks – 2. Hierarchy Governance Model – 3. The Close Connection between the Market and Network Governance Models – 4. Conclusions*

1. Preliminary Remarks

To quote Christine Desan, who addressed money as a legal institution and a constitutional project: "*As societies change the way they engineer money, they change its character and the market it takes. (…) In fact, societies engineer money rather than discovering it. Their work is constant and collective, a matter that involves both public initiative and individual decision-making*".[1] The European money engineering project began in the second half of the 1970s as a negative harmonisation process and then turned into a positive harmonisation process in the second half of the '90s. It entails the construction of an internal market for payments that builds up a European monetary identity based on three pillars: the electronification process,[2] the interoperability of payment systems,[3] and the technological neutrality principle.[4] The policy priority is not only to remove internal frontiers for payments, but also to facilitate peer participation in the financial system through the holding of a payment account with basic features,

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[*] Jean Monnet Chair in EU Money Law, Business and Law Department, University of Siena. This paper has been written within the framework of the Jean Monnet Chair in EU Money Law (EUMOL), 2018 – 2022, based at the University of Siena and chaired by Dr Gabriella Gimigliano.

[1] C. Desan, *The constitutional approach to money: monetary design and the production of the modern works*, in S. Bandelj, F. Wherry, V. Zelizer (eds), *Money talks: explaining how money really works*, Princeton, 2017, pp. 109 ff.; C. Desan, *Making money. Coin, currency and the coming of capitalism*, Oxford, 2014.

[2] ECB, *Electronification of payments in Europe*, in *ECB Monthly Bulletin*, May 2003, pp. 61-72.

[3] On the concept of interoperability, more details in: Committee on Payment and Settlement Systems (CPSS), *The interdependencies of payment and settlment systems*, Bank for International Settlement, Basel, 2008, 10 ff.

[4] See preamble (21), Directive n. 2366 of 2015, of the European Parliament and Council, of 25 November 2015, OJEU [2015] L337/35 (thereafter, PSD2). As is known, the PSD2 replaced the PSD1; this acronym refers to Directive n. 64 of 2007 of the European Parliament and the Council, of 13 November 2007, in OJ [2007] 319/1 (thereafter, PSD1).

and to create a context of trust where payment users feel that their funds, as well as their personal and transactional data, are protected.

This short essay aims to consider governance models from the standpoint of a legal analysis of the construction process for an internal market for payments, arguing for the normative and pervasive role of the network model of governance.

The starting point is the legal concept of the internal market defined as an area without internal frontiers where the "free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaties" and the internal market is the legal basis for the harmonisation process for payments.[5]

As we are dealing with a multi-jurisdictional, trans-national framework with multiple stakeholders working together, the "governance" standpoint seems the most appropriate way of analysing the internal market for payments. Taking Mark Bevir's approach, governance is about "processes of rule more than institutions of government," and these processes increasingly involve organizational hybrids intersecting hierarchy, market, and network.[6]

2. Hierarchy Governance Model

The first governance model concerned is without a doubt the hierarchical model. This is a social organization that

a. provides for a central authority (public or private organization) leading a chain of subordinate units, which are committed to performing specialized functions;

b. works better when the organization concerned has clear purposes;

c. facilitates the allocation of tasks and responsibilities but does not spur on (develop) creative innovation with a view to the final users' needs.

As far as the hierarchical model is concerned, there are two potential central authorities, the Member States and the Union; indeed, the construction of an internal market for payments is an area of regulatory competences shared between the Union and the Member States, and both are entitled to take regulatory initiatives. However, the European regulatory initiative takes priority inasmuch as the legislative proposal meets not only the principle of conferral but also the principle of subsidiarity and of proportionality. Thinking of money as a means

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[5] On the evolution of the harmonisation process for payments, see: G. Gimigliano, *Title VI 'Final Provisions' (Arts 107-117)*, in Id., M. Božina Beroš (eds.), *The Payment Services Directive II. A Commentary*, Cheltenham, 2021, pp. 231 ff.; J. Usher, *The law of money and financial services in the European Community,* Oxford, 2000, p. 6 f.

[6] M. Bevir, *Governance. A very short story*, Oxford, 2012, p. 11 f.

of payment featuring general acceptability, and scriptural money as (payment) services exhibiting positive network externalities, it seems sensible to lay down rules and regulations at the Union level rather than at the national or local level. However, some regulatory concerns have arisen when the hierarchical model of governance is jeopardised by the technical and legal difficulty of separating Union and Member State competences without forgoing the objective of levelling the playing field for service providers and users.

The first point concerns the distinction made between substantive rules and private enforcement mechanisms. This seems to be an aspect of weakness of the European harmonisation process for payment. Indeed, the PSD2 – like the PSD1 – sets out binding rules for duties of information before and after a contract for the provision of payment services is made, but they have not yet harmonised what the legal consequences should be when payment service providers have not fulfilled transparency obligations. This means that national contract law rules will apply, despite – as will be emphasized in the next section – the fact that transparency requirements are also laid down to pursue a pro-competitive objective.

The second point concerns the trade-off between monetary law and the rules and regulations on the discharge of monetary obligations and the harmonisation process for payment services: the first concerns the payer-payee legal relationship, while the second deals with the user-provider contract relationship. The two levels are closely connected in general, and all the more so thanks to the electronification process for retail payments: this process has facilitated the vertical integration of the business value chain for payment services based on a top-down approach, from financial institutions to payees and payers. Therefore, it seems extremely difficult to draw a distinction between the payee-payer relationship pertaining to domestic civil law traditions and the user-service provider relationship at the Union level.[7]

Keeping in mind the above-mentioned features of the Union-Member State relationship, let us look first at Art 107 of the 2015 Payment Services Directive (PSD2). This article establishes that Member States enjoy a certain degree of regulatory leeway only with regard to the 14 directive provisions mentioned. Fourteen out of 117 PSD2 articles seems a negligible number. Therefore, the Union is the main entity leading the chain of subordinate units, while the Member States as subordinate units will implement the PSD2 rules and regulations in compliance with the rationale of the directive concerned.

However, in addition, art 3 provides for a series of exceptions based on a different legal rationale: for business activities which are traditionally considered to be operations of payment services – such as processing bank checks – but are not covered by the electronification process; they either do not entrust the

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[7] On the vertical integration process and the relationship between the user-provider relationship and the payee-payer obligation, see G. Olivieri, *Concorrenza e contratto nei servizi di pagamento*, in V. Santoro (ed.), *Il diritto dei sistemi di pagamento*, Milano, 2007, pp. 175-190.

service provider with the custody or transfer of funds or transaction data, or they are payment services provided among financial institutions, and in both cases the need for retail user protection is inexistent. In the end, they appear to work as limited networks, because the scriptural money concern has a limited scope of acceptability. Therefore, for the exceptions listed in art 3, Member State rules and regulations prevail unless the Union has established a different legal framework elsewhere.

All of the exceptions set out under art. 3 are used to challenge both the role of the Union as the unit leader of the legislative chain and the proper application of the PSD1 among all Member States. The first reaction of European lawmakers was to re-write the directive preambles in PSD2 in order to clarify their meaning. But the exception provisions sometimes still raise legal uncertainties. This happened with the matter of "limited network" exclusions, and the European Banking Authority (EBA) issued some guidelines that – as was foreseeable – apply qualitative rather than quantitative standard measures.[8] Therefore, they cannot *per se* cope with the legal uncertainties, and should be coupled with constant cooperation between the EBA and the national competent authorities. However, as the European Court of Justice stated, although "It is therefore apparent that, by authorising the EBA to issue guidelines and recommendations, the EU legislature intended to confer on that authority a power to exhort and to persuade, distinct from the power to adopt acts having binding force", not only are the EBA guidelines not binding for competent authorities and financial institutions, but "It is true that the issuance by the EBA of guidelines is without prejudice to the right of the EU legislature to adopt, within the limits of the powers conferred upon it by primary law, an act with binding legal effects laying down standards different from those recommended by the EBA, which would then entail disregarding the guidelines concerned".[9] This will impair the EBA's role in the enforcement process.

3. The Close Connection between the Market and Network Governance Models

Since the Züchner case,[10] there is no doubt about the full applicability of Treaty competition rules to the provision of payment services. The market model is a social coordination model featuring a decentralised structure, where price provides people with the information they need to decide what to produce and how much to produce, as well as what to use and how much to use, inasmuch as competition ensures that price conveys correct information.

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[8] For an analysis of EBA Guidelines on the limited network within the PSD2, see: V. Troiano, S. Mezzacapo, *La maggiore convergenza nel negative scope della PSD2: i nuovi limiti applicativi della "limited network exclusion"*, in Rivista di diritto bancario, 2022, 3, pp. 481 ff.

[9] Amplius, F. Annunziata, *The remains of the day: EU financial agencies, soft law and the relics of Meroni*, European Banking Institute Working Paper Series, 2021, n. 106, pp. 1-61.

[10] CJEU, 14 July 1981, C-172/80.

The positive harmonisation process for payments took a pro-competitive approach. This is the case for:

- the prior information requirements to be fulfilled by the service provider to let the prospective customer compare different offers provided for in the 1988 Commission recommendation, in the 1997 cross-border credit transfers directive and more recently in the PSD1 and PSD2;
- information system requirements, so as to improve the "comparison of payment account services and fees and incentivise payment account switching" on a cross-border basis, streamlined in the 2014 Payment Account Directive (hereafter, PAD); the bottom-up standardisation process should – according to European policymakers – encourage consumers' mobility within the internal market;
- consistently, the PAD directive compelled Member States to make comparison websites available free of charge to payment service consumers: these websites should provide consumers with clear, trustworthy, and independent information covering the broadest range of possible offers in order to reduce search costs.

The pro-competitive regulatory strategy has also been carried out at another level: as for payment institutions, European policymakers set risk-based capital and own funds thresholds and drew a distinction between pure and hybrid payment institutions with the aim of removing the legal barrier for the not-bank payment service providers. Consistently, the European lawmakers allowed the payment institutions to grant credit lines and, in this way, they tried to improve competition in the segment of overdraft facilities, a market bottleneck since overdraft price was not driving the choice of current account.[11]

The PSD2 did not revise any of the above-mentioned aspects and, in addition, encouraged competition along the payment service value chain by splitting it up into smaller parts, laying out information account services and initiation account services.

Taking a different standpoint, the construction of the internal market for payment has tried to smooth the rough edges of the antitrust experience by performing an ancillary role. In this way, the two-sided network externalities accommodated in the antitrust experience were also confirmed in the legislative framework, conferring an important normative role on the network model of governance. This is a social coordination model that consists of informal

[11] The overdraft facility as a bottleneck arose from the Cruickshank Report (Office of Fair Trading, *Cruickshank Report*, 2000, in www.hm-treasury.gov.ac.uk) according to which "*the price of the overdraft is not driving the choice of the current account*". See also: N. Ryder, *The Cruickshank report and cash machine charges*, in Business Law Review, 2000, 8/9, pp. 198-201; M. Wolgast, *The Cruickshank report on competition in UK banking: assessment and implications*, in Journal of Financial Regulation and Compliance, 2001, 2, pp. 161-170; C. Graham, *Competition law and UK retail banking*, in World Competition, 2013, 3, pp. 425-428.

relationships among the actors and presupposes a high level of trust among them, but the actors begin to cooperate for mutual advantage; it differs from hierarchy because it does not usually contain an authoritative centre to resolve disputes among the members, and it differs from the market because the actors engage in "repeated and enduring exchanges, often relying on trust and diplomacy rather than prices and bargaining".[12]

As economics studies have underlined,[13] payment services not only exhibit positive network externalities, they also look like two-sided markets. In addition, they require mechanisms to re-allocate the cost of the provision of payment services among the two sides of this market, as well as some vertical integration clauses; while the multilateral interchange fee pursues the first objective, honour-all-cards and non-discrimination rules, as well as the non-surcharge rule, are instrumental in the latter function.

The question now is to what extent antitrust jurisprudence and legislative action recognize the two-sided network externalities. There are at least two cases worthy of mention here. The 2002 Visa case,[14] as well as the Eurocheque International case,[15] told us that – whatever the payment instrument concerned – the only provisions necessary for the operation of four-party payment schemes are creditor bank's obligation to accept any payment validly entered into the system by a debtor bank and the prohibition of (ex post) pricing by one bank to another. More recently, with the 2014 Cartes Bancaires judgement, the Court of Justice held that "*Having therefore found,* (…) *that there were 'interactions' between the issuing and acquisition activities of a payment system and that those activities produced 'indirect network effects', since the extent of merchants' acceptance of cards and the number of cards in circulation each affects the other, the General Court could not, without erring in law, conclude that the measures at issue had as their object the restriction of competition within the meaning of Article 81(1) EC*".[16]

Consistently, although multilateral interchange fees (MIFs) were not deemed necessary to the operation of two-sided payment platforms, this was considered a restriction by effect rather than by object, and the Commission came to the conclusion that they could be temporarily exempted because they were able to improve efficiency rolling down the advantages to the final users, as long as MIF fees were transparent and cost-based. At the legislative level, the 2015

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12 M. Bevir, *Governance*, cit., p. 27.

13 D.S. Evans, R. Schumalensee, *The economics of interchange fees and their regulation: An overview*, MIT Sloan Working Paper, May 2005; N. Economides, *Competition policy in network industries: An introduction*, June 2004; J.C. Rochet, J. Tirole, *Two-sided markets: An overview*, March 2004; K. Hemppainem, *Competition and regulation in European retail payment systems*, pp. 24 ss.; D. Evans, *The Antitrust economics of two-sided markets*, Joint Center, September 2002; J.C. Rochet, J. Tirole, *Platform competition in two-sided markets*, November 2001.

14 Commission decision of 24 July 2002, in OJ [2002] L318/17.

15 Commission decision of 10 December 1984, in OJ [1985] L35/9.

16 Commission decision of 26 February 2014; CJEU, 11 September 2014, C-67/13P, § 64.

MIF Regulation[17] set a cap on the MIF fee for credit card transactions and was inclined "to ensure that debit card fees are set at an economically efficient level, taking into account the structure of domestic debit card markets, the possibility to express interchange fee caps as a flat rate should be maintained". Establishing a cap to the fee rate, this Regulation recognized the role of the MIF as well.

In addition, going through the Visa and Mastercard antitrust cases, honour-all-card and non-discrimination rules are never prohibited as vertical integration clauses, although it is admitted that they constitute a competition restriction,[18] while the PSD2 has allowed Member States to continue applying the non-surcharge rule "taking into account the need to encourage competition and promote the use of efficient payment instruments".[19]

4. Conclusions

The network model of governance is at the crossroads between hierarchy and market, creating a bridge between them. This means that the payment system as a vertically integrated two-sided market becomes the normative paradigm of the legal framework, not only in public enforcement – namely, in the oversight activity of the monetary authority – but also in the private enforcement of European payments law.

Now, it might be interesting to investigate the consequences of this approach and how it may influence the allocation of responsibilities and risks among network matchmakers, payment service providers and users, as well as to investigate the consequences for the construction of the monetary obligation in the national legal system, especially after the Digital Market Act came into force.

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[17] Regulation n. 751 of 2015, of the European Parliament and the Council, of 29 April 2015, in OJ [2015] L123/1.

[18] Compare: Commission decision of 19 December 2007 (Mastercard case); Commission decision of 29 April 2019 (Visa case).

[19] See Art. 62(5) PSD2.

The Vulnerable Digital Payment Systems Consumer. A New Normative Standard?

Maria Cecilia Paglietti[*]

Summary: *1. Introduction – 2. Politics of Consumer Payment System Law: Between Inclusion and Protection – 3. Users, Consumers, Citizens – 4. Rise and Reconfiguration of the Concept of Consumer – 5. Sources of Vulnerability for Payment Services Consumer – 5.1 Low-Income (Economic Vulnerability) and Law (the Negligent Consumer in the PSD) – 5.2 Age: Payment law as Elder Law? – 6. Consequences of Vulnerability for Party Autonomy – 6.1 Protection by Design (on the Market Side) – 6.2 Digital-Financial Diligence (on the Consumer Side) – 7. Redress Vulnerability: Enforcement*

1. Introduction[1]

I will be presenting a topic related to the vulnerability of the consumer in the retail payments market. Specifically, my presentation aims to conceptualize the figure of the digital systems payment consumer, a figure subject to two separate – and *ex se* relevant – sources of vulnerability: digital vulnerability and financial vulnerability.

This issue grow out on questions raised by complainants during my experience at the Italian Banking and Financial Ombudsman (Arbitro Bancario e Finanziario), which is an is an out-of-court alternative dispute resolution system (ADR) based at the supervisory Authority (the Bank of Italy) and aims to solve disputes between customers and banks and other financial intermediaries.

So as Ombudsman (or Ombudswoman, if I must be politically correct) I had seen numerous disputes related to payment services (as mainly encountered by customers with payment cards who were complaining of fraudulent use in respect of online transfers: basically a matter of Dir. 2015/2366 – better known as PSD2 – enforcement). This is the reason why I have been considering this topic for the last couple of years and been conducting research on the subject.[2]

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[1] Throughout this article, gender-specific terms have been used in order to ease the textual flow. Whenever a gender-specific term is used, it should be understood as referring to both genders, unless the contrary is explicitly stated.

[2] See, for instance, M.C. Paglietti, M. Rabitti, *A Matter of Time. Digital- Financial Consumers Vulnerability in the Retail Payments Market*, in European Business Law Review, 2022, 4, pp. 581-605.

The paper will be divided into three parts.

In the first part an attempt will be made to define the taxonomy of the digital payment consumer.

After establishing the main factors of vulnerability, I will move forward trying to identify the legal consequences of vulnerability at the intersubjective level.

The third part deals with the enforcement issue and the need for more consistency in the application of relevant rules across Member States.

2. Politics of Consumer Payment System Law: Between Inclusion and Protection

Up until a few years ago, the expression 'vulnerable consumer' would have been interpreted as a pleonasm since the consumer was *per se* considered vulnerable.[3]

Now, on the contrary, vulnerability is a key argument in the consumer law debate: the main part of present-day European scholarship nowadays attempts to define the limits and characteristics of vulnerability in consumer law (especially in regulated markets).[4]

This change in the cultural and legal landscape is due to a number of factors.

In the first place, the role of constitutional and fundamental rights has increased in private law and there has been a shift from a market-based approach towards a broader consumer-human right approach.

Further, in the specific field of finance, after the 2008 crisis we have come to recognize the social role of the credit markets and of the new role for consumers in mature credit economies, consumer credit being charged with public policy functions, that are supposed to perform both economic and social task. This implies an additional shift towards a policy paradigm which promises to promote both competition, safety and financial inclusion. Credit is now seen as a potentially dangerous product which requires a product safety in relation to regulation.[5] Moving towards the democratization of credit (associated with

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[3] H.-W. Micklitz, *The Consumer: Marketised, Fragmentised, Constitutionalised*, in D. Leczykiewicz, S. Weatherill (eds.), *The Images of the Consumer in EU Law: Legislation, Free Movement and Competition Law*, Oxford, 2016, pp. 21-42: 32.

[4] L. Waddington, *Exploring vulnerability in EU law: an analysis of "vulnerability" in EU criminal law and consumer protection law*, in European Law Review, 2020, 45, pp. 779-801.

[5] I. Ramsay, *Changing Policy Paradigms of EU Consumer Credit and Debt Regulation.* D. Leczykiewicz, S. Weatherill (eds.), *The Images of the Consumer in EU Law*, cit., pp. 159-182: 161; accordingly financial products should then be analyzed through a products paradigm rather than a contract paradigm: O. Bar-Gill, E. Warren, *Making Credit Safer*, in University of Pennsylvania Law Review, 2008, 157, pp. 1-101: 6.

the Anglo-Saxon model of credit), consumer finance regulation is now linked to social exclusion.[6]

In these terms, the debate has focused mainly on access to credit, over-indebtedness and responsible lending,[7] but on a basic financial services and, thus, on consumer payment system law.[8]

3. Users, Consumers, Citizens

First, a terminological clarification.

In referring to the weaker party in a payment contractual relationship, policy makers, institutions, and regulatory agencies use the term of "consumers" and, alternatively, "users", "recipients", or "citizens".[9]

Although digital payment system law (the PSD2, the Digital Finance Package and the Retail Payment Strategy) does not have a personal scope limited solely to consumers[10] and is thus not consumer legislation, it is also true that payments strategies are increasingly customer-centric.[11] But while every consumer is also a user, not every user is a consumer.

So, what is the subjective scope of application of payment system law?

I think that the subject admitted to protection is a figure who, though operating in the banking market, is a social actor, i.e. a citizen[12] who, when acting as a consumer (what can indeed happen very frequently), will benefit from a special protection, that also factors in his level and sources of vulnerability.

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6 G. Comparato, *The Financialization of the Citizen. Social and Financial Inclusion through European Private Law*, Oxford, 2018.

7 Especially on the vulnerability of mortgage debtors: I. Domurath, *Consumer Vulnerability and Welfare in Mortgage Contracts*, Oxford, 2020.

8 N. Reich, *Vulnerable Consumers in EU Law*, in D. Leczykiewicz, S. Weatherill (eds.), *The Images of the Consumer in EU Law*, cit., pp. 139-158: 145.

9 Basic Payment Account Directive, Directive 2014/92/EU of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features; the Distance Marketing of Consumer Financial Services Directive, Directive 2002/65/EC of the European Parliament and of the Council of 23 September 2002 concerning the distance marketing of consumer financial services and amending Council Directive 90/619/EEC and Directives 97/7/EC and 98/27/EC.

10 Art. 4, par. 1, n. 10, Dir. 2015/2366.

11 E.g., Recital 3, DIR. 2014/92/EU.

12 G. Davies, *The Consumer, the Citizen and the Human Being*, D. Leczykiewicz, S. Weatherill (eds.), *The Images of the Consumer in EU Law*, cit., p. 325, spec. 336; V. Mak, E. Terryn, *Circular economy and consumer protection: The consumer as a citizen and the limits of empowerment through consumer law*, in Journal of Consumer Policy, 2020, 43, p. 227; S. Ranchordas, *Vulnerable Consumers and Vulnerable Citizens*, in Journal of European Consumer and Market Law, 2021, 6, pp. 225 ff.; D. Blanc, *La protection du consommateur par le Parlement européen; du consommateur citoyen à la citoyenneté domestique*, in M. Combet (ed.), *Le droit européen de la consommation au XXIe siècle. État des lieux et perspective*, Bruxelles, 2022, pp. 69-86: 72.

4. Rise and Reconfiguration of the Concept of Consumer

It is often said that the EU consumer law used to be based on the model of the average consumer, an indiviual who is the weaker party in a type of bargaining characterized by information asymmetry and imbalance of bargaining power, but who is nevertheless "reasonably well informed and reasonably attentive and circumspect".[13] A corollary of this approach was a regulatory emphasis on the "information paradigm", an approach that considered the transmission of information as the tool by which protect the consumer's freedom of choice.[14]

Now both of these assumptions seem outdated, and have been replaced by a more realistic model of the consumer, who (as shaped also by studies in the Behavioural law and economics which are, in this field, is a common and useful addition on figuring out the features of vulnerable consumer)[15] is not hyper rationale but, on the contrary, is an individual possessing biases and cognitive limitations.

With a change in the social-economic context (attributable to the turning point brought about by the digital revolution) and the rise of the neo-liberal model of economic regulation, regulatory goals and techniques changed. The emergence of a cultural movement that tends to value the "*part d'humanité du consommateur*"[16] (a notion that, in turn, is in debt to the studies of legal theorists and political philosophers, such as, recently, Martha Fineman[17]) together with the, above-mentioned, new human rights-based consumer law model, went hand-in-hand with the change in perspective through which the subjective paradigms are analysed.

The discussion has moved from defining consumers to defining vulnerability.

On a regulatory level, many references to consumers' vulnerability can now be found both in general legislation [Recital 34 of the Consumer Rights Directive;[18]

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13 CJEU 06.07.1995 Case C-470/93 (Mars) para 24, ECR 1995 I-01943; CJEU 16.07.1998 Case C-210/96, par. 31. See also e.g., CJEU 28.01.1999 Case C-303/97, and recital 18 of the Preamble of the Unfair Commercial Practices Directive.

14 See amplius J. Stuyck, *Consumer Concepts in EU Secondary Law*, in F. Klinck, K. Riesenhuber (eds.) *Verbraucherleitbilder: Interdisziplinäre und europäische Perspektiven*, Berlin, München, Boston, 2015, pp. 115-136.

15 O. Bar-Gill, *Seduction by Contract: Law, Economics, and Psychology in Consumer Markets*, Oxford, 2012; A.-L. Sibony, *Can EU Consumer Law Benefit From Behavioural Insights?: An Analysis of the Unfair Practices Directive*, in K. Mathis (ed.), *European Perspectives on Behavioural Law and Economics,* Dordrecht, Heidelberg, London & New York, 2014, pp. 71-106.

16 M. Friant-Perrot, *Le consommateur vulnérable à la lumière du droit de la consommation de l'Union européenn*, in RTDeur. Revue trimestrielle de droit européen, 2013, p. 483.

17 M. Albertson Fineman, *The Vulnerable Subject: Anchoring Equality in the Human Condition*, in Yale Journal of Law & Feminism, 2008, 20; Id., *The Vulnerable Subject and the Responsive State*, in Emory Law Journal, 2010, 60, p. 251; Id., *Vulnerability and Inevitable Inequality*, in Oslo Law Review, 2017, 4, pp. 133-149; but, before, D. Caplovitz, *The Poor Pay More*, New York, 1967, and A. Andreasen, *The Disadvantaged Consumer*, New York, 1975.

18 Directive 2011/83 on consumer rights, amending Council Directive 93/13 and Directive 1999/44 and repealing Council Directive 85/577 and Directive 97/7.

Art. 5(3), of the Unfair Commercial Practices Directive];[19] and in EU secondary law [Art. 3(5) of the Internal Market in Electricity;[20] Art. 3(3) of the Internal Market in Natural Gas Directive;[21] the General Product Safety Directive,[22] Articles 14, 15 and 16 of the Payment Account Directive;[23] the Mortgage Credit Directive;[24] Arts. 7 and 23(a) of the Citizens' Rights Directive;[25] Art. 5 of the ODR Regulation (Online Dispute Resolution),[26] the DSA (Digital Service Act)].[27]

The switch from the subject to the person/individual implies an abandonment of the static definition of the consumer,[28] this by virtue of a concept defined from a *situational*[29] and *functional perspective*,[30] which assumes vulnerability to be "universal and constant, inherent in the human condition".[31]

The latest take, therefore, starts out from the assumption that vulnerability is the norm, not the exception,[32] and that there is the need, in some regulated markets,

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[19] Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market.

[20] Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity.

[21] Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas [2003] OJ L176/57.

[22] Directive 2001/95 on general product safety [2002] OJ L11/4.

[23] Directive 2014/92/EU.

[24] Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010: although the Directive does not expressly provide protection to the "vulnerable consumer", it implicitly accepts a concept of vulnerability in the responsible lending provisions intended to prevent debt overcommitment in housing loans.

[25] Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services.

[26] Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes (Regulation on consumer ODR) [2013] OJ L165/1.

[27] Proposal for a Regulation of the European Parliament and of the Council on a Single Market for Digital Services (Digital Services Act) and amending Directive 2000/31/EC, COM/2020/825 final.

[28] Consumers may move in and out of states of vulnerability, and they may be vulnerable in respect of some categories of transaction but not others: Final report "*Consumer Vulnerability Across Key Markets in the European Union*", 2016, p. 39; N. Šajn, *Vulnerable consumers*, European Parliamentary Research Service, May 2021, p. 4, available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690619/EPRS_BRI(2021)690619_EN.pdf (Accessed on October 24th 2022).

[29] Related to a specific legal transaction: European Commission, Understanding Consumer Vulnerability in the EU's Key Markets, Brussels, 2016.

[30] "[S]atisfied on the basis of a *single criterion*: the legal transaction in particular must form part of activities which are outside a person's trade, business or profession": Opinion of Advocate General Cruz Villalón delivered on 23 April 2015, Case C-110/14, *Horaţiu Ovidiu Costea v C Volksbank România SA*, § 28.

[31] M. Albertson Fineman, *The Vulnerable Subject*, cit., p. 1.

[32] C. Riefa, *Protecting Vulnerable Consumers in the Digital Single Market*, in European Business Law Review, 2022, 33, pp. 607-634: 617.

to shift from a normative standard of the *reasonably circumspect* consumer to the one of *vulnerable* consumer.[33]

This new setting calls for a radical rethinking of the concept of autonomy in private law (a concept that traditionally embodies the opposite of vulnerability),[34] implies a certain flexibilization of a rather formal approach toward consumer protection[35] and leads to a plurality of consumer "images", that, potentially, are as numerous as secondary markets are.[36]

5. Sources of Vulnerability for the Payment Services Consumer

5.1 Low-Income (Economic Vulnerability) and Legislation (the Negligent Consumer in the PSD)

Both digital and financial vulnerability share most of the sources of vulnerability: they have been identified by scholars as gender, age, education, income, city, and the level of trust the consumer has in her counterparty.[37] Specifically relevant in the payment services and the digital markets, respectively, the level of digital education, the level of acknowledgement of the specific characteristics of the digital marketplace and the level of financial education.[38]

The first (digital vulnerability) is a concept of vulnerability that embraces the new types of threats faced by individuals in the consumer digital economy, fuelled by a mass collection of personal data and organized through algorithms.[39] The second (financial) is related to the in part to the long-term nature of commitments, and in part to the complexity of products and information.[40]

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33 *Ibidem*.

34 This reflects what was suggested also on the societal level: M. Fineman, *The Autonomy Myth a Theory of Dependency*, New York Press, 2004; N. Maillard, *La vulnérabilité, une nouvelle catégorie morale?,* Genève, 2011, spec. pp. 161 ff.

35 N. Reich, *Vulnerable consumers in EU Law*, cit., p. 154.

36 J. Stuyck, *Consumer Concepts in EU Secondary Law*, cit., pp. 115-136.

37 For the financial market the Final report *Consumer vulnerability across key markets in the Europea Union*, January 2016; and for the digital environment N. Helberger *et al.*, *EU Consumer Protection 2.0. Structural Asymmetries in Digital Consumer Markets, A joint report from research conducted under the EUCP2.0 project*, Brussels, 2021.

38 P. Cartwright, *Understanding and Protecting Vulnerable Financial Consumers*, in Journal of Consumer Policy, 2015, 38, pp. 119-138.

39 N. Helberger *et al.*, *EU Consumer Protection 2.0*, cit.

40 Financial Conduct Authority Occasional Paper No 8: *Consumer Vulnerability* (2015, updated April 2020), p. 6; G. Elliehausen, *Behavioral Economics, Financial literacy and Consumers' Financial Decisions*, in A.N. Berger, P. Molyneux, J.O.S. Wilson (eds.), *The Oxford Handbook of Banking*, Oxford, 2019, p. 814.

In the light of what has been previously said, the figure of the average consumer and the idea that this standard is the best way to strengthen consumers' confidence in payment system market, has been critically questioned by scholars.

The prevailing approach in European literature is to frame vulnerability in financial markets as a problem of social exclusion.[41] Given that financial exclusion is considered having insufficient access to safe services, European scholars put the discussion on vulnerability in the modern consumer credit society into broader political context of the social function of credit.

One way to promote a fair financialization is to adopt a more protective approach beyond the normative standard of the reasonably circumspect consumer.[42]

Some authors argue for a new general consumer standard in financial regulation: every counterparty of a financial institution should be considered vulnerable due to the features of the market he operates in (one characterized by a lack of bargaining power in and this individual's structural economic vulnerability), so that a special protection should be provided in the entirety of credit and mortgage law (thus endorsing the concept of "universal financial services").[43] Others would prefer to restrict the concept of vulnerability to consumers in need of the basic financial services (like basic payment services and payment cards).[44]

The normative model is considered the one of Dir 2014/92, which aims to (i) ensure that payment accounts with basic features are available to the widest possible range of consumers and (ii) encourage unbanked vulnerable consumers to participate in the retail banking market.[45]

Arguments have also been made in favour of a right to access to payment services and some claim that the payment market should be interpreted as a "service of general interest". Like electricity, energy, and telecommunication, also basic banking services (such as basic payment services and a payment card) are considered "essential services": bank accounts, in fact, are vital for participation to modern economy.

Both of these two conceptions of vulnerability share a common assumption: vulnerability stems from the difficult economic situation of the consumer. The assumption is that low-income consumers have drastically limited margins for

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[41] *Discrimination, Vulnerable Consumers and Financial Inclusion: Access to Financial Services and the Law*, C.G. Stanescu, A.A. Gikay (eds.), London, 2020; *Consumer Debt and Social Exclusion in Europe*, H.-W. Micklitz, I. Domurath (eds.), Ashgate, 2015.

[42] I. Domurath, *Consumer Vulnerability and Welfare in Mortgage Contracts*, cit., *passim*.

[43] Id., *The Case for Vulnerability as the Normative Standard in European Consumer Credit and Mortgage Law – An Inquiry into the Paradigms of Consumer Law*, in Journal of European Consumer and Market Law, 2013, 3, p. 124-137.

[44] N. Reich, *Vulnerable Consumers in EU Law*, cit., p. 143.

[45] Recital 46, Dir. 2014/92.

errors in judgment, pay more than higher-income families for the credit they obtain and they have less protection against exploitation.[46]

Some of the commentators who consider poverty the principal contributor impacting vulnerability in financial market take a different view, one not based on ideas of social or economic exclusion. These authors, by contrast, consider vulnerability relevant only where it has its source in – secondary – EU law.

This form of "legal vulnerability" is found in the Payment Service Directives (PSD: Dir 2007/64[47] and now in Dir. 2015/2366: PSD2[48]). According to one Author, the fact that the payer shall only bear all the losses relating to any unauthorised payment transactions if he incurred them by acting fraudulently or by failing to fulfil one or more of his obligations reflects the recognition of the EU legislature that the consumer in the PSD (and, then, in the payment system law) is prone to negligence and not circumspection.[49]

A summary conclusion: whether the vulnerability is considered to be related to economic marginalization or as arising from a legislative prescription studies on financial consumers are in agreement that, in the field of basic financial services, consumers are affected by vulnerability and that the new normative standard should be the one of the vulnerable consumer.[50]

5.2 Age: Payment Law as Elder Law?

Scholars have been trying to elaborate a legal taxonomy of vulnerability related to financial consumers. But when it comes to payments made in a digital environment I believe that, given the structural asymmetries in the

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[46] As suggested in the work of D. Caplovitz, *The Poor Pay More*, cit.; P. Cartwright, *Understanding and Protecting Vulnerable Financial Consumers*, cit., pp. 119-138; N. Reich, *Vulnerable consumers in EU Law*, cit.; I Domurath, P. Rott, *A Plea for Special Treatment of Financial Services in Unfair Commercial Practices Law*, in EUVR, 2013,61.

[47] Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC.

[48] Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC.

[49] J. Stuyck, *Consumer Concepts in EU Secondary Law*, cit., pp. 115-136: 131.

[50] Digital payment consumer vulnerability is also related to the specificities of the act of paying which has become less visible, dematerialized and almost *imperceptible*. Correspondingly, the "pain of paying" (the negative emotions that a subject, as a loss-adverse human being, feels when making a purchase) is felt more strongly when paying cash than when paying by card, and it is even lower when using mobile phones and watches. As attachment decreases, the pain of paying decreases as well, exposing consumers to the risk of over-indebtedness. Also socio-psychological factors affect consumers' behavior: Payment attitudes depend mainly on emotions (the perception of attributes, such as safety and the efficiency of a retail payment system: C. van der Cruijsen, F. van der Horst, *Payment Behaviour: The Role of Socio-Psychological Factors*, De Nederlandsche Bank Working Paper No 532, Available http://dx.doi.org/10.2139/ssrn.2867462 (Accessed on October 8th, 2022) and on the perceived degree of control of electronic payment instruments (here, again, we encounter the topic of consumers' trust and the security of payment system).

financial-digital market and the inherent complexity of the digital payment market, the indicator of "age" (namely, being elderly) might have the highest and the most consistent incidence rate.[51] Age-related differences in the ability to use technological processes are a well-known phenomen.

Scholars have long since identified that age is a factor to be considered in the design of many legal rules, and it is used to differentiate the degree of consumer protection across individuals.[52]

Similarly, grey-literature has been emphasizing the complexities faced by some consumers (such as the elderly) when adapting to new procedures.[53]

Also at the normative level, the issue is a recurring topic in the regulatory framework of the markets involved (see, e.g., Recital 296 and Art. 3 (2)(d), of the European Electronic Communications Code;[54] in the U.S., the Indiana Senior Consumer Protection Act protects seniors – everyone above the age of sixty – from specific types of financial abuse;[55] the Federal Trade Commission and state consumer protection agencies have specific enforcement programs to protect against financial scams that primarily afflict elders).[56]

On the digital side, the divide existing amongst certain sociodemographic lines is a well-known issue and often affects the case with elderly members of society ("grey digital divide").

Also, using age as key factor to differentiate the degree of consumer protection across individuals, contributes in reducing the arbitrariness in categorizing vulnerable groups.

This personal characteristic, in fact, may not be compensated by other drivers, such as education or income. It likely persists due to the inability of the consumer to overcome "generational barriers" in understanding (instant) digital payment schemes. Thus in the digital payment market the source of vulnerability connected with old age, is not linked to the mere fact that the consumers are inept at making good decisions,[57] nor is it because they have a diminished cognitive abilities, nor even because they might have problems processing information (especially when new, or presented at high pace)[58] or

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[51] On age as an input that is likely to feature in the personalization of many rules: O. Ben-Shahar, A. Porat, *Personalized Law: Different Rules for Different People*, New York, 2021, spec. p. 106.

[52] O. Ben- Shahar, *Personalized Elder Law*, in Elder Law Journal, 2021, 29, pp. 281-312: 289.

[53] EBA, *Consumer Trends Report 2020-21*.

[54] Directive 2018/1972 establishing a European Electronic Communications Code (Recast) [2018].

[55] Ind. Code Ann. § 24-4.6-6-1-3 (2020).

[56] O. Ben- Shahar, *Personalized Elder Law*, cit., p. 283.

[57] K. Jacks Gamble, P. Boyle, L. Yu, D. Bennett, *Aging and Financial Decision Making*, in Management Science, 2015, 61, pp. 2603-2610.

[58] B. Duivenvoorde, *The Protection of Vulnerable Consumers under the Unfair Commercial Practices Directive*, in Journal of European Consumer and Market Law, 2013, 2, pp. 69-79; C. Yoon, C.A. Cole and M.P. Lee, *Consumer Decision Making and Aging: Current Knowledge and Future Directions*, in Journal of Counseling Psychology, 2009, 19, pp. 2-16.

suffer social isolation.[59] Rather, it relies on the circumstance that each generation interacts, understands and uses technology differently; elderly persons, despite a high level of education, are likely to experience generational barriers in understanding and dealing with digital payment products.

Although differences exist because the individuals differ as to their identifying characteristic (for example, the group of 'elderly consumers' contains very old consumers (eg, 90+) but also 'younger' elderly consumers (e.g., 65 year-olds) and there is no consensus on the relevant level of age, what seems important here is to come to the conclusion (or, maybe, the starting point) that age appears to be the key issue when assessing the vulnerability of digital payment consumers.

Though not necessarily specific to age, another related source of vulnerability relates to enforcement. So-called redress vulnerability is seen in situations where consumers face difficulties in obtaining redress due to costs, time, or process-related constraints.[60]

Having identified the different sources and states of digital financial vulnerability, we should consider the legal consequences that result from our identification of a vulnerability situation.

6. Consequences of Vulnerability for Party Autonomy

6.1 Protection by Design (on the Market Side)

The topic poses several questions: Which policy choices should the legislature make in regulating a contractual relationship featuring a digital payment consumer? What are the obligations of firms in a digital payment system where the counterparty is a vulnerable consumer?

And, on the consumer side: Can a consumer who has behaved unreasonably but is vulnerable benefit from protection?

The legal relevance of categories regarding previously ignored situations of hardship and the consequent raising of operators' awareness towards those customers whose needs were not previously considered, impacts on both the product creation and distribution.

- Governments and companies must, first and foremost, commit to promoting consumer education.

[59] N. Ridgway, Y.-S. Kang, *The Importance of Consumer Market Interactions as a Form of Social Support for Elderly Consumers*, in Journal of Public Policy & Marketing, 1996, 15, pp. 108-117.

[60] C.G. Stanescu, A.A. Gikay, *Introduction*, in *Discrimination, Vulnerable Consumers and Financial Inclusion*, cit., p. 12; P. Cartwright, *Understanding and Protecting Vulnerable Financial Consumers*, cit., pp. 123 ff.

- Vulnerability is also specifically relevant to the bank's disclosure obligations.
- Information should not be complete and exhaustive but, on the contrary, synthetic and selective.

Reference standards can be found in Articles 5(1) and 10(2) of the Consumer Credit Directive and Article 25(2) Directive 2014/65 (known as Mifid II),[61] which seem to assume the cognitive model of a consumer who can understand and process a small amount of information. Consequently, only relevant information should be conveyed, in a concise manner and as selected from the information capable of guiding the consumer's choice. As a result he is enabled to compare alternative proposals, in a trend constituting something of "Mifidization" of the information paradigm.

Firms should not only personalize the communication, but should also avoid offering particular types of products (such as extremely advanced, complicated and potentially riskier products) to some categories of vulnerable consumer (such as the elderly).[62] Vulnerability is thus relevant in product governance: companies should "tailor" their products specifically to the group's customer profile they intend to reach, given that a product might be suitable from the perspective of the average consumer but may be unfit when targeted at, and assessed from, the perspective of the vulnerable consumer.[63]

As the *Menu of Policy Options for Digital Financial Literacy and Financial Consumer and MSME Protection* points out her first key policy option for policymakers is to encourage "protection by design" for new digital financial products and services so as to support financial inclusion and, ultimately, the financial well being of the individuals. An inclusive and responsible approach to the design of new digital financial products and services that was more oriented to the needs of individuals would help prevent aggressive and unfair market practices and ensure the legitimate use of customer data.[64]

In terms of concretizing the meaning of these conceptual remarks on the relevance of digital-financial vulnerability, the following might be illustrative of what is expected. In promoting a mobile instant payment application, manufacturers will have to provide information suitable for the specific consumer profile they are targeting, with the information selected so as to make the client aware not only of how the application functions but also of the product's characteristics (and related risks); such steps will be necessary to remove both digital and financial asymmetries.

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[61] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on Markets in Financial Instruments.

[62] N. Helberger *et al.*, *EU Consumer Protection 2.0.*, cit., pp. 8-9.

[63] P. Hacker, *Personalizing EU Private Law: From Disclosures to Nudges and Mandates*, in European Review of Private Law, 2017, 25, pp. 651-677.

[64] https://www.gpfi.org/sites/gpfi/files/1_G20%20Menu%20of%20Policy%20Options.pdf; see also O. Bar-Gill, E. Warren, *Making Credit Safer*, cit., pp. 46 ff.

Observing the many "from… tos" which mark the path of digital-payment consumer protection, we assist to a trend from a victim-centred perspective (which has its centre of gravity on consumers that defends themselves) to a one more firm-centred, imposing positive and substantive obligations on the payment service provider and embracing a more prescriptive standard of conduct.

In terms of product design, the concept of vulnerability is changing from an exclusionary factor (according to the equation whereby a vulnerable customer is a bad customer) into an element to be taken into account in order to satisfy specific needs and to win market shares. The adoption of an inclusive design strategy therefore appears to be instrumental in rebalancing asymmetrical positions.

6.2 Digital-Financial Diligence (on the Consumer Side)

As to consumer conduct, the question is whether the payer has a "digital/ financial diligence obligation" or whether there is instead a principle of minimum self-responsibility on the part of the consumer, that must guide their conduct.

Let us take an example in the matter of unauthorized payments, for instance phishing frauds (a type of attack in which cyber criminals tricks the victims so as to steal their personal and financial data, usually by means of e-mails).

We are all aware that the risks of fraudulent payment transactions depend as much on the user's behaviour as on the level of security system adopted by the operator: a payment service provider (PSP) may adopt the highest level of security authentication process, but if the user communicates his credentials to the fraudster, security breaches are inevitable.

Since the PSD2 provides a default regimen of a "zero liability rule" for the user, in cases where there is no negligence involved (with the user being liable up to the liability of the PSP if he has been grossly negligent),[65] in a case of a phishing fraud also the conduct of the PSP should be assessed in order to determine the level of consumer negligence, if any and, if so, whether it constitutes gross negligence.

The definition of gross negligence appears to be decisive and thus the concepts of the "average" and "vulnerable" consumers play an important role in assessing the level of sophistication of the fraud. The same behaviour should be assessed differently depending on the specific vulnerability of the consumer involved.

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[65] R. Mann, *Making Sense of Payments Policy in the Information Age*, Georgetown Law Journal, 2005, 93, p. 633; L.J. Rusch, *Reimagining Payment Systems: Allocation of Risk for Unauthorized Payment Inception,* in Chicago-Kent Law Review, 2008, 83, p. 561.

According to what was previously said, it is not the perspective of the average consumer that must be taken into account when assessing the existence of the gross negligence, but the perspective of an 'average member' of a group of vulnerable consumers.

The extent of the gross negligence, i.e. the level of diligence requested, should be graduated with regard for the vulnerability of the consumer, especially in respect of his age. The level of sophistication might be perceived differently with the different group of consumers, including the vulnerable one.

When assessing the consumer's gross negligence, the age factor should be taken into account. The fake e-mail's degree of deceptiveness should be measured with reference to the vulnerability of the individual payer, who, by virtue of his age, might not have had the ability to distinguish between reliable and fake e-mail and who may not have been aware of the risk of cyber-attacks and of the fact that banks do not request personal information by email.

7. Redress Vulnerability: Enforcement

Despite the full harmonization legal framework, the interpretation and application of the PSD2 varies between national systems.

Even though the Court of Justice has recently articulated the exhaustive nature of the PSD2, excluding the application of national contract law in matters of liability for unauthorized payments regulated by the Directive, still we encounter a divergent application of identical rules.[66]

For instance, in respect of gross negligence, despite a common legislative definition (in PSD2 it is a "conduct exhibiting a significant degree of carelessness"[67]), its interpretation and application is different among national systems (given the localism of enforcement).

The English FOS (Financial Ombudsman Service), the French Cour de Cassation and the Italian ABF all adopt different notions. Diverging application practices also distort competition in the payment market.

And since consumer confidence also involves a certainty of uniformity at the time of enforcement, there is a need for more consistency in the application of PSD2 across Member States,[68] something which can be pursued only by

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[66] M. R. Guimarães, R. Steennot, *Allocation of Liability in Case of Payment Fraud: Who Bears the Risk of Innovation? A Comparison of Belgian and Portuguese Law in the Context of PSD2,* in European Review of Private Law, 2022, pp. 29-72.

[67] Recital 72.

[68] Law matters in boosting consumer confidence: C. Twigg-Flesner, *The Importance of Law and Harmonisation for the EU's Confident Consumer*, in D. Leczykiewicz, S. Weatherill (eds.), *The Images of the Consumer in EU Law*, cit.

skilled enforcers who ensure obligations are fulfilled. Private enforcement schemes (such as ADR and ombudsman) can assist by interpreting national contract law in light of the financial framework that aims to provide a consistent application for consumer.

PSD2. Innovation in Retail Payments: Between Rules and Market Needs

Francesca Provini[*]

Summary: *1. Introduction and Frame of Reference – 2. Objectives of PSD2 and Experience to Date – 3. Focus on the Italian Market – 4. PSD2: Lessons Learned and Possible Areas of Intervention (PSD3) – 5. Conclusions*

1. Introduction and Frame of Reference

The payments sector represents a useful and in some ways indispensable support for the development of the European single market. Overcoming situations of national fragmentation has long been seen as a great opportunity in this sense; this is another reason why the payment sector has been interested by technical and regulatory harmonization activities.

Over time, from a regulatory perspective, we have witnessed the entry into force of the Directive 2007/64 (the so-called PSD1)[1] which constituted, among other things, the regulatory framework for the Single Euro Payment Area (SEPA).[2] In 2015 a new Directive was approved – the PSD2, Directive 2015/2366[3] – which sought to provide a response to technological developments and new consumer habits that have led to a demand for fast, user-friendly and secure payment services (also in the light of the growing of e-commerce).

2. Objectives of PSD2 and Experience to Date

The revised Payment Services Directive (PSD2) aimed to: enhance the competition by including new players; contribute to a more integrated and efficient

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[1] Directive 2007/64 of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7, 2002/65, 2005/60 and 2006/48 and repealing Directive 97/5.

[2] The single euro payments area (SEPA) harmonizes the way cashless euro payments are made across Europe. It allows European consumers, businesses and public administrations to make and receive credit transfers, direct debit payments and card payments under the same basic conditions. This makes all cross-border electronic payments in euro as easy as domestic payments. SEPA covers the whole of the EU. Other countries and territories which are part of the geographical scope of the SEPA Schemes are: Andorra, Iceland, Norway, Switzerland, Liechtenstein, Monaco, San Marino, United Kingdom, Vatican City State, Mayotte, Saint-Pierre-et Miquelon, Guernsey, Jersey and Isle of Man. https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services/single-euro-payments-area-sepa_en

[3] Directive 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65, 2009/110 and 2013/36 and Regulation 1093/2010, and repealing Directive 2007/64.

European payments market; make payments more secure; enhance protection for European consumers and businesses; improve cross-border payments.

The PSD2 introduced, for the first time in EU law, detailed security requirements. In particular, the application of a two-factor strong customer authentication to initiate electronic payments and to access payment accounts online. The PSD2 also introduced a comprehensive regime of responsibilities for payment service providers (PSPs).[4]

The PSD2 **laid the foundations for the open banking** by bringing into the scope of the regulation three new payment services based on access to customer data held by the account servicing payment service providers – ASPSP[5] (since now mainly credit institutions) by third party providers (TPP). The new services are: the payment initiation service (PIS), the account information service (AIS) and the card issuers service (CIS). The last – notably in Italy – has not yet been developed.[6]

The Open Banking model has **three main key elements**:

i. Access to payment information by parties other than those (the ASPSPs) that traditionally hold the information. In this context, information and data are becoming increasingly important and are thus at the basis of new business models.

ii. Technology as an enabling factor (in particular the API mechanism[7]) that allows secure communication between different parties. In this context, more and more integrated ecosystems are emerging and gaining relevance. For example, digital platforms in which different actors (financial and non-financial) can – using the available information – complete or enrich their offer of goods and services adding them to those of other partners in the platform, therefore enhancing the customers' experience.

iii. Security as an indispensable and crucial element to ensure users' trust in new services and thus the development of such services.

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[4] The PSP category includes: credit institutions; electronic money institutions; payment institutions; post office giro institutions which are entitled under national law to provide payment services; the ECB and national central banks when not acting in their capacity as monetary authority or other public authorities; Member States or their regional or local authorities when not acting in their capacity as public authorities (see, article 1 Directive 2015/2366).

[5] Account servicing payment service provider: a payment service provider providing and maintaining a payment account for a payer.

[6] Payment initiation service: a service to initiate a payment order at the request of the payment service user with respect to a payment account held at another payment service provider. Account information service: an online service that provides consolidated information on one or more payment accounts held by the payment service user with either another payment service provider or more than one payment service provider. Card issuer service: a service of issuing payment cards backed by accounts opened at another institution.

[7] API – application programming interface: set of definitions and protocols for the creation and integration of application software.

3. Focus on the Italian Market

Bank of Italy has a privileged observation point on the payment market as Supervisory Authority (*i.e.* in the licensing phase and in the ongoing supervision of PSPs) and also as Oversight Authority that, in its catalyst function, is oriented to support the development of the payments market in terms of innovation and security.

In this context, observing the market has evidenced **trends that are somewhat different from what the legislator expected**: in particular, the payment initialization service is much less diffused than envisaged. The service was created with the idea to bring in to the market an alternative to payment cards (especially for online commerce in which cards have the highest penetration rate in Italy, but also in Europe). At the moment, the development of initialization services is still rather limited, although new use cases could be expected for example, in connection with the diffusion of instant credit transfers, which could support the use of the initialization services.

On the other hand, the account access service has shown interesting use cases mainly due to the possibility to offer customers, based on payment information, an integrated view of their spending habits and wealth. We experienced a wide range of value-added services for example: invoice reconciliation; tools for expenses/savings planning; personal financial management services; credit scoring services for access to credit.

The new services had both a launch and an adjustment phase that lasted until the early months of 2020, then a phase of growth and progressive diffusion started, although it is still going rather slowly. It is interesting to note that there have been some changes in the incumbent market players' attitude: in the first phase, they simply complied with the obligations imposed by the legislation (opening their accounts to TPPs by setting up the necessary technological interfaces); while in a more recent phase, the incumbents are showing interest in offering these new services on their own as a possible instrument for building customer loyalty.

In June 2022, there were about 100 third party providers active in the Italian market, out of which only 14 were Italian. In the first half of 2022, the number of customers who used open banking services amounted to around 400,000 (up 200% compared to the previous year) and there were about 55 million internet-banking users (open banking weighs for less than 1 percent). It is interesting to note the triple-digit growth rates in the last six months. However, the market in Italy is still struggling to take off. In this context, it has to be taken into account that the Italian electronic payments market is still growing and has yet to fill the gap with the other European countries. For example, in terms of use per capita of payment instruments alternative to cash: 168 in Italy in 2021 compared to 320 in the EU. In this context, the growth of electronic payments may also stimulate the growth of PSD2-related new payments methods.

These data tell us that **there still is a great potential that needs to be exploited** in an increasingly proactive way by market operators; in this sense, there are still many opportunities that operators can seize.

In this context, new and increasingly pressing challenges arise for authorities. Emphasis must be shifted away from actions aimed only at ensuring regulatory compliance (*i.e.* the attention paid so far to overcome the obstacles identified by the EBA), which is necessary, but not sufficient to support the development of new services by itself. It will be important to move onto actions in the catalyst area with the objective of helping the market to identify business models in line with the needs of users (including the most innovative ones). In this context, it will be also crucial to stimulate forms of cooperation between different market operators.

4. PSD2: Lessons Learned and Possible Areas of Intervention (PSD3)

We are now on the verge of a possible revision of PSD2 and we have to ask ourselves what have we learned?

We can notice that the **objectives of PSD2 have just started to materialise**. For example, the security requirements, in particular the strong customer authentication (SCA), are having the desired effect of reducing fraud, contributing to improve the security of payment transactions and enhancing consumers' protection. This fact is also evidenced by some EBA preliminary analysis on payment fraud data, which suggest that fraud rates are significantly lower for payment transactions where SCA is applied compared to those where SCA is not applied.

Another positive aspect is the growing number of TPPs that entered the market: data from the EBA's central register[8] shows that about 400 non-bank TPPs have been authorised in the EU, which could contribute to enhance the competition in the payment market.

The European Commission launched two public consultations and initiated a call for advice in respect to the European Banking Authority.[9] Based on the indications that will be collected, the Commission will consider whether and how to proceed with the formulation of a proposal to amend the PSD2. Therefore, it is still too early to say in which direction the eventual PSD3 will go, but it could represent **a great opportunity to overcome gaps** and to address issues in order to fully achieve the objectives set by PSD2.

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[8] As of May 2022.

[9] https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Opinions/2022/Opinion%20od%20PSD2%20review%20%28EBA-Op-2022-06%29/1036016/EBA%27s%20response%20to%20the%20Call%20for%20advice%20on%20the%20review%20of%20PSD2.pdf

From a general and hypothetical point of view, some areas that might be influenced by a future revision could identified.

The **technological developments** are affecting the world of payments creating new services and editing the most traditional ones. In this context, interactions and dependencies between regulated and non-regulated entities, that enter the ecosystem of financial services, are growing more and more. This is why, in the context of a possible PSD2 review, attention should be paid to evaluate the opportunity of a regulatory intervention in the area of "providers of technical services" supporting payments. The market could benefit from some clarification regarding the role that technological providers (including BigTechs) can play in the world of payments, also in the light of supervisory powers toward these subjects. To this end, it could be useful to start building a taxonomy of services that are part of the payment ecosystem in order to consider which activities could be included in the scope of the Directive, and it could be useful to consider an approach that is product-oriented (taking as an example the oversight approach on payments).

The digitalization of payment services and the rise of platforms could make the **freedom to provide services** the most common way of providing payments on a cross-border basis; in this context, intermediaries operating on a freedom of services basis could have a significant impact on the host market. This is a very important aspect (not only for payments) that needs to be addressed and that will require more coordination and cooperation among home and host authorities than in the past.

Increasing attention will be paid to issues related to **consumer protection and awareness**: for example, it could be evaluated whether there is a need to lay down an ad hoc regime for instant payments, such as, for example, specific transparency obligations for the revocation of payments. In general, there is room for some clarification on the liability distribution regime between PSPs, in particular in relation to SCA exemption and TPP's services.

The alignment/**merge between the PSD2 and the electronic money Directive – EMD2**[10] will be an opportunity to resolve some issues and enable further harmonization and consistent application of the legal requirements for Payment institutions (PIs) and Electronic money institutions (EMIs), avoiding regulatory arbitrage and ensuring a level-playing field. For example, we observed some difficulties in distinguishing payment accounts and electronic money accounts, since they are very similar in nature and they serve more or less the same purposes. In this context, a more substantial approach that would allow the application of similar requirements to similar activities carrying similar risks (following the principle of "same activity, same risks, same rules") should be considered. Merging the provisions of EMD2 into PSD2 (PSD3) may also require

[10] Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60 and 2006/48 and repealing Directive 2000/46.

a fine-tuning of the rules applicable to issuers of e-money tokens contained in MiCAR.[11] Moreover, it could be also possible to evaluate the inclusion in the PSD3 of payment services related to crypto assets, since these services don't seem to be regulated by the MiCAR.

Regarding the **negative scope of PSD2**, the practical application evidenced that some exemptions are not always clear and not always uniformly applied all around Europe; moreover in some cases users are not aware that PSD2 customer protection is not applicable for the out of scope services. For example, the perimeter of the exclusion related to the commercial agents is not completely clear and should be better clarified in order to avoid uncertainty in case of payment transactions carried out by the platform's operator. Furthermore, payment instruments with limited purposes could benefit from some specific considerations in order to solve the level playing field and competition issues vis-à-vis the "regulated" payment instruments.

Since PSD1 implementation different practices emerged in **the access to payment systems** by PIs and electronic money institutions EMIs who depend on credit institutions to carry out their business. In this area, the revision of PSD2 or of the settlement finality Directive[12] could be an opportunity to solve the problem of the level playing field between these PSPs and credit institutions.

It should be taken into consideration that a possible extension of the perimeter of **sharable data** (not only payment data, but broader) should be accompanied by a solid evaluation of business and revenue models in order to have an accettable and viable framework in place, which could make this services a business opportunity for all parties involved. This is going to be a crucial aspect for the take off of this market segment from the perspective of open finance. Further clarifications would also be needed regarding the processing of special categories of data of the payees, the so-called silent parties.

5. Conclusions

As highlighted in the EU Retail Payments Strategy,[13] the **PSD2 has become a worldwide reference in regards to open banking and secure transactions**. Authorities believe in the potential of open banking; in this context, the planned work on a broader framework for open finance, as set out in the Digital Finance Strategy, has the potential to give greater value to the experience gathered from the implementation of PSD2.

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[11] https://www.consilium.europa.eu/en/press/press-releases/2022/06/30/digital-finance-agreement-reached-on-european-crypto-assets-regulation-mica/

[12] Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems.

[13] https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services/payment-services_en

The PSD2 compared to the PSD1 has resulted in a greater harmonization and competition in the landscape of payment services. However, some issues need to be addressed in order to fully achieve the objectives of PSD2 and ultimately contribute to the creation of a single EU retail payments market.

In particular, there is a growing need to find a balance between regulation (static) and innovation (dynamic) in order to ensure that the legal requirements are future-proof in the light of the continuous digitalisation of payment services.

Issues of harmonization and competition in the landscape of payment services will become even more important in connection with technological innovation such as crypto assets and Decentralised finance, which are gaining momentum.

In this context, dealing with innovation will be one of the most important challenges for the near future for both Authorities and market operators.

Stablecoins on the Way to the EU Regulation on Markets in Crypto-Assets

*Donato Salomone**

Summary: *1. A Little Bit of Taxonomy – 2. Crypto-Assets: Distinction by Function – 3. The Need for Stablecoins – 4. Stablecoins: Distinction by Backing – 5. Stabilisation Mechanisms – 6. The Need for Rules on the Stablecoins: the Trigger for MiCAR – 7. Crypto-Assets within MiCAR – 8. Stablecoins within MiCAR – 9. ARTs – 10. EMTs – 11. Conclusions*

1. A Little Bit of Taxonomy

Stablecoins are a particular type of crypto-assets, which, because of certain characteristics specified in the following paragraphs, have the potential to establish themselves as a widely used means of payment among the public. Such a potential is indeed one of the reasons behind the presentation by the European Commission of a proposal for the adoption of a regulation on markets in crypto-assets (MiCAR),[1] that, moreover, is part of a broader strategy for digital finance. Namely, the European Commission adopted on 24 September 2020 a digital finance package, including a digital finance strategy and legislative proposals on crypto-assets and digital resilience, for a competitive EU financial sector that gives consumers access to innovative financial products, while ensuring consumer protection and financial stability.

Before going deeper into the subject matter at stake, it is worth setting a bit of taxonomy in a field like this, where specific and organic legal definitions miss and, if anything, those tend to chase notions developing in the sphere of practice and which, for that reason, are a source of uncertainty and, in any case, cannot satisfy from a strictly legal point of view. We are getting used to some terms, such as crypto-assets, crypto-currencies, stablecoins, DLT, without being used to recognize the differences among them.

However, there is a legal definition to take as a starting point and it is the definition of virtual currency under Article 3 of the AML Directive 2015/849:[2] "*'virtual currencies' means a digital representation of value that is not issued or*

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[1] Proposal for a regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593

[2] Directive (EU) 2015/849 of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC, OJ L 141, 5.6.2015, pp. 73-117.

guaranteed by a central bank or a public authority, is not necessarily attached to a legally established currency and does not possess a legal status of currency or money, but is accepted by natural or legal persons as a means of exchange and which can be transferred, stored and traded electronically". It is a rather broad and comprehensive definition involving several concepts: (i) the digital representation of a value; (ii) the fact that the currency at stake is not a legal tender and, therefore, does not touch upon the role of the public authority, neither in the issuing nor in the guarantee phase; (iii) it is a medium of exchange that can be used to make payments on a voluntary basis.

The reference to the legal definition of virtual currency is worth mentioning since its characteristics are common to crypto-currencies, with the addition of the technology used, which is distributed ledger technology (DLT) or similar.

A DLT is a database of transactions distributed among a network of many computers, rather than stored at a central node. A typical example of DLT is blockchain, with the clarification that blockchain is just an example of DLT, as not all DLT technologies are attributable to the blockchain by themselves.

Crypto-assets could be defined as a digital representation of value or rights which may be transferred and stored electronically, using DLT or similar technology.

2. Crypto-Assets: Distinction by Function

The distinction of crypto-assets based on the function they perform is widespread in practice.

Thus, we first distinguish 'utility tokens', which allow the holder to access the provision of goods and services. Utility tokens are only used in dealing with the supplier of those products and services and are not accepted as a means of payment.

'Investment tokens', also known as 'security tokens', represent the ownership of certain rights (e.g. in the form of dividend-like rights). An example of security tokens would be the ones issued as a part of an ICO (initial coin offering), which enables companies to raise capital for their projects.

'Payment/exchange/currency tokens' (also referred to as virtual currencies or crypto-currencies) are generally used as a means of exchange (under this point of view, bitcoin and stablecoins belong to this category). On the other hand, it is not excluded that, on the basis of the specific characteristics of each token, it may also perform investment functions.

Finally, there are also 'hybrid tokens' combining the characteristics of other kinds of tokens with different functions. Hence, hybrid tokens are multifunctional as they can perform more than one of the above-mentioned functions.

3. The Need for Stablecoins

It is now necessary to understand the reason why, within the varied landscape of crypto-assets, stablecoins express specific characteristics making them suitable for establishing themselves as a means of exchange in the public sphere, thus deserving particular attention by the legislator as well.

Payment token originated with the function of enabling the exchange of value online quickly and without intermediation (crypto-assets are indeed expression of the s.c. decentralised finance). Such an exchange function requires the stability of the value of the means of exchange one wants to use. In other words, volatility, which is a feature common to many crypto-assets (the example runs again to bitcoin), does not appear compatible with the need for an efficient performance of the above-mentioned exchange function.

When talking about money (understood in a functional sense, irrespective of the formal concept of currency), reference has to be made to an asset to which three traditional functions are generally attributed: store of value, unit of account and means of exchange. Stability of value is a precondition for money to fulfil all the indicated functions: as for the reserve of value, no investor would be interested in preserving his assets by exposing them to the volatility of the reference asset; as for the unit of account, pricing becomes difficult if set up on the basis of a currency subject to strong and frequent fluctuations; as for the means of exchange function, the creditor's interest is to receive payment in a currency that does not lose its value in the very immediacy of the payment itself.

Stablecoins are crypto-assets aiming precisely to counter value volatility by keeping their value stable over time and by anchoring it to certain reference assets, which may be one or more legal currencies, assets of another nature or a basket of them.

The rational under the emerging of stablecoins is clear: being able to contain volatility could makes these crypto-assets attractive to the public and, therefore, likely to perform an alternative monetary function.

From a historical standpoint, it is not a new phenomenon that there are goods, which, because of their particular desirability, can perform *de facto* an exchange function competing with the one carried out by the official money.

It is worth mentioning banknotes, originating as a claim on the issuer since they were issued against the deposit of money or precious metals. Given the confidence in the issuer's solvency, the note began to circulate and to be peacefully accepted as a means of payment regardless of its formal recognition as a legal tender. What is new, if anything, is the fact that this phenomenon is expressed through the use of new technologies based on distributed registers and cryptography.

4. Stablecoins: Distinction by Backing

In addition to the function to be carried out, crypto-assets can be distinguished also depending on the presence or the absence of value-stabilising mechanisms that guarantee the stability of their value over time by shielding it from excessive and unforeseen fluctuations.

On the one hand, there are crypto-assets lacking such stabilisation mechanisms (e.g. bitcoin), therefore subject to rapid and significant fluctuations in their value.

On the other hand, there are crypto-assets (it is the case of the stablecoins) whose value is guaranteed by certain stabilisation mechanisms. These stabilisation instruments, in turn, may be based on fiat currency, crypto-currency or algorithm.

5. Stabilisation Mechanisms

As specifically regards the value stabilisation mechanisms, fiat-collateralisation recurs when the token is issued against a deposit of fiat money. Hence, in such a case, collateralisation results in an activity, which takes place off-chain, as the asset constituting the store of value has not, in turn, the form of a crypto-asset.

Crypto-collateralisation recurs where the asset that serves as a reference for the value is a crypto-asset itself, and it generally happens on-chain.

A very particular case is that of the so-called algorithmic stablecoins, where the stabilisation mechanism does not consist in a reserve of reference assets and it is not constituted by the holder himself. Such a mechanism works by the execution of an algorithm that, in relation to the trend of the demand for tokens on the markets, increases or reduces the quantity issued of the relevant token. Having regard to what above, it could be argued that no collateralisation takes place. Indeed, the algorithm does not affect the reference value of the crypto-asset, but rather the market price, acting – as already mentioned – on the relationship between demand and supply of tokens.

In any case, regardless of the stabilisation mechanism applied, it is necessary to briefly clarify the risk profiles, also in order to avoid easy simplifications.

In fact, while it is quite clear that crypto-assets without value stabilisation mechanism (and thus characterised by significant value fluctuations) expose the holder to an appreciable margin of risk, one must avoid the conclusion that stablecoins are risk-free.

In its recent Assessment of Risks to Financial Stability from Crypto-assets, the Financial Stability Board points out that "*the composition and amount of reserve assets backing the stablecoin may vary significantly, some issuers do not appear to adhere to any standards regarding the composition of reserve assets backing the stablecoin, and there may be no direct right by a user against the*

issuer or reserve to redeem. As a result, the risks of various stablecoins might differ based on their design, including their reserve assets and redemption rights".[3] Therefore, stablecoins can also express risk profiles for the relevant holder. Those risks depend, for instance, on the composition of the reserve of assets, on the recognition of a right of redemption or, in any case, of a right of claim vis-à-vis the issuer for the assets making part of the reserve of assets.

6. The Need for Rules on the Stablecoins: the Trigger for MiCAR

The issue of stablecoins is of great importance in the genesis of MiCAR.

A full and complete exam of MiCAR is out of the scope of this contribution, which does not aim at providing with any cross-sectional overview of it. It is just worth mentioning that MiCAR would foresee a broad and articulated definition of crypto-assets other than those having nature of financial instruments. MiCAR, indeed, wants to regulate the issuance and the admission to trading of crypto-assets, the subjective requirements of the issuer, the issuer's disclosure duties, governance profiles, the activities of the Crypto-assets Service Providers (CASPs), the institutional supervisory architecture, the repression of market abuse. Moreover – as already mentioned above – the draft Regulation is part of a broader strategy for digital finance prepared by the European Commission itself, which also includes other important regulatory proposals (DORA and DLT Pilot Regime).

However, the emerging and the evolution of stablecoins is one of the key elements that prompted the Commission to dedicate a specific discipline to the phenomenon.

In the Explanatory Memorandum accompanying MiCAR, there is first and foremost a reference to the evolution of crypto-assets and to the arising of stablecoins, which, although still of limited use to date, have the potential to become widely accepted and potentially systemic. Wide acceptance could stem from the presence of stabilisation mechanisms or reserve assets that could make stablecoins credible and suitable to perform, *de facto*, monetary functions, in particular as a means of payment.

Credibility is a key word when trying to understand the nature and the operability of stablecoins. It also recalls how, from a historical point of view, public trust has sometimes enabled the emerging of means of exchange other than legal tender and competing with the latter.

Nevertheless, there is also another profile to take into account.

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[3] Financial Stability Board, *Assessment of Risks to Financial Stability from Crypto-assets*, 16 February 2022, p. 11.

The use of DLT and the involvement of large IT companies may favour the spread of stablecoins on a global scale, raising, also under this point of view, the need to guard against the potential systemic risk. This is the case of the so-called global stablecoins, which are "*a specific category of crypto-assets which have the potential to enhance the efficiency of the provision of financial services, but may also generate risks to financial stability, particularly if they are adopted at a significant scale*".[4]

The potential to perform a competitive function vis-à-vis legal tender has also been emphasised by the European Central Bank (ECB) in its opinion on MiCAR: "*Under the proposed regulation, crypto-assets* […] *have a clear monetary substitution dimension, having regard to the three functions of money as a medium of exchange, store of value and unit of account*".[5]

7. Crypto-Assets within MiCAR

For the purposes of a general overview of the crypto-assets that will be regulated in MiCAR, stablecoins will play an absolutely prominent role in the systematics of it.

In view of the existing diversity in practice, MiCAR refrains from dictating a single discipline of this category of crypto-assets. Instead, it opts for the distinction between asset-referenced tokens (ARTs) and e-money tokens (EMTs), based on the different composition of the assets to which the token refers in order to maintain its value stable.

Then there is another category (crypto-assets other than), that MiCAR does not define positively, but by difference to the two above-mentioned categories of stablecoins. Utility tokens are the most relevant example of crypto-assets other than.

The division accepted by MiCAR overlaps only in part with the traditional distinction among security tokens, payment tokens and utility tokens.

On the one hand, stablecoins tend to substantially correspond to payments tokens. On the other hand, – as it will be better clarified below – a clear payment function seems to be attributable to EMTs only, while it cannot be excluded that, on a case-by-case basis, ARTs might also carry out an investment function (in any case, tokens qualified as financial instruments pursuant to the EU law will not fall under the scope of MiCAR).

As for utility tokens, as mentioned above, they constitute a typical example of crypto-asset other than, but such a category, being indicated residually, can in the abstract accommodate other types of crypto-assets as well.

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[4] Financial Stability Board, *Regulation, Supervision and Oversight of Global Stablecoins Arrangements*, 13 October 2020, p. 1.

[5] Opinion of the European Central Bank of 19 February 2021 on a proposal for a regulation on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, OJ C 152, 29.4.2021, pp. 1-9.

MiCAR also deals – albeit only in the recitals – with algorithmic crypto-assets, which can be brought under the umbrella of ARTs and EMTs if they tend to maintain a stable value by referring to certain assets, regardless of whether the stabilisation mechanism is based on the application of algorithmic protocol. It does not appear as a very clear provision as it does not seem intended to address pure algorithmic crypto-assets, where the stabilisation of value is only achieved by calibrating the supply and demand of the token.

8. Stablecoins within MiCAR

Limiting the exam to the stablecoins as they will be regulated in MiCAR, it is worth clarifying that the proposed Regulation not only refrains from dictating a single regime of them, but it does not even provide for a definition of stablecoins as such. And this despite the fact that stablecoins are referred to several times in the Explanatory Memorandum as a trigger for the adoption of the Regulation.

The rationale of such a choice always lies in the existence of a plurality of stablecoins, in some cases very different from each other. Having regard to this background, it would be impossible and even useless to spend an effort on arrangement for its own sake. Instead, MiCAR looks at the value stabilisation mechanisms and, in particular, at the assets to which stablecoins make reference for this purpose.

The proposed Regulation typifies two kinds of stablecoins, which it distinguishes according to the nature of the reference assets.

ART is a type of crypto-asset that purports to maintain a stable value by referring to the value of several fiat currencies that are legal tender, one or several commodities or one or several crypto-assets, or a combination of such assets.

EMT is a crypto-asset that purports to maintain a stable value by referring to the value of a specific fiat currency that is legal tender.

It follows that, in case the reference is made to assets other than legal tender, the stablecoin at stake can only qualify as ART.

Where the reference asset is a legal tender, a distinction should be made: if it is a specific currency, the relevant token is an EMT; if it is made up of a plurality of currencies, the relevant stablecoin will be qualified as ART.

As a result of the application of certain criteria (size of the customer or of the issuer, value of the issued tokens or of the transactions made by the relevant token, interconnectedness with the financial system, etc…), ARTs and EMTs may be qualified as significant, however at the outcome of a complex administrative procedure involving both the competent authorities for MiCAR purposes and the European authorities.

In case of significant ART or EMT, additional duties are foreseen upon the issuer, which is also subject to a more articulated supervisory system.

Unlike the Single Supervisory Mechanism (SSM), in which banks can be significant, the qualification of significance within MiCAR is assigned to the token, not to the issuer. With the consequence that, in the event the same entity issues both significant and non-significant tokens, different supervisory regimes would apply.

9. ARTs

Attention will be paid to some of the main characteristics of ARTs. As already highlighted, this contribution does not want to provide with a complete overview of the rules applicable to them. It will focus on a few aspects, some of them could affect the greater or lesser diffusion of stablecoins and, therefore, the possibility of their performing an exchange function competing with that of currency in the strict sense.

Firstly, it is worth recalling that the public offer or admission to trading of ARTs is subject to authorisation.

A simplified authorisation regime should be provided in favour of credit institutions. However, it is not yet clear whether one will go for prior approval of the white paper or for a prior notification regime. Insofar as notification is prior to the start of the activity, it could be discussed whether, in essence, this would be a form of tacit consent.

Another relevant profile relates to the possible provision of redemption rights or claims against the issuer. On this point, the Commission's proposal envisages just the possibility of such rights being granted to the holder. The Council's mandate, on the other hand, opts for the necessary recognition of redemption rights, which would be granted to the holder in any case.

The reserve of assets constitutes the guarantee mechanism assisting stablecoins, as their composition and management must be carried out in a way that this reserve is able to cover the risks arising from the use of the token and the consequences of the exercise of the redemption right by the holder (liquidity risk). Hence, MiCAR requires the issuer to constitute and to maintain the reserve of assets, as well as to ensure that the creation and destruction of ARTs is always matched by a corresponding increase or decrease in the reserve of assets.

ARTs do not produce interests. This does not appear a revolutionary choice, if we consider that the EMD2[6] also provides for such a prohibition.[7]

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6 Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, OJ L 267, 10.10.2009, pp. 7-17.

7 See Article 12 and Recital (13) EMD2: "*The issuance of electronic money does not constitute a deposit-taking activity* […], *in view of its specific character as an electronic surrogate for coins and banknotes, which is to be used for making payments, usually of limited amount and not as means of saving. Electronic money institutions should not be allowed to grant credit from the funds received or held for the purpose of issuing electronic money*".

The reasons for the exclusion seem to be the same. Indeed, the prohibition of interests, while being dystonic with respect to the principle of the natural fecundity of the money (in any case, ARTs are not money in the strict sense of the word), is justified on a functional level, insofar as it serves to prevent electronic money from being diverted from its role of alternative means of payment and from purposes other than its own.

These considerations can be replicated in the case of ARTs and they are a further confirmation that, under MiCAR, stablecoins are essentially regulated as being capable to perform a payment function.

It should also be noted that the concept of interest is very broad because it encompasses any benefit related to the length of time during which the token is held.

10. EMTs

The payment function is even more evident if we look at EMTs. Moreover, in the text of MiCAR proposed by the Commission, the payment function is referred to in the very definition of EMT.

And indeed: (i) the public offering of EMTs is an activity reserved to banks and electronic-money institutions; (ii) it is expressly provided that EMTs are assimilated to the electronic money under EMD2; (iii) the issuance is made at par value and against the receipt of the same value in the form of funds within the meaning of Article 4(25) PSD2[8] ("*'funds' means banknotes and coins, scriptural money or electronic money as defined in point (2) of Article 2 of Directive 2009/110/EC*").

Holders of EMTs are provided with a claim on the issuer. EMTs that do not provide all holders with such a claim are prohibited.

Prohibition of interests is stated also for EMTs and, on this point, it would be enough to recall what already mentioned in the previous paragraph. It is just worth adding that such a prohibition is also in line with the assimilation of EMTs to the electronic money.

11. Conclusions

Under the current legal and regulatory framework, it seems clear that stablecoins constitute a private and complementary money, not issued or guaranteed by a central bank or a public authority. In a nutshell, an asset, which,

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8 Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC, OJ L 337, 23.12.2015, pp. 35-127.

de facto, could perform some of the functions economically assigned to the money, although without having the status of legal tender.

MiCAR will have a very comprehensive scope of application, but it is not intended to build around stablecoins alternative payment systems to the existing ones. It rather concerns addressing the risks that widespread use of stablecoins might pose.

In addition to being something different from legal tender, stablecoins are also outside the scope of PSD2. The payment regime designed by PSD2, in fact, is based on the concept of funds (banknotes, coins, scriptural money and electronic money). Token money, as such, does not seem to fall under this meaning, at least by following a literal approach.

Nevertheless, for the purposes of the oversight of payment instruments, the European System of Central Banks, which is responsible for promoting the smooth operation of payment system under Article 127 TFEU, is oriented to consider technological developments by including in its oversight activity all electronic payment instruments realising a transfer of value. In the so-called PISA Framework, one can read the following: "*From a Eurosystem perspective, recent technological developments warrant the extension of the scope of the current oversight of payment instruments to all electronic payment instruments enabling transfers of value between end users. The latter consists not only of transfers of euro funds by means of electronic payment instruments but also of representations of value backed by claims or assets denominated in euro or redeemable in euro; or other digital assets that are accepted under the rules of a scheme for payment purposes or to discharge payment obligations in euro" … "An electronic payment instrument is a personalised device (or a set of devices), software and/or set of procedures agreed between the end user and the payment service provider to request the execution of an electronic transfer of value. Typical examples of electronic payment instruments are payment cards, credit transfers, direct debits, e-money transfers and digital payment tokens*".[9]

Such a distinction between transfer of funds and transfer of value deserves some additional considerations.

On the one hand, it clearly reflects the need to safeguard the provisions of PSD2, which, as already mentioned, do not allow a *tout court* extension to the tokenised money.

On the other hand, it does not seem the case to over-emphasise this distinction for at least two reasons.

Firstly, one can find the reference to the monetary value represented by a claim vis-à-vis the issuer in the definition of electronic money under EMD2: "*"Electronic money" means "electronically, including magnetically, stored*

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9 Eurosystem oversight framework for electronic payment instruments, schemes and arrangements, 22 November 2021, p. 2.

monetary value as represented by a claim on the issuer which is issued on receipt of funds for the purpose of making payment transactions […] and which is accepted by a natural or legal person other than the electronic money issuer" (Article 2 EMD2).

Secondly and from a strictly private law point of view, if we consider the payment as an event extinguishing the obligation, the distinction at stake loses relevance, to the extent that one accepts the interpretation according to which the delivery of funds always allows the creditor to acquire the representation of a monetary value.

Given what above, one could wonder whether MiCAR could play a role within the legal framework applying to the payment systems.

Even though MiCAR does not aim at directly affecting payment systems and payment instruments, it will make it possible to circumscribe, within the tokens with a payment function, the EMTs and to assimilate them to the electronic money referred to in EMD2. Depending on the legal consequences of such an assimilation, it could be argued whether it makes effectively sense to keep on considering EMTs only in the context of stablecoins.

The paths of EMTs and ARTs are destined to separate sooner or later and MiCAR could be a first (legal) step to that direction. It will be also necessary to see whether and to what extent PSD3 will address this issue.

Perspectives and Prospects for EU Rules on (some) FinTech Service Providers

*Giuseppe Pala**

Summary: *1. Introduction – 2. PSD2 and E-MD – 3. The EU Crowdfunding Service Providers Regulation – 4. Markets in Crypto-Assets Regulation – 5. Other Proposed Pieces of Legislation – 6. Some Final Remarks*

1. Introduction

The Financial Stability Board describes FinTech as "technologically enabled financial innovation that results in new business models, applications, processes and products with an impact on the provision of financial services". Such services may be entirely or partially new – meaning that technology provides the means to offer a somewhat new type of service that was not available before (e.g. crypto-assets, ICOs etc.) – or may be more traditional, but shaped in new ways to take into account the new possibilities offered by the technological evolution (e.g. mobile payments).

I will try to speak briefly about the Union legislator's first attempts to regulate FinTech and, especially, new types of Fintech service providers, in particular regarding their prudential requirements and supervision.

From the analysis of the legislative landscape of the Union in the area of financial services comes quite a composite picture. On the one side, general frameworks on more traditional financial services were implemented through the years with specific provisions meant to regulate some peculiar Fintech service providers. This is the case, for example, for the PSD2 (Directive (EU) 2366/2015) and the E-Money Directive (Directive 2009/110/EC). On the other hand, the Union legislator adopted (or is going to adopt soon) bespoken regimes that specifically regulate new Fintech service providers: the EU Crowdfunding Service Providers Regulation (Regulation (EU) No 2020/1503), and the Market in Crypto-Asset Regulation, not yet adopted, proposed by the European Commission on September 2020.

Moreover, the Digital Finance Package adopted by the European Commission on September 2020 contained not only the abovementioned proposal for a Regulation on Markets in Crypto-Assets, but also a proposal for a Regulation on a Pilot Regime for market infrastructures based on DLT and a proposal for a Regulation on Digital Operational Resilience in the financial sector (DORA). Furthermore, on April 2021 the Commission published its proposal for a Regulation on Artificial Intelligence (AI Act). More recently, on February 2022 a proposal for a Regulation on harmonised rules on fair access to and use of data

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(Data Act). These are all new pieces of legislation that are going to regulate very sensible matters and will have a peculiar impact on Fintech service providers.

2. PSD2 and E-MD

I will not dwell too much on the PSD2 and on the E-MD, as they are well-known pieces of legislation that, among other aspects, establish the requirements for Fintech service providers such as the Account Initiation and Payment Initiation Service Providers and the E-Money Institutions.

Rather, I would like to point out some interesting aspects.

First, the EU legislator thought it necessary to establish prudential rules and supervision for payment service providers that actually never come directly in possession of customers' funds. Payment Initiation Service Providers and Account Information Service Providers offer services that were made possible only through the advancement of new technologies, and in doing so they interact with the payment system in such a way that they need to be supervised. At the same time, the fact that such service providers do not come in possession of the customer's funds called, of course, for less strict requirements compared to the ones imposed to other payment service providers.

Second, the EU Commission is looking at reforming the Payment Service Directive and has very recently launched public consultations to this end. The context for these consultations comprises the Commission's Digital Finance Strategy and Retail Payments Strategy, that purport to bring a broader 'open finance' framework to allow customer data beyond the scope of PSD2 to be shared and re-used by financial service providers for creating new and improved services. It follows that the reform of the PSD may very well offer the opportunity to introduce legislative definitions of new types of FinTech services and FinTech service providers.

Third, in its Retail Payment Strategy the Commission expressly states that the differences between the services provided by payment institutions and e-money institutions no longer seem to justify a distinct authorisation and supervision regime and could therefore be brought under a single framework. It will be interesting to see if such a merger will bring along also new specific rules.

3. The EU Crowdfunding Service Providers Regulation

3.1 More recently, bespoken regimes have been set out by the Union legislator to regulate entirely new FinTech service providers.

The first example comes from Regulation (EU) No 2020/1503, known as the European Crowdfunding Service Providers Regulation, which came into force on November 2021. The need to regulate crowdfunding services at Union level came

in light of the growth that such sector enjoyed in recent years and, at the same time, of the emergence of disharmonised national legislative regimes. Moreover, when it published its legislative proposal, the European Commission underlined its aim to foster new ways for small and medium enterprises and start-ups to fund themselves: crowdfunding, therefore, was and is seen as an alternative and innovative way to fund businesses that is worth facilitating but also overseeing.

The Union legislator decided to regulate and place under supervision only the two main types of crowdfunding services: the so called lend-based crowdfunding, which consists of the matching through an internet-based crowdfunding platform of project owners, that require a loan, and investors, that provide the loan and expect repayment with a certain interest rate; and investment-based crowdfunding, in which the project owners issue transferable securities and instruments (such as shares, bonds and other securities) that investors acquire through the internet-based crowdfunding platform in order to finance the project owner and, sometimes, have some form of control over the project itself.

Without entering in too much detail, it may be noticed that other types of crowdfunding do not fall in the new regime, like donation-based and reward-based crowdfunding. More importantly, despite their analogies with crowdfunding, Initial Coin Offerings through DLT and similar DLT-based techniques that project owners can use to fund themselves are not covered by the Regulation; they will be probably and partially covered by the Regulation in Markets of Crypto-Assets, of which we will speak later, at least if the "coins" or "tokens" offered do not fall under the definition of financial instruments pursuant to the MiFID2 definition. At the same time, the Crowdfunding Regulation is not applicable to consumers' crowdfunding, that falls under the Consumer Credit Directive. It follows that only business projects can be funded through the crowdfunding service envisaged by the regulation.

On the other hand, crowdfunding services under the new Regulation comprise not only the management of the internet-based platform to match business-funding interests of investors and project owners, but also, for example, individual portfolio management of loans, asset safekeeping services and payment services.

3.2 The Union legislator established a single supranational regime with uniform rules for crowdfunding service providers, according to which they need to be authorised by the national competent authority and, with such authorisation, they may provide their services throughout the Union. In this regard, the provisions of the Regulation are quite different from the ones that were initially contained in the legislative proposal by the Commission. Indeed, the Commission meant to create an optional regime: service providers could choose to follow national rules (if any), but in this case they could only provide their services on a national level; or they could choose to request and obtain a Union authorisation, and therefore be able to operate on the Union level, cross-borderly. In the end, after the discussions in the trilogue meetings, the Union legislator settled, as I said, for a single regime.

Moreover, the Union legislator imposed on crowdfunding service providers prudential requirements in the form of CET1 own funds or of an insurance policy (the overall amount is not, per se, impressive: 25 000 euro or, if higher, one quarter of the fixed overheads of the preceding year, reviewed annually). Crowdfunding service providers need also to comply with multiple other requirements: organisational ones (effective and prudent management rules; complaint handling; rules on conflict of interests), conduct of business ones (general duty of care; due diligence regarding the evaluation of the projects presented to the investors through the platform), outsourcing rules etc. Specific requirements are laid out for specific services such as the already mentioned individual portfolio management of loans and asset safekeeping services (the latter requires that the service provider is also authorised as a bank or an investment firm).

It is important to underline that the Union legislator took care to state expressly that crowdfunding service providers do not need a banking licence to operate and that national legislators may not impose authorisation regimes, analogue to the one in the CRD, for loan-based crowdfunding service providers.

At the same time, crowdfunding requires the transfer of funds from a party (the investor) to another (the project owner). The service that allows for such transfer can be carried out by the crowdfunding service provider itself, as long as it holds a PSD2 authorisation as a payment service provider. If, on the contrary, the crowdfunding service provider is not willing to offer such service or, more generally, is not an authorised payment service provider, it must nonetheless ensure that project owners accept funding of crowdfunding projects, or any other payment, only by means of a payment service provider under PSD2.

Finally, if a crowdfunding service provider wants to offer financial services (in particular, investment services like individual asset management for the investors) it must obtain a separate MiFID-2 authorisation.

3.3 The Regulation confers upon the national competent authorities the task of supervising crowdfunding service providers, in order to assess their compliance with the obligations provided for in the same Regulation. Very interestingly, with its original proposal, the European Commission intended to confer supervisory competences directly upon ESMA, with an aim to efficiency; of course, this proposal was linked to the initially proposed optional regime, according to which the Union rules (and, therefore, the Union level supervision) would apply only to Union-level crowdfunding service providers. During the legislative process, the European Parliament (and Member States) worked to hold supervisory powers on the national level and, at the same time, to unify the regulatory regime for all crowdfunding service providers.

Nonetheless, ESMA is attributed a very relevant role, not only through its regulatory powers – concerning the development of regulatory and technical standards and the issuance of guidelines and recommendations – but also through its powers to provide supervisory convergence and side with national competent authorities in investigations and on-site inspections.

The minimum set of supervisory powers that is conferred upon national competent authorities by the Regulation is in line with similar pieces of legislation, such as MiFID 2.

4. Markets in Crypto-Assets Regulation

4.1 A different Regulation was proposed on September 2020 by the Commission in order to try to regulate a very magmatic and both innovative and risky new area of the financial market, that involves the use and circulation of crypto-assets and crypto-currencies through DLT. The aim was and remains to bring for the first time crypto-assets, crypto-assets issuers and crypto-asset service providers under a uniform and Union-level regulatory framework.

For the purposes of the following analysis, it must be underlined that the proposal for a Regulation on Markets in Crypto-Assets is still under review in the legislative process.[1] So far, we know that many modifications to the initial draft, some significant, have been made by the Council and the European Parliament. Therefore, the final text that will be adopted in the end may differ considerably from the one proposed by the Commission.

That said, the proposed Regulation is a quite complex and articulated piece of legislation.

It identifies crypto-assets as "*a digital representation of value or rights which may be transferred and stored electronically, using distributed ledger technology or similar technology*". Within this macro-category, it distinguishes between three different types of crypto-assets:

- E-money tokens (E-MTs), i.e. "*a type of crypto-asset the main purpose of which is to be used as a means of exchange and that purports to maintain a stable value by referring to the value of a fiat currency that is legal tender*";
- Asset-referenced tokens (ARTs), i.e. "*a type of crypto-asset that purports to maintain a stable value by referring to the value of several fiat currencies that are legal tender, one or several commodities or one or several crypto-assets, or a combination of such assets*";
- Other crypto-assets, meaning crypto-assets that are not e-money tokens nor asset-referenced tokens.

From this distinction comes a differentiation also of the rules for the issuers of each type.

[1] After the conference, on 30 June 2022, the Council presidency and the European Parliament announced that they reached a first provisional agreement on the draft of the Regulation, but the definitive consolidated text is yet to come.

I must reiterate that all these definitions are tentative: the Council and the European Parliament have proposed various adjustments. For example, the definition of ART is probably going to be changed in order to be broader and comprise any crypto-asset that purports to maintain a stable value by referring to any other value or right, including one or several official currencies.

Various exclusions are also set out. As it stands, the regulation would not apply, for example, to crypto-assets that fall under the definition of financial instruments provided for by MiFID2; of e-money under EMD; of deposits under the DGS directive. Nor it would apply to central banks, and therefore to central bank digital currencies.

The exclusion of e-money is not convincing. E-money tokens appear to differ from e-money only for the circumstance that the first circulates through DLT. And in fact, rules for e-money tokens in the Regulation are clearly based on the ones provided for by the E-MD. Indeed, issuers of e-money tokens shall issue e-money tokens at par value and on the receipt of funds within the meaning of PSD2. Moreover, upon request by the holder, the issuer must redeem, at any moment and at par value, the monetary value of the E-MT, either in cash or by credit transfer. At the same time, the issuer cannot grant to the holder interests or any other benefit in relation to the length of time the e-money tokens is hold. Furthermore, e-money tokens can only be issued by credit institutions and e-money institutions. It is therefore probable that the aforementioned exclusion will be reviewed during the legislative procedure.

On a different note, the fact that the issuer of E-MTs must be a credit institution or an e-money institution implies that prudential requirements are not set out in the proposed Regulation, as their general regimes apply.

It is established, nonetheless, that the issuance of E-MTs must be preceded by the publication online of a white paper containing all the relevant information. The issuer must notify the draft white paper to the competent authority prior to the publication, but there is no need for a specific authorisation.

Specific additional obligations are set out for the issuers of Significant E-MTs (S-EMTs), i.e. E-MTs that gain a significant relevance in the Union market taking into consideration the size of the customer base of the issuer, the overall value of the tokens issued, the number of transactions and so forth. In particular, such issuers must comply with specific rules on custody and investment of reserve assets, i.e. the basket of fiat currency backing the value of the S-EMTs.

4.2 The Commission's proposal confers upon national competent authorities the task of supervising issuers of EMTs, while the European Banking Authority (EBA) is entrusted with the supervision on issuers of S-EMTs. It must be underlined that the criterion according to which supervision is based on the national level or the Union level is focused on the object (the EMT) and not the person (the issuer). It follows that if the same legal entity issues an EMT and a S-EMT, that entity will be subject to supervision from the national

competent authority for what pertains the "normal" EMT and from the EBA for what pertains the significant token.

In performing its tasks, the EBA will be assisted by a college of supervisors, to which different authorities, both national and supranational, participate, in order to provide the EBA with non-binding opinions on a variety of issues.

Of course, the EBA is not typically entrusted with direct supervision tasks. If I am not mistaken, the MiCA Regulation would be the first piece of legislation to confer such tasks on the EBA. Therefore, it will be interesting to witness the evolution of the EBA and compare it to the one already occurred to ESMA.

4.3 Much more complex are the provisions of the Regulation regarding issuers of ARTs, since this type of asset is brand new in the Union legislative landscape.

Such issuers need to be established in the Union and obtain the relevant authorisation from the competent authority, unless they are already authorised as credit institutions. As part of the authorisation process, issuers must prepare a white paper with all the relevant information pertaining not only to the ART(s) that will be issued, but also to the issuer itself, its governance arrangements, its organisational policies and so on. The competent authority will assess the white paper along all other requirements in order to grant or refuse the authorisation.

Issuers of ARTs must have robust governance arrangements, effective processes to identify, manage, monitor and report the risks to which it is or might be exposed, and adequate internal control mechanisms. Members of the management body must have the necessary good repute and competence. Good repute and competence are required also for natural persons who either own, directly or indirectly, more than 20% of the share capital or voting rights of the issuer, or who exercise, by any other means, a power of control over such issuer. Similarly, power is conferred upon the competent authority to assess and authorise or oppose the acquisition of a qualifying holding in the issuer.

Issuers of ARTs must, at all times, have in place CET1 own funds equal to an amount of 350 000 Euro or, if higher, 2% of the average amount of the reserve assets; the competent authority may require the issuer to hold additional own funds.

There are provisions on conduct of business rules (to act honestly, fairly and professionally), on marketing information, on complaint handling, and on conflict of interests, among others.

Furthermore, issuers must have in place a plan to support an orderly wind-down of their activities if necessary.

More peculiarly, specific obligations are set out regarding the constitution and maintenance of reserve assets, i.e. the basket of fiat currencies and of other assets or values backing the value of the issued ARTs. Such reserve assets need to be segregated from the issuers' own assets, they must be managed in an effective and prudent way and must be held in a credit institution (if they are currencies

and traditional financial instruments) or in a crypto-asset service provider (if they are other crypto-assets). Reserve assets can only be invested in highly liquid financial instruments with minimal market and credit risk.

A very interesting and controversial part of the Regulation concerns the rights that will be recognised to the holders of ARTs. The Commission's proposal would attribute to the issuers the power to choose whether they will confer rights, like redemption rights or direct claims vis-à-vis the issuers, on the holders. Issuers would only be required to clearly state their decision (and the consequent contractual obligation) in the white paper. Nonetheless, as per the Commission's draft, if redemption rights are not conferred by the issuer on all the holders, such rights must be at least conferred on specific natural or legal persons; at the same time, the issuer must put in place mechanisms to ensure the liquidity of the tokens. Furthermore, it is expressly stated that if the market value of the issued ARTs varies significantly, the holders have the right to redeem them from the issuer directly.

This part of the Commission's proposal is the subject of very deep scrutiny in the trilogue meetings and working parties, and various substantial adjustments have been suggested. It is clear that the rights that will be conferred on the holders of such crypto-assets will have an immediate impact on their nature, their possible uses and their success in the market.

Finally, specific obligations are prescribed for issuers of Significant Asset Referenced Tokens (S-ARTs), for example regarding remuneration policies, the monitoring of liquidity needs to meet redemption requests etc.

The supervision framework is identical to the aforementioned one for EMTs. The Commission's proposal confers upon national competent authorities the task to supervise issuers of ARTs, and upon the EBA the task to supervise issuers of S-ARTs. Again, if the same legal entity issues an ART and a S-ART, that entity will be subject to supervision both from the national competent authority and from EBA. The European Parliament has suggested that supervision on S-ARTs should be conferred on ESMA instead of EBA. If such a proposal were to be accepted – but it appears it will not – there would be a framework in which, in hypothesis, the same legal entity could be subject to the contemporary supervision of the national competent authority (or authorities) concerning ARTs and EMTs, and of EBA and ESMA concerning S-EMTs and S-ARTs respectively.

4.4 The proposed Regulation contains few provisions on the issuers of crypto-assets other than EMTs and ARTs. Such crypto-assets are clearly believed to be less impactful on the markets, therefore the rules set out are much less detailed than the ones we just briefly analysed. It is important to notice that the issuers of these "other-than" crypto-assets do not need an authorisation from the competent authority; they only need to prepare a white paper, notify it to the competent authority (that does not enjoy ex ante approval powers) and publish it on their website.

4.5 Finally, the proposed Regulation sets out the rules applicable to providers of crypto-asset services, of which it offers quite a rich catalogue:

custody and administration of third parties' crypto-assets; operation of a trading platform for crypto-assets; exchange of crypto-assets against fiat currency or other crypto-assets; execution of orders for crypto-assets on behalf of third parties; advice on crypto-assets.

All crypto-asset service providers must be legal persons that have a registered office in the Union and that have been authorised by the competent authority. They must act honestly, fairly and professionally, they must meet prudential requirements in the form of CET1 own funds or of an insurance policy (the amount depends on the type of service provided), they must have competent and good reputed members of the management bodies, they must adopt organisational arrangements aimed at guaranteeing compliance with all their obligations. Acquisitions of qualifying holdings in crypto-assets service providers are subject to the approval of the competent authority by non-objection.

More peculiar are the provisions on the safekeeping of clients' crypto-assets and funds. Clients' crypto-assets must be safeguarded and cannot be used by the service provider without the clients' express consent. Clients' funds must be placed with a central bank or a credit institution, in a separate account. If the service provider wants to provide also payment services related to the crypto-asset service, it must held an authorisation as a payment institution under the PSD2.

Furthermore, specific obligations are set out for service providers in relation to each specific crypto-asset service. For instance, providers of custody and administration services must put in place contractual arrangements with clients in order to regulate aspects specified by the regulation, hold a register of positions, provide asset segregation; providers of exchange fiat-to-crypto and crypto-to-crypto services must implement a non-discriminatory commercial policy and guarantee transparency on orders and transactions; operators of trading platforms must follow specific operating rules, must not deal on their own account, must guarantee full transparency pre- and post-trade, must settle transactions on DLT.

The Commission's proposal confers the task of supervising crypto-assets service providers upon national competent authorities. The proposal does not provide for a definition of Significant Crypto-Assets Service Providers, nor for a specific supervisory framework relating to such category. In my opinion, this choice of the Commission appears incoherent having regard to the provisions on S-EMTs and S-ARTs. Unsurprisingly, the European Parliament has suggested that such a category of service providers is introduced in the Regulation, in order to put it under the supervision of ESMA.

4.6 Again, as we have seen with the Crowdfunding Regulation, the set of powers to be conferred upon competent authorities is modelled on the MiFID2, with some differences:[2] competent authorities may obtain all the information

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[2] For example, no power to require existing recordings of telephone or electronic communications or data traffic records; no power to summon and question a natural person with a view to obtain information.

they need, may carry out on-site inspections and investigations, may prohibit or suspend activities, may impose sanctions and so on.

5. Other Proposed Pieces of Legislation

Before offering some final thoughts, I would like to draw the attention to some regulation proposals that are being discussed and that will probably entry into force in the near future.

The first is the proposal for a pilot regime for market infrastructures based on DLT, that seeks to provide legal certainty and flexibility for market participants who wish to operate a multilateral trading facility (investment firms or market operators) or a securities settlement system (central securities depositors) using distributed ledger technology.

The second proposal is for a regulation on Digital Operational Resilience, which aims at creating a regulatory framework that obliges all firms in the financial sector – including crypto-assets service providers and crowdfunding service providers – to have in place sufficient technical and organisational measures to withstand, respond to and recover from all types of information and communication technologies disruptions and threats.

The third proposal – that with the previous two and with MiCAR composes the Commission's Digital Finance Package – is about Artificial Intelligence. This is of course a more general issue: AI is seen as a key factor for the evolution of many high-impact sectors, like climate change, environment, health, finance and so on. At the same time, AI systems pose various risks. The proposal would therefore provide for specific requirements for the placing on the market and putting into service and use of AI systems, also prohibiting the use of AI for specific practices.

Finally, the proposal for a data act sets forth new rules on who can use and access data generated in the EU across all economic sectors. The idea is to foster data usage for the provision of new services and the improvement of already existing services, while at the same time guaranteeing rights and protection to consumers and businesses whose data is used.

6. Some Final Remarks

In light of this brief overview of the EU legislative landscape in the Fintech area, I would like to share some final observations.

First of all, the task for the EU legislator in this field is especially difficult. On the one side, FinTech seems to offer enormous yet undiscovered potentialities, in making financial services more efficient, less costly, more universal. The Commission always reiterates that EU embraces the digital revolution and wants

its firms to drive it in the lead, making the benefits of digital finance available to European consumers and businesses. On the other side, Fintech – and especially its particularly advanced and somewhat mysterious areas, such as the crypto-assets and the DLT – may pose significant threats to market stability and consumer protection, for example.

In balancing these two opposites, the EU Legislator must also take into consideration the ever-evolving technologies, which are being used nowadays. The aspiration is, of course, to create technology-neutral provisions that can stand the test of time, but it is not an easy objective to achieve. In this regard, for example, problems are clearly posed by the very nature of some new technologies, that are purposely decentralised. How do you impose specific requirements or obligations on something that is not under the responsibility of a clearly identifiable natural or legal person? The European Parliament's suggested modifications to the MiCAR would introduce some form of control and supervision on decentralised autonomous organisations to which the issuance of tokens can be traced back. But to implement and enforce such control will be clearly difficult.

Regarding supervision specifically, two last considerations. The first one is that, as we have seen, the model that the EU legislator is applying in these new matters is the same as always, based on MiFID and similar pieces of EU legislation: the authorisation process, the various requirements, the competent authority, the powers of the competent authority. Nonetheless, it will be interesting to see if such legislative instruments are apt to the task of overseeing turbulent and evanescent sectors like the crypto-assets one. Maybe SupTech and RegTech will revolutionise things, providing both the supervisors and the supervised entities with new instruments to assure compliance with regulations. In this respect, for instance, it seems to me a little outdated the idea that competent authorities called to supervise crypto-asset service providers will obtain the information they need through reports submitted by such providers and through specific requests forwarded to the latter. Maybe in the near future, the digital system that is used to provide crypto-asset services will continuously provide the competent authorities' digital systems all the data they need to carry out their duties.

Finally, and on a different note, what I think emerges is that there is a tendency to confer supervision tasks on the EU level; a tendency that is finding some resistance but is clearly identifiable. The initial crowdfunding regulation proposal conferred supervisory tasks on ESMA; the MiCAR proposal confers direct supervision tasks and powers on EBA (and maybe ESMA, if the EU Parliament proposals are approved); the DORA regulation puts the ICT service providers to which financial market participants outsource some of their services under the supervision of the ESAs. This is all explicable with the nature of the Fintech services, born and raised on the internet and in a way that is not bound by territorial borders.

For all these reasons, I believe it will be fascinating to see not only what pieces of legislation will be adopted in the Union, but also how such new rules will be applied and how they will shape the market in the future.

CRYPTO-ASSETS, PROPOSAL FOR A REGULATION ON MICA (MARKETS IN CRYPTO-ASSETS) AND CONSUMER PROTECTION

*Maria Rosaria Maugeri**

Summary: *1. Crypto-Assets, Consumer Protection and Digital Finance Package – 2. Crypto-Assets Transactions and Current Consumer Protection – 3. The Proposal for a Regulation on MiCA and Consumer Protection*

1. Crypto-Assets, Consumer Protection and Digital Finance Package

Digital transition is a top priority for the European Union over the next decade. As Charles Michel, President of the European Council, emphasised in his speech to the FT-ETNO Forum on 29 September 2020, digital strategy, in general, and the development of digital finance, in particular, should be based on European values and sound risk regulation.

Crypto-assets use blockchain technology/DLT and are a fundamental pillar of digital finance.

Consumers are increasingly using digital financial services and trading crypto-assets. This thus raises the question as to whether in that context consumers enjoy the same kind of protection that they do under EU law on inequality of bargaining power. The first part of this work will be devoted to that issue.

Before commencing the discussion on this point, it is worth remembering that a package on digital finance was presented on 24 September 2020. It is a package of measures intended to support harnessing the potential of digital finance and, at the same time, to mitigate the associated risks.

The package includes: (i) a Proposal for a Regulation of the European Parliament and of the Council on a pilot regime for market infrastructures based on distributed ledger technology (COM(2020) 594); (ii) a proposal for a Regulation of the European Parliament and of the Council on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014 and (EU) No 909/2014 (COM(2020) 595); (iii) a proposal for a Directive of the European Parliament and of the Council amending Directives 2006/43/EC, 2009/65/EC, 2009/138/EU, 2011/61/EU, EU/2013/36, 2014/65/EU, (EU) 2015/2366 and EU/2016/2341 (COM(2020) 596) and (iv) a proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937 (COM(2020) 593).

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The latter, known as MiCAR (*Markets in Crypto-assets Regulation*), has attracted the attention of practitioners and early commentators, and is relevant – as we shall see – with regard to consumer protection.

The MiCAR proposal regulates the issuance of crypto-assets and the provision of crypto-asset services in the EU, provided that these are crypto-assets subject to EU financial services provisions listed in Article 2 of the Proposal.

The proposal's explanatory memorandum states that MiCAR pursues four general objectives, namely: (i) legal certainty; (ii) to support innovation; (iii) to instil "appropriate levels of consumer and investor protection and market integrity given that crypto-assets not covered by existing financial services legislation present many of the same risks as more familiar financial instruments" and (iv) to ensure financial stability.

In the MiCAR proposal, the consumer is defined, in accordance with EU tradition (which admittedly can vary but cannot be dwelt on here), as "any natural person who is acting for purposes which are outside his trade, business, craft or profession" (Article 3(1)(28)).

The objective of ensuring consumer protection in the financial market (which MiCAR aims at) is common, as we will see, to other EU regulatory frameworks. Therefore, the question arises as to whether and how the MiCAR framework fits in with existing consumer legislation. The second part of this work will be dedicated to that issue.

2. Cypto-Assets Transactions and Current Consumer Protection

Consumers are currently protected in crypto-asset transactions, both in cases of financial services (I will clarify what I am referring to in a moment) and in cases that do not constitute financial services.

In fact, consumer law flanks financial law in protecting consumers unless expressly excluded by the provisions themselves or implicitly by the type of relationship regulated.

The compatibility between the protection afforded to savers and that afforded to consumer is confirmed by a number of legal provisions, first and foremost the rules on distance marketing of consumer financial services (Directive 2002/65/EC of the European Parliament and of the Council of 23 September 2002, transposed into Italian law in Articles 67-*bis et seq.* of the Italian Consumer Protection Code). The provisions in question expressly recognise and protect the figure of the "consumer" of financial services by providing for, *inter alia*, as in other areas of the law, information obligations incumbent on the supplier, a right of withdrawal and obligations relating to the type of medium that must contain the information. Financial services are also expressly referred to in the legislation regarding unfair terms and unfair commercial practices.

There is no reason to suppose that the aforementioned provisions are not also applicable, at least now (different could be after MiCAR approval), in the crypto-asset sector. However, some problems may arise with regard to the applicability of the provisions of Directive 2011/83/EU on consumer rights, transposed in Articles 45-67 of the Italian Consumer Protection Code, which also provide, *inter alia*, for information obligations, a right of withdrawal and obligations relating to the type of medium that must contain the information. This is for two reasons: one related to the exclusion from the scope of the directive and the other to an exemption contained therein.

The first puzzling element stems from the circumstance that both Article 3(3)(d) of the Directive and Article 47(1)(D)) of the Italian Consumer Protection Code provide that the provisions do not apply to financial service contracts without defining the latter.

In truth, however, recital 32 of the aforementioned directive makes it clear that the exclusion derives from the fact that EU legislation contains numerous rules on consumer protection in the field of consumer financial services. In other words, the European legislator states that the sectors that are already regulated, including financial services, do not require that measures be taken because the position of consumers in those sectors is already protected. In short, the legislator had identified areas where no action is necessary since they are already regulated.

With regard to financial services, the reference (at the very least) to the aforementioned provisions contained in Directive 2002/65/EC of the European Parliament and of the Council of 23 September 2002 concerning the distance marketing of consumer financial services is obvious. This directive defines "financial service" as any service of a banking, credit, insurance, personal pension, investment or payment nature.

In this regard, I would like to underline that in 2002 a legally relevant European list of what should be considered as investment services already existed. Accordingly, it is clear that Directive 2002/65/EC referred to that list. It follows that the scope of the directive and hence Articles 67-*bis et seq.* is sufficiently defined and that, by way of exclusion, the scope of Directive 2011/83/EU is also defined.

In other words, it may be concluded that in the case of a financial service (in the terms defined by Directive 2002/65/EC) consumers will be protected in Italy by Articles 67-*bis et seq.* And in cases falling outside the aforesaid scope, including in circumstances were one to remain within the competence of Consob (Italian Securities and Exchange Commission), the provisions of Directive 2011/83/EU will once again be applicable and hence in Italy the provisions of Articles 45 *et seq.* of the Italian Consumer Protection Code will apply.

The other reason that might lead one to the conclusion that consumers may lose all forms of protection if crypto-assets do not constitute a financial service stems from the fact that Directive 2011/83/EU (which applies where Directive 2002/65/EC does not) provides for an exemption, contained in Article 3(3)(l)

of the aforementioned directive and in Article 47(n) of the Italian Consumer Protection Code, with regard to contracts concluded "by means of automatic vending machines or automated commercial premises".

This raised the question as to whether the aforementioned rules could apply in the case of smart contracts. However, despite the fact that Nick Szabo, the first scholar who theorised smart contracts, used a vending machine as an example of how a smart contract works, today a smart contract has – or to be more precise: may have – very different characteristics from those of a vending machine. Just think of crypto-assets.

Szabo's smart contracts did not refer to blockchains or to DLT in general. Smart contracts may, in fact, not run on the latter. But the phenomenon discussed today, when referring to smart contracts as veritable contracts, is typically linked to blockchains or, more generally, to DLT. The contracting party does not have a vending machine in front of them from which the content of the transaction may be clearly deduced. In other words, the contracting party faces a very different kind of complexity in accessing the content of the transaction from that faced in the case of a contract concluded through a vending machine. Suffice it to say that smart contracts that run on DLT are typically concluded at a distance and have characteristics that cannot be inferred in any way from the context (for instance, the complexity in understanding the characteristics of crypto-assets).

Moreover, the exemptions laid down in the directive are exhaustive and cannot be extended to include entirely different cases.

3. The Proposal for a Regulation on MiCA and Consumer Protection

What has been said so far with regard to consumer protection is also confirmed by what is expressly stated in Recital 16 MiCAR: "Small and medium-sized enterprises and start-ups should not be subject to excessive administrative burdens. Offers to the public of crypto-assets in the Union that do not exceed an adequate aggregate threshold over a period of 12 months should therefore be exempted from the obligation to draw up a crypto-asset white paper. However, EU horizontal legislation ensuring consumer protection, such as Directive 2011/83/EU of the European Parliament and of the Council, Directive 2005/29/EC of the European Parliament and of the Council or the Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts, including any information obligations contained therein, remain applicable to these offers to the public of crypto-assets where involving business-to-consumer relations".

Assessing the MiCAR proposal from a consumer protection perspective, it can be said that the measures envisaged seem sufficient, even if there is an issue of having it fit in well with the existing consumer legislation mentioned above. It appears that such legislation will not be repealed.

Recital 55 MiCAR states that crypto-assets services should be considered "financial services" as defined in Directive 2002/65/EC of the European Parliament and of the Council. If marketed at a distance, contracts between crypto-assets service providers and consumers should be subject to this directive. This avoids any debate as to whether the definition of financial services covers crypto-asset services.

Crypto-asset services are defined in Article 3 MiCAR. Therefore, all the services set out therein would be subject to the provisions of the directive on the distance marketing of financial services, transposed in Italy in Articles 67-*bis et seq.* of the Italian Consumer Protection Code.

Briefly comparing the obligations that MiCAR places on crypto-asset service providers with those under Directive 2002/65/EC, shows that in principle they tend to coincide. In principle because the information to be provided is instrumental to authorisation and is contained in the register kept by ESMA with regard to MiCAR whereas the rules on the distance marketing of financial services concern communication to the consumer in the pre-contractual phase. However, one could interpretatively say that they are still "available to the consumer". It would perhaps be appropriate for the EU legislator to clarify this.

There is no reference in MiCAR to withdrawal (in the case of crypto-asset services). However, it is possible to consider that in the case of such services, Article 6(2) of Directive 2002/65/EC, transposed in Article 67-*duodecies*(5) of the Italian Consumer Protection Code – according to which withdrawal does not apply to financial services whose price depends on fluctuations in the financial market outside the supplier's control that may occur during the withdrawal period – is always and in any event applicable. Probably it would be appropriate to provide for a precise exception, with reference to withdrawal in the case of crypto-assets. Although the EU regulation of financial services should not favour a specific technology, limiting consumer protections, it seems clear that withdrawal is at odds with crypto-assets and, in general, smart contracts.

However, what is certainly not included in MiCAR – and rightly so – is the obligation, for example, to provide consumers with documentation on paper when requested. It seems clear that the right to receive documentation on paper is completely out of step with the use of the technology under discussion.

Indeed, these are provisions that are out of step with the new technologies and the EU legislator would do well to expressly derogate from them.

Tax Law Aspect of Crypto-Assets

*Filippo Dami**

Summary: *1. Introduction – 2. The Tax Effects Connected to Transactions and Possession of Crypto-Assets According to the Interpretation of the Italian Tax Authority – 3. The Critical Issues Emerging from the Solutions Proposed by the Tax Authority – 4. The Draft Law No 2572 Submitted to the Italian Senate – 5. Monitoring for Tax Purposes and Assessment Action – 6. Possible Solutions*

1. Introduction

Since no specific regulations exist, the identification of the current tax discipline to apply to transactions involving the so-called cryptocurrencies (although it would be better to define them as crypto-assets due to the multifaceted nature of such instruments) preliminarily reflects not only the absence of a structured general discipline ruling them but, even before that, the uncertainty of how they can be appropriately framed from a legal viewpoint.

Within the narrow limits of a brief (but necessary) initial observation to the reflections of strictly tax nature that I intend to develop here, I only recall how, from a definition perspective, the (weak and in constant evolution) legislative solutions and the consequent doctrinal interpretations, jurisprudential and administrative practice just help us in understanding the features that distinguish this case as to its operational connotation although fueling doubts and debates on how it can be brought back to the institutions present in our system and, therefore, regulated according to the different areas.

In Italy, indeed, Article 1, paragraph 2, letter qq) of Legislative Decree No 231/2007 established the first definition according to which a virtual currency constitutes "*the digital representation of value not issued or guaranteed by a central bank or public authority, not necessarily linked to a legal tender,* ***used as means of exchange to purchase goods and services or for investment purposes and transferred, stored and traded electronically***".

This definition was later "amended" by Article 1, paragraph 1 of Legislative Decree No 184/2021 that aimed at setting down a criminal regulation to "*fight fraud and counterfeiting of non-cash means of payment*", referred to as "*a representation of digital value not issued or guaranteed by a central bank or public entity, and not necessarily linked to a legally established currency, hence not possessing the legal status of currency or money, although accepted by natural or legal persons as means of exchange that can also be transferred, stored and exchanged electronically*".

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In this context and, as a natural consequence of the "abstractness" perceivable from the rules just shown above, there are, therefore, those who aim at identifying the regulations to use the *crypto-assets* in the different areas and propose to equalize them to currencies (and, specifically, to a foreign currency)[1] and, on the other hand, those who lean toward their framing as assets as laid down by Article 810 of the Italian Civil Code since, as known, any "*assets*" (including the intangible ones) can "*form the subject of rights*",[2] or as financial products.[3]

Coming to the specific topic of interest here, what is certain is that the use, exchange, transfer, and even the mere holding of these particular assets has various implications from the tax viewpoint pertaining, in particular, to (a) the (possible) taxation of their transfer transactions, (b) the (possible) relevance for tax purposes (both income and capital) related to their holding and economic use, and (c) the procedural profiles on monitoring and ascertaining action against the taxpayers who use and hold them.

As to all these areas of interest, the solutions currently envisaged and, specifically, those emerging from the interpretation of the Tax Administration and some initial regulation attempts, are not satisfactory and even, in some cases, entirely unreasonable for the grounds outlined above as to the qualifying uncertainty.

It deals, therefore, with a matter of starting by analyzing the solutions put forward so far and then trying to highlight reasoned solutions that can contribute to the debate on the features of a legislative intervention that does not seem to be further delayable and that only if well-defined will be able to dispel the different uncertainties that we are debating today.

2. The Tax Effects Connected to Transactions and Possession of Crypto-Assets According to the Interpretation of the Italian Tax Authority

So far, when outlining the tax consequences connected to transactions and possession of crypto-assets, the Italian Revenue Agency has equalized them to currencies and, precisely, to foreign currencies, hence applying the provisions expressly referred to the latter for tax purposes.

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1 As better examined below, this position is supported by Agenzia delle Entrate. See Resolution 72/E/2016 and Questions 956/2018 and 788/2021. In case-law, see a similar conclusion of the Court of Appeal of Brescia No 7556/2018.

2 Some case-law has recently accepted this interpretation. E.g., see the judgements of the Court of Florence No 18/2019 2019 and TAR of Lazio No 1077/2020. Likewise, the international accounting practice stuck to this concept, highlighting that when cryptocurrencies are held for sale (the proper purpose of exchanges or wallet providers) must be entered among inventories and valued at the lower value between the purchase cost and realizable value (i.e., the presumed disposal value). In contrast, if held for other purposes (e.g., investment), they must be entered among fixed assets as intangible assets and valued at cost.

3 This is the position of CONSOB, *Initial offerings and cryptocurrency exchanges, 19 March 2019*.

This decision was made through Resolution No 72/E dated 2 September 2016,[4] explicitly justified by the need to ratify the conclusions of the EU Court of Justice that, through its judgment C-264/2014 dated 22 October 2015, equalized the transactions dealing with exchanging a virtual currency into a traditional one and vice versa to those "*referred to currencies, banknotes and coins used as legal tender*" as laid down in Article 135(1)(e) of Directive 2006/112/EC.

Therefore, based on this assimilation, the Italian Tax Authority has established that: a) the trading activity of such "coins" should be qualified as a service provision for consideration free from VAT under Art.10, paragraph 1, No 3 of the Italian Presidential Decree No 633/1972; b) those who exercise this business activity are subject to income tax and IRAP whose taxable income results from a measure determined by the mechanism of "cost-revenues and inventories";[5] c) the relevant exchange of the crypto-assets held by an individual outside a business activity generates a different income of financial nature subject to 26% tax rate like for "traditional" currencies, only when a speculation hypothesis occurs and, according to the law in force, it is always deemed to exist in case of disposals: (c1) "*forward or arising from deposits or current accounts*" (art. 67, co. 1, letter c-quater of TUIR) and, (c2) thus including the "spots against forward", if "*over the tax period, the deposits and current accounts held in total by the taxpayer and calculated according to the exchange rate effective at the beginning of the reference period is higher than ITL one hundred million* (now EUR 51,645.69) *for at least seven continuous working days*" (art. 67, paragraph 1b of the TUIR).

In the subsequent Resolution No 956-39/2018, the Tax Authority after reiterating that, for income tax purposes "the general principles governing transactions involving traditional currencies apply to virtual currency exchange transactions carried out by individuals holding bitcoin (or other virtual currencies) outside their business activity", and that "*the regular professional activity of brokering traditional currencies with bitcoin constitutes a relevant activity to the effects of VAT but also of IRES and IRAP*," also added that, since investments in crypto-assets can generate taxable income in Italy, according to the provisions of the so-called anti-money laundering, the taxpayer holding them shall indicate the relevant amount in the RW box of their income tax return statement showing the code 14 in column 3 – "Other foreign assets of a financial nature". It being understood that, according to this resolution, which is an additional indication for Italian taxpayers, in any case, virtual currencies are not subject to "*taxation on the value of financial instruments, current accounts and passbooks held abroad by individuals residing in the State's territory (the so-called IVAFE, established by*

[4] This Resolution arose from a request for clarification from a company that needed to know the proper tax treatment of transactions involving the purchase and sale of bitcoin on behalf of its customers.

[5] As stated in the aforesaid Resolution No 72/E dated 2 September 2016, it means that the individual carrying out the brokerage activity shall have to consider the revenues and costs on such activity valuing the crypto-assets "in inventory" at the end of the tax period according to their standard value or according to their quotation on that date.

Article 19 of the Italian Decree-Law No 201 dated 6 December 2011, converted with amendments into Law No 214 dated 22 December 2011, as amended), because this tax applies to deposits and current accounts only of banking nature". It is undisputed that this is not the condition connoting the case in question.

Finally, the Italian Revenue Agency also defined the tax rules reserved for utility tokens that enable raising funds in cryptocurrency to carry out a project by allowing the holder to get goods or services from their issuer. Due to the last feature, they were initially assimilated to vouchers, making VAT payable only at acquisition by the individual entitled to enjoy of the goods or service "incorporated" therein (Resolution No 21/E dated 22 February 2011). Then they have been the subject of a total change in interpretation.

By answering the Question No 110/2020, the Tax Authority indicated that just the token acquisition constitutes a transaction subject to VAT, at least in the case submitted, since the service availability to access the blockchain (i.e., the data structure/digital ledger that, in such specific case, allowed the companies connected to sign, encrypt and exchange among themselves commercial documents, where authorship, non-repudiation, and integrity were ensured).

3. The Critical Issues Emerging from the Solutions Proposed by the Tax Authority

The solutions just summarized and proposed by the Tax Authority show various critical issues and have, at least partly, an unclear consistency on a systematic level. They were (and still are), in fact, the focus of a substantial doctrinal debate, although their essential features were included in a recent draft law submitted to the Italian Senate.

Without prejudice to what will then be said in this regard, including the adhesion to the proposed critics, nevertheless, it should be noted that these solutions are an attempt to fill a ruling gap as to the interpretation of a phenomenon that is indeed new and constantly changing, thus making it unseizable not only as to trace it back to cases known and already regulated but also to a specific and uniform configuration that allows a consistent appreciation regarding the legal consequences it triggers.

In these terms, therefore, the effort of the Tax Authority has to be appreciated since it leads to solutions that are less unfavorable for taxpayers than others in any case conceivable.

As widely pointed out, indeed, the main limit to such reconstructions (including that they are more favorable than other conceivable solutions) is certainly represented by identifying the tax effects starting from the strict assimilation of crypto-assets to currency and, specifically, to foreign currencies. Further to appearing distorting, and considering the very nature of these values (conceived as an alternative to the instruments traditionally managed by the

banking systems and connoted by a natural non-territoriality), in fact, today, this framing also clashes with the (albeit meager) regulating reference in our legal system. For what already said the definition of Art. 1, paragraph 1 lett. d) of the Italian Legislative Decree No 184/2021, the legislator textually excluded the legal status of currency or money for virtual currencies, which is rather deemed as a "*payment instrument of conventional type*" accepted "*as a medium of exchange*". In addition, the assimilation to currencies was ruled out by the monetary authorities themselves (ECB and Bank of Italy), and it also conflicts with the accounting practice that, among other things, could generate some coordination problems when considering the taxation of entities that hold the same virtual currencies under business schemes and that, therefore, shall apply the principle of derivation from the balance sheet for tax purposes.

4. The Draft Law No 2572 Submitted to the Italian Senate

Despite what just highlighted, the proposed framing by the Tax Authority was the basis of the draft law No 2572 of 30 March 2022, as already touched upon, submitted to the Italian Senate and aimed at defining the "*Tax provisions on virtual currencies*" as well as the related "*regulation of anti-money laundering obligations*".

The core profile of this proposal is to identify the concept of cryptocurrency, defined, in this context, as a "*static or dynamic cryptographic minimum mathematical unit liable to represent rights, with autonomous circulation*". However, it should be said that this draw law is unlikely to achieve a concrete result because of the short time before the legislative body expires and other most important issues that the Parliament has to manage today.

To this aim, the relevant tax discipline is identified as to the income tax field through the introduction in TUIR of a specific case in the miscellaneous income area, providing that taxation should concern only the "*transfers for consideration*" that "*involve payment or conversion into euros or foreign currencies*", thus making irrelevant from the tax viewpoint both a mere "*withdrawal*" and "*exchange*" into other cryptocurrencies.

Just because of the substantial assimilation to the scheme already provided for foreign currencies, the relevant capital gain (26%) would be taxable only if, over the tax period, the counter value in euros of the virtual currencies owned in total by the taxpayer and calculated taking into account the cost or purchase value subject to taxation, is higher than EUR 51,645.69 for at least seven continuous business days. In this regard, the criteria to quantify the "imposable" tax cost from which deriving the same capital gain are then indicated, primarily identified according to the documents issued with a set date collected by the taxpayer and equal to zero, assuming a free acquisition.

In this framework, an assumption of revaluation of the tax carrying cost of cryptocurrencies held by taxpayers at the first application of the new rules would

also be introduced, providing (in line with what our legal system repeatedly establishes, albeit with rules extended year after year, for land and holdings) the correlated payment of a substitute tax also payable in three annual installments of the same amount and fixed at a variable rate of 8%, 9% or 10% depending on whether the value considered is, respectively, less than EUR 500,000, between EUR 500,000 and EUR 1 million or more than EUR 1 million.

For tax monitoring purposes, the same draw law then provides the mandatory filling in the RW box of the annual income tax return only for holdings of virtual currencies exceeding EUR 15,000 over the tax period, identified according to their cost or purchase value. It is, finally, provided IVAFE is not discounted on the latter since they are not qualified as financial products.

The approach just outlined is focused on the possession of the values in question by non-business individuals without setting down anything on this assumption, according to which the relevant transactions would be affected by the principle of attraction to the formation of a business income and consistently with the solution of a framing among currencies and, therefore, among components of financial nature, they shall be irrelevant for determining the IRAP taxable income.

5. Monitoring for Tax Purposes and Assessment Action

Aside from how to tax transactions involving crypto-assets, monitoring and assessment are the widely recurring aspects in the individual tax systems requiring (also) to be the subject of a careful regulation. Besides the control of the proper fulfillment of the specific tax obligations that will be introduced, it is necessary to rule the reconstruction of the taxpayer's wealth and the measurement of their assets and income performances aimed at contrasting any offenses committed, if any, as well as at identifying the territorial context where taxation takes place.

The importance of this issue is confirmed by the European Commission that, on 2 June 2021, decided to launch a public consultation aimed at expanding and strengthening the administrative cooperation to ensure adequate attention for tax purposes of this innovative case.

The objective sought here is, first and foremost, to understand how the use of crypto-assets takes place, the type of related services provided to users, and how the associated relationships are defined. In this way, the aim is to identify the reporting obligations for tax purposes similar to those now burdening the intermediaries as to cross-border mechanisms to obtain potentially undue tax advantages. This is connected to the indications given by G20 to OECD about the requirement to include the activities that use virtual currencies among those for which the information exchange between states operates, given their proven ability to evade tax transparency rules easily.

6. Possible Solutions

The approach followed by the Tax Authority and included in the draw law mentioned above appears not entirely satisfactory, as already noted in the doctrine.

If, on the one hand, the course chosen is linked to the indication given by the OECD in its 2020 report "*Taxing virtual currencies*" to try, where possible, to frame crypto-assets among the already existing taxable cases, it is evident, on the other hand, how it clashes with a misleading viewpoint of the peculiarities of this phenomenon that, indeed, the report above invites the policymakers to take into account.

Shortly, the mistake that clearly penalizes the proposed solution is, as pointed out earlier, the assimilation of virtual currencies to foreign currencies -which is improper in light of how this phenomenon expresses itself and because of the most evolved legislative provisions outlining its regulation.

Ultimately, the prior framing of this phenomenon affects the identification of the related tax structure. To really understand this aspect, it is enough to look at the solutions adopted by the countries that have already identified the appropriate relevant tax regulation. Except for the UK, which relies on a case-by-case assessment of how the token is operated, the solutions vary from assumptions of assimilating the income produced as capital gains on non-financial assets to considering the surplus value linked to the sale of intangible assets, sometimes valorizing the speculative intent, whether or not present.

On closer inspection, these solutions could also be implemented in our system since they give a more systemic consistency than those already experienced both from the interpretation and proposal viewpoint.

Although surely penalizing from the tax burden side – at least as to the solutions put forward so far- in my opinion, it is particularly persuasive the solution that starts from assimilating cryptocurrencies to the concept of intangible assets based on the framing identified for accounting purposes by IFRS. This is a reasonable solution because, on the evidence of fact, crypto-assets are not: a) a currency, as also confirmed by the legislator; b) an instrument representing the capital of another entity; c) a contractual right to receive cash or to exchange financial assets and liabilities. But they are indeed a "*thing*" that can "*form the subject matter of rights*" – hence an asset according to the meaning laid down in Article 810 of the Italian Civil Code.

Based on these considerations, on the one hand -and consistently with the general principles of our tax system, the tax discipline should ensure the taxation for income purposes of only the increase in wealth actually achieved by the individual who holds and operates crypto-assets and, on the other hand, should refer to them in terms of monitoring and relevance for ascertaining the taxpayer's

wealth and income dimension consistently with what is already in force to fight against the money laundering.

Obviously, it should be qualified the business activity and all the related consequences of brokering in the purchase and sale of crypto-assets, but for this aim, it is not required a regulatory intervention since it is possible to reach conclusions simply by applying the existing rules.

Finally, such an intervention could provide for:

a. the taxation of capital gains (in such a case with a 26% substitute rate as occurs for financial assets) arising from the "monetization" (i.e., conversion into euro or other currency having legal tender) of the crypto-asset based on the valorization of the imposable tax cost fixed according to the terms laid down in the recent draw law mentioned above (with a possible reference established by the current provision of Art. 67 paragraph 1, letter c-quinquies of TUIR), as well as assuming to exchange the crypto-activity for goods or services, which could already be traced back to the case deriving from the combined provisions of Arts. 67, paragraph 1, letter i of TUIR (qualifying as miscellaneous income arising from occasional business activities) and 71, paragraph 2 of TUIR (indicating the criterion for quantifying the relevant taxable income, providing for the latter assumption a relevance threshold for the taxable amounts);

b. the irrelevance for tax purposes of the simple crypto/crypto "exchange" not resulting in any form of new wealth and, specifically, in any "monetization" since it would rather be a simple exchange of "expectations";

c. the consistent relevance regulation of the supply for VAT purposes (that could hardly not be applicable by recurring to the additional subjective and territorial requirements, since these transactions involve goods);

d. the requirement to the taxpayer to show the amount of the crypto-asset held in the RW box of their tax income return statement as an independent fact, disregarding the consideration that they are "foreign" assets since they are a – territorial – hence excluding any problem to identify the possible "place" where these assets are held;

e. the introduction of the reference to crypto-assets in any rules (such as the "*redditometro*" – income-counter – or the discipline of financial investigations) implies implementing an assessment key of the assets identifying the taxpayer's ability to pay and/or use of their own wealth;

f. the definition of rules to quantify the value of this specific asset for the proper application of the inheritance and gift tax, taking into account that the relevant prerequisite in such a case could be deemed integrated.

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Open Banking, Outsourcing, and Bank-Fintech Cooperation

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Summary: *1. Introduction – 2. The Incumbent/Fintech Collaborative Space – 3. The Regulatory Framework: The Rules on Bank Outsourcing – 4. Policy Implications – 4.1 Microprudential Risks – 4.2 Negative Effects on Innovation – 4.3 Macroprudential Risks – 5. Existing Tools to Bring Fintechs Inside the Regulatory Perimeter – 5.1 Regulatory Sandboxes – 5.2 Fintech Charters – 5.3 Appointed Representative Regimes – 6. A Complementary Solution: The Mentorship Scheme – 6.1 The Idea – 6.2 Supervisory Consequences – 6.3 Key Benefits – 6.4 Implementation – 7. Conclusion*

1. Introduction

Amid global competition to build the perfect financial ecosystem, governments worldwide are seeking ways to best harness the potential of new financial technology firms. These fintechs were once seen as "disruptors", potentially displacing established banks and paving the way for more innovative business models. More recently, both types of players have begun to appreciate various forms of collaboration.[1] The willingness of consumers to switch from traditional banks to newcomers had probably been overestimated, and this has reinforced the case for collaboration rather than directly enticing customers away from the established players.[2]

Partnership arrangements between banks and fintech firms may take on various forms, including simple joint ventures, but they may also involve more advanced technology-based ways of integrating new business models or services in the established bank's portfolio, mainly via open banking. The main reason for the proliferation of partnership arrangements is the many advantages they bring to both parties. When cooperating with an established bank, fintechs can take advantage of certain banking services or infrastructure, which saves them significant costs and decreases time-to-market. With a bank's cooperation (and licence), they can develop and test products and bring them to market without the

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[1] Financial Stability Board, *FinTech and Market Structure in Financial Services: Market Developments and Potential Financial Stability Implications* (14 February 2019) <www.fsb.org/2019/02/fintech-and-market-structure-in-financial-services-market-developments-and-potential-financial-stability-implications/> accessed 27 September 2022.

[2] World Economic Forum, *Beyond FinTech: A Pragmatic Assessment of Disruptive Potential in Financial Systems* (22 August 2017) <www.weforum.org/reports/beyond-fintech-a-pragmatic-assessment-of-disruptive-potential-in-financial-services/> accessed 27 September 2022.

need to apply for a separate banking licence, while at the same time developing their own brand and enjoying direct client access. Moreover, access to client data brings them opportunities with respect to entering new markets and offering innovative products. Hence, such collaboration boosts fintechs: they can compete with banks by offering services without having to build all of the products and processes that would ordinarily be needed from scratch. At the same time, as banks feel obliged to digitalize their business models as they search for new clients, many new market segments are opening up for fintechs and third-party providers. Fintechs can offer specialised services to, or build up the infrastructure of, a bank. In addition, collaborating with bigger market players earns reputational benefits and know-how transfer, thereby helping fintechs to increase their market share.

Conversely, by collaborating with fintechs, banks are able to extend their product range and gain access to new markets by making use of third-party-provider platforms and services. Moreover, they can outsource processes to third parties, saving them money and making them more flexible and agile with regard not only to product development, but also to changes in the market or regulatory environment. Finally, by outsourcing certain processes or services, banks can concentrate on, or specialise in, more profitable business areas that more closely match their expertise.

Both players are also likely to be motivated to join forces to counter the entry of "bigtech" firms.[3] From a social perspective, collaborations between banks and fintech firms may ultimately increase innovation by facilitating and speeding up new entrants' market access.

Such arrangements are generally to be welcomed but also pose regulatory problems, particularly concerning the effective supervision of fintechs operating outside of the direct purview of regulatory authorities. Questions of enforcement and effective supervision emerge, which may ultimately result in problems regarding market stability and systemic risk. In response, regulatory sandboxes and fintech charters may help to address these problems, but these are neither available everywhere nor can they always achieve the goal of attracting fintechs into the regulatory framework.

As an additional tool to facilitate this intermediate regulatory goal, we suggest that policymakers introduce an optional regime, complementary to the regulatory sandbox and / or the fintech charter, where fintech startups may gain a licence to operate as regulated businesses by having a regulated entity (eg, a bank) agree to "extend" its own licence to them in the framework of a "mentorship" agreement.

The licence extension would take the form of a communication from the incumbent to the supervisor, specifying the information usually given in the

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3 Financial Stability Board, *BigTech in Finance: Market Developments and Potential Financial Stability implications* (9 December 2019) <www.fsb.org/2019/12/bigtech-in-finance-market-developments-and-potential-financial-stability-implications/> accessed 29 July 2020.

context of authorization proceedings. In addition, the incumbent would state that it is satisfied that the startup meets the requirements for the granting of the licence and that it takes responsibility for the fintech startup's compliance with the regulatory framework. The startup would be jointly liable for its own breaches.

This paper lays out the case for a mentorship regime by, first, setting out the various forms and terminology of partnership arrangements between banks and fintech firms (chap. 2). Next, it contrasts these arrangements with the regulatory framework, which classifies the vast majority of these co-operations as outsourcing arrangements, through which the bank outsources some of its functions to another entity, namely the fintech firm (chap. 3). Under the applicable regulatory framework in Europe, the outsourcing bank is consequently subject to a range of requirements, whereas the outsourcee fintech does not directly fall within the supervisor's perimeter. That, as chap. 4 argues, may lead to some supervisory shortcomings. Chap. 5 then explains why regulatory sandboxes, fintech charters, and appointed representative regimes, useful as they may be, are imperfect solutions to the problems identified in chap. 4. This leads us to propose the "mentorship" regime, which we discuss in chap. 6, before a conclusion is provided in chap. 7.

2. The Incumbent/Fintech Collaborative Space

The fintech industry has an ambivalent relationship with incumbent banks, and vice versa. On the one hand, according to a previously strongly-held belief, fintechs are "disruptors" that may replace incumbent players. On the other hand, incumbents may be the main customers of fintech products,[4] important suppliers of services covered by licensing requirements,[5] and, thanks to their customer base, effective distributors of fintechs' products.[6] In addition, given their superior knowledge of the industry, incumbents may act as corporate venture capitalists to fund fintech projects.[7] Finally, incumbents may also become the acquirers

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[4] See C. Brummer, Y. Yadav, *FinTech and the Innovation Trilemma*, in Georgetown Law Journal, 2019, vol. 107, pp. 276-277: "[fintech] firms may offer services and products that complement those offered by incumbents to create innovative supply chains for financial products. In scenarios such as these, entrant firms may wish to take advantage of the customer networks, access to capital, and expertise offered by incumbents with a long pedigree".

[5] M. Bömer, H. Maxin, *Why Fintechs Cooperate with Banks – Evidence from Germany*, in Zeitschrift für die gesamte Versicherungswissenschaft, 2018, vol. 107, pp. 372-373 (noting how obtaining a licence can be prohibitively costly for a fintech start-up).

[6] See eg, European Banking Authority, *Report on the Impact of Fintech on Institutions' Business Models* (3 July 2018) 26 <https://eba.europa.eu/file/28458> accessed 29 July 2020.

[7] C. Brummer, Y. Yadav, *FinTech and the Innovation Trilemma*, cit., p. 277 ("prominent financial firms serve as incubators for fintech talent, putting new companies through their paces and offering pathways to partnership for those that come up with successful products and proofs of concept"); M.F. Klus *et al.*, *Strategic Alliances between Banks and Fintechs for Digital Innovation: Motives to Collaborate and Types of Interaction*, in Journal of Entrepreneurial Finance, 2019, vol. 21(1), p. 3.

of successful fintech firms further down the road.[8] Hence, there is ample scope not only for competition but also for collaboration and "co-opetition" between incumbents and fintech insurgents. In fact, there are already plenty of examples of strategic alliances between banks and fintech firms.[9]

Such collaboration has multiple mutual advantages. Banks, as the incumbents with legacy issues and cumbersome internal processes, may not be well-suited to developing new products and may thus prefer to buy them from third parties.[10] On the other hand, fintechs' superior technology may allow them to make better use of banks' troves of data.[11] In some areas, such as compliance, incumbents may transfer valuable knowledge (and culture) to fintech firms,[12] while the latter may instil greater entrepreneurial, innovation- and customer-oriented attitudes in their banking partners' organisations.[13] In addition, banks' customer bases may allow startups to benefit at an earlier stage from economies of scale,[14] and the incumbents' reputation as reliable institutions may spill over onto their new fintech partners.[15] Last but not least, incumbents may act as facilitators in the relationship between fintech startups and supervisory authorities, by bridging the cultural and knowledge gaps between the two.[16]

Over recent years, two main forms of collaboration between banks and fintech startups have emerged that are of interest here: (1) a bank gives its fintech partner's clients access to banking (or other financial) services (known as banking-as-a-service); and (2) a fintech provides a software product to the bank to improve the bank's product portfolio or customer experience (software-as-a-service).[17] In the former case, the key justification for the partnership is regulatory: it is often too costly for the startup to obtain a banking licence. At the same time, the core non-regulated, or lighter-regulated (bundle of) services

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8 A.F. Carmona *et al.*, *Competition Issues in the Area of Financial Technology (FinTech)* (European Parliament, 9 July 2018), pp. 43-46 <www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2018)619027> accessed 29 July 2020.

9 B.J. Drasch, A. Schweizer, N. Urbach, *Integrating the "Troublemakers": A Taxonomy For Cooperation Between Banks and Fintechs*, in Journal of Economics and Business, 2018, vol. 100, p. 26 (showing that strategic alliances are much more common than acquisitions, incubations, and joint ventures); L. Hornuf *et al.*, *How Do Banks Interact with Fintech Startups? Forms of Alliances and their Impact on Bank Value*, in Small Business Economics, 2021, vol. 57, p. 1505.

10 M.F. Klus *et al.*, *Strategic Alliances between Banks and Fintechs for Digital Innovation*, cit., pp. 9-10. See generally: C. Christensen, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, Harvard Business School Press 1997.

11 S. Hunter, *Innovation or Disruption: Not Always Black and White*, in J. Barberis, D.W. Arner, R.P. Buckley (eds), *The RegTech Book*, Wiley 2019, p. 124. See also G. Dorfleitner, L. Hornuf, *FinTech and Data Privacy in Germany*, Springer 2019, p. 89.

12 S. Hunter, *Innovation or Disruption*, cit., p. 124.

13 G. Dorfleitner, L. Hornuf, *FinTech and Data Privacy in Germany*, cit., p. 89; M.F. Klus *et al.*, *Strategic Alliances between Banks and Fintechs for Digital Innovation*, cit., pp. 9-11.

14 L. Hornuf *et al.*, *How Do Banks Interact with Fintech Startups?*, cit., p. 7.

15 G. Dorfleitner, L. Hornuf, *FinTech and Data Privacy in Germany*, cit., p. 89; M.F. Klus *et al.*, *Strategic Alliances between Banks and Fintechs for Digital Innovation*, cit., pp. 12-13.

16 M. Bömer, H. Maxin, *Why Fintechs Cooperate with Banks*, cit., p. 371.

17 Ibidem.

that fintech startups offer often include an ancillary (and yet essential) banking component, such as a current account and/or a payment system (eg a debit card) attached to a current account.[18] In the case of software-as-a-service, fintech startups, given their customer-centred culture, can be assumed to be better at finding technological solutions that clients will appreciate in terms of simplicity and, more generally, customer experience.

Especially where regulatory obstacles have proved surmountable, as is the case within the EU (and the UK), fintech startups have become banks themselves. In addition to servicing their own final clients, they act as one-stop-shops for both banking-as-a-service and software-as-a-service. One such example is the German bank N26, a mobile bank with a business model centred on the use of application programme interfaces (APIs) to serve other financial services providers, fintech firms, (online) retailers, and final banking services customers. Originally, when it was a startup itself, N26 was the junior partner of Wirecard, using the latter's banking licence.[19] Likewise, when N26 debuted in the US in 2019, it used Axos Bank's white-label services to access the American market.[20]

In Europe, long equipped with its own banking licence, N26 has now created an ecosystem where it uses many third-party providers' services to enrich its own banking services and customer experience, while at the same time supplying software-as-a-service and banking-as-a-service products to licensed financial institutions, fintech firms and non-financial market players, such as online retailers. Banking-as-a-service allows the fintech in the relationship (an e-money institution, for instance) to provide basic banking services (typically, a current account and a debit card) to its clients. The presence of a separate bank services provider may either be made explicit, with separate branding for the banking services, or be hidden from the clients, in the sense that they may only find out about it if they read the terms and conditions. In the latter case, the authorised entity operates as a "white-label bank"[21] whereby banking services clients have the impression that they are dealing exclusively with the fintech firm on the eponymous phone app they use and may have no knowledge whatsoever of the existence of a third-party bank in the relationship.

While N26 is still traditional in the sense that it mostly appears as the brand in direct contact with retail customers, other institutions have pushed this business model to the extreme. Banks like Solaris or Fidor have made "banking-as-a-platform" their sole business model. For example, Solaris, which holds a full banking licence, does not engage in any direct client contact itself. Its core

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18 Ibidem, p. 373.

19 Fintec Systems, *White Label Banking: Driver of Growth for FinTechs or Sustainable Business Model?* (23 August 2018) <https://knowledge.fintecsystems.com/en/blog/white-label-banking-driver-of-growth-for-fintechs-or-sustainable-business-model> accessed 29 July 2020.

20 R. Dillet, *N26 Launches its Challenger Bank in the US* (*TechCrunch*, 11 July 2019), <https://techcrunch.com/2019/07/11/n26-launches-its-challenger-bank-in-the-u-s/> accessed 29 July 2020. N26 said they would consider applying for a banking licence once they hit 1 million to 2 million users.

21 M. Bömer, H. Maxin, *Why Fintechs Cooperate with Banks*, cit., p. 376.

business is to "sell" its banking licence to fintech startups, which can provide and disseminate their services under Solaris's wings: its marketing effort is directed at fintechs (or other banks, for instance from third countries[22]) that "rent" the regulatory licence for a fee. In fact, Solaris is actively advertising itself as "empower[ing] you to become a financial pioneer" while asking customers to "choose from our API accessible services to create your own fully licensed state of the art financial solution".[23] In this way, Solaris – along with competitors such as Fidor Bank or Revolut – is an online bank which positions itself at the centre of an ecosystem of smartphone- and web-based financial and software products servicing mainly fintech and online services providers. In contrast to the traditional model, there is no single (monolithic) bank running all processes and providing all services, but rather a web of (smaller) interlinked players offering (bundles of) financial services. In some cases, the fintech serviced by the bank acts as a "front-end neobank",[24] that is, as an entity supplying banking services and looking like a bank to any customers who have neglected to read the small print. For instance, Penta is a German fintech which according to its homepage offers "[f]ast online banking for startups and SMEs".[25] Its answer to the question "Why Penta?" is: "Penta is the best account for everyday banking".[26] Yet, Penta itself is not a bank. Only by scrolling down to the bottom of its "About us" page (a hyperlink which is found at the bottom of the homepage) does one realize that Penta's banking services are "empowered by Solaris".[27]

Traditional banks may themselves be part of bank-fintech ecosystems, in that they may purchase ready-made software-as-a-service solutions to improve their customer experience. Yet other traditional banks, such as BBVA's subsidiary in the US and Intesa Sanpaolo in Italy, have created their own platforms to be at the centre of their own respective ecosystems.[28]

The banking-as-a-platform model is an evolution of the cooperation that originally developed in the US between fintechs and incumbent banks. In order to cover the entire territory of the US without obtaining either a

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22 See J. Bessenbach, *How Banking as a Service Can Open the Doors to Europe's Mobile Banking Market Solarisbank Blog* (14 March 2019) <www.solarisbank.com/blog/how-banking-as-a-service-can-open-the-doors-to-europes-mobile-banking/> accessed 29 July 2020.

23 Solarisbank, *Discover Our Services* <www.solarisbank.com/en/services/> accessed 27 September 2022.

24 Front-end neobanks are fintech companies acting as the interface of customers of banking services that they distribute. See Insider Intelligence, *What neobanks are, how they work and the top neobanks in the US & world in 2022* <https://www.insiderintelligence.com/insights/neobanks-explained-list/> accessed 27 September 2022.

25 See Penta <https://getpenta.com/en/> accessed 27 September 2022.

26 Ibidem.

27 Penta, *About* <https://getpenta.com/en/company/about-us/> accessed 27 September 2022. In Australia, the same business model is followed by Up; see Up, *About* <https://up.com.au/about/> accessed 27 September 2022.

28 See BBVA Open Platform <https://bbvaopenplatform.com/>; Banca 5 <https://www.banca5.com/> both accessed 27 September 2022.

federal charter or a licence from 50 states, peer-to-peer lenders opted for a cooperative arrangement with fully-licensed state banks: the fintech controls the process that leads to a borrower getting funds for the platform, but the loan is originated by a licensed bank, which then sells the loan to the fintech firm or the peer-to-peer lenders using its platform. In form, the licensed bank is the entity conducting the banking activity (originating the loan), but all the activities leading to the loan's issuance are the responsibility of the peer-to-peer platform acting as an outsourcee of the licensed banks. In substance, of course, it is the bank that is used as an outsourcee by the platform. And yet, from a regulatory perspective, the bank is the outsourcer and the fintech the outsourcee.

The same qualification applies within the EU to relationships between banks providing fintechs with banking-as-a-service functionalities: while the customer often perceives the fintech as its unique counterparty, the banking services component of the relationship with the customer is provided by a bank that formally outsources to the fintech much of the customer management relationship, from client-onboarding to terminating the relationship. As a consequence, the relationship between the bank and the fintech is much more complex than a purely commercial arrangement in which a standardized (financial) product is an ancillary element of a broader customer relationship between the fintech and its clients. Outsourcing critical banking functions implies compliance with the bulky requirements of the EU's bank outsourcing regime, to which we now turn.

3. The Regulatory Framework: The Rules on Bank Outsourcing

From a regulatory perspective, the partnerships between banks and fintechs we described in chap. 2 are classified as "outsourcing" arrangements.[29] Regardless of how the cooperation came about, and whichever business case may have driven it, from a regulator's perspective it is always the bank that is "outsourcing" some of its activities to a non-regulated entity. Put differently, the two scenarios described above – the fintech uses the bank's licence to operate independently and under its own name on the market; and the bank draws on the fintech's services to complement its offerings – would both count

[29] In the context of MiFID, "outsourcing" is defined as "an arrangement of any form between an investment firm and a service provider by which that service provider performs a process, a service or an activity which would otherwise be undertaken by the investment firm itself". See Article 2(3) of Commission Delegated Regulation (EU) 2017/565 of 25 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council as regards organisational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive [2017] OJ L87/1.

as a regulated firm outsourcing some of its activities to a third party.[30] Regulation abounds in many countries to ensure that such contractual arrangements do not impair the supervisory function of market regulators.[31] The key idea underpinning such regulation is that any outsourcing arrangement is subject to the general framework governing the risk management of banking institutions. Supervisors will thus make sure that sensitive areas that are essential for the carrying out of core banking or financial services will not be contractually moved to another firm without appropriate safeguards.

To this end, regulation delves deeply into defining the contents of the outsourcing relationship. For example, banks may not outsource their key managerial responsibility and must always ensure that the integrity of their business organisation is unimpaired.[32] In addition, a decision to outsource a particular activity may not result in the bank escaping from its responsibility for the activity. The bank has therefore to ensure that the outsourced activity is performed in the same way as it would have been "in house". Typically, the law provides for more stringent requirements where the outsourced activity is "material" or "critical or important";[33] however, the decision on whether an outsourcing operation is material or not is for the bank to take, based on an individual risk assessment.[34] This is against a background in which there is typically neither an ex ante screening mechanism for outsourcing arrangements, nor an obligation to

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30 To be sure, the EBA Guidelines are far from clear in drawing the line between mere purchases of third-party services and outsourcing arrangements. The test is whether the function "is performed on a recurrent or an ongoing basis by the service provider and whether this function … would *normally* fall within the scope of functions that would or could realistically be performed by [banks], even if the [bank] has not performed this function in the past itself": see European Banking Authority, *Final Report on EBA Guidelines on Outsourcing Arrangements* (25 February 2019) (hereafter, EBA Guidelines) para 26 <https://eba.europa.eu/regulation-and-policy/internal-governance/guidelines-on-outsourcing-arrangements> accessed 27 September 2022 (emphasis added). After providing a list of specific services that are not considered outsourcing, such as market information services, global network infrastructures, and corresponding banking services, they exclude from the definition "the acquisition of services that would otherwise not be undertaken by the [bank] …, goods … or utilities": see EBA Guidelines, para 28(g). Software is not listed among the services or goods that exemplify such residual category of non-outsourcing services. Yet, the general criterion of normality in self-production can be used to exclude that some of the software services can be deemed to be outsourced. No one expects a bank to write the code for its own word-processing software. But the boundaries become hazier when it comes to software performing risk management functions. In addition, if normality is the test, the more banks buy software from third parties, the less can they "realistically" be expected to develop the software themselves.

31 See eg EBA Guidelines (n. 30); Office of the Comptroller of the Currency, *Third-Party Relationships: Risk Management Guidance* (OCC Bulletin 2013-29, 30 October 2013) <www.occ.gov/news-issuances/bulletins/2013/bulletin-2013-29.html>, accompanies by *Third-Party Relationships: Frequently Asked Questions to Supplement OCC Bulletin 2013-29* (5 March 2020) <https://www.occ.gov/news-issuances/bulletins/2020/bulletin-2020-10.html>; Financial Conduct Authority, *FCA Handbook*, SYSC 13.9 "Outsourcing" <www.handbook.fca.org.uk/handbook/SYSC/13/9.html> all accessed 27 September 2022; BaFin, *Mindestanforderungen an das Risikomanagement* (Circular 10/2021 (BA)) (hereafter, MaRisk); and KWG §25b.

32 EBA Guidelines, paras 35, 36; MaRisk AT 9 para 4.

33 See EBA Guidelines, para 29; KWG § 25b.

34 MaRisk AT 9 para 2.

notify them to the supervisor pursuant to the EBA Guidelines.[35] Rather, the bank normally decides on the outsourcing arrangements under its own responsibility and takes appropriate steps as part of its general risk management policies and procedures.[36]

Where the outsourcing operation is material (or "critical" or "important"), a number of additional requirements apply.[37] For example, the outsourcing institution is required to carry out appropriate due diligence to ensure that the outsourcee is suitable and has, inter alia, the business reputation, expertise and capacity to perform the outsourced functions.[38] A written outsourcing agreement is mandated, following a detailed set of requirements.[39] Amongst other things, this agreement has to provide that both the bank and the supervisory authority are in a position to effectively monitor the outsourcee, including having access to its premises, as well as having examination and information powers.[40] Still, the key responsibility for overseeing the outsourcee appears to rest with the outsourcing bank, rather than with the market supervisor.[41] Accordingly, the supervisor will focus its efforts on monitoring the outsourcing institution, and whether the outsourcing arrangement is undermining the institution's activities.[42] This is consistent with the general distribution of responsibilities, as described above, according to which the supervisor is generally responsible for overseeing the licensed bank, and the bank is responsible for, and will monitor, any outsourcing activity under its own responsibility.

Finally, a key aspect of the outsourcing regime is that functions relating to core banking services, namely the taking of deposits and loan-making, and payment services cannot be outsourced other than to entities that are authorised or somehow allowed to carry out those services.[43] More precisely, the outsourcee is prohibited from having decision-making authority with respect to the acquisition of a new customer (depositor or borrower). So long as such decisions are left to the bank, related functions can still be outsourced.[44]

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35 The situation may be different at the member state level. For instance, under the Italian regime, any material outsourcing arrangement needs to be notified to the Bank of Italy. See Banca d'Italia, Circolare No 285/2013, Part I, IV.3.28. The same is true in the UK. See *FCA Handbook*, SYSC 13.9.2.

36 Before MiFID I was implemented, German law had provided for an obligation to disclose any outsourcing arrangement to the market supervisor.

37 One helpful definition of "materiality" is as pertaining to "services of such importance that weakness, or failure, of the services would cast serious doubt upon the firm's continuing satisfaction of the threshold conditions or compliance with the Fundamental Rules". See Prudential Regulation Authority, *PRA Rulebook* <http://www.prarulebook.co.uk/> accessed 27 September 2022.

38 EBA Guidelines, paras 69-73.

39 Ibidem, paras 74-75.

40 Ibidem, paras 85 ff.

41 See ibidem, paras 100-105.

42 Ibidem, para 109.

43 Ibidem, para 62.

44 See P. Maume, *In Unchartered Territory – Banking Supervision Meets Fintech*, in Corporate Finance, 2017, vol. 11-12, pp. 377-378.

4. Policy Implications

The many dimensions of partnerships between banks and fintech firms, combined with the regulatory framework we have sketched out in chap. 3, have several implications. On the positive side, as we have seen in chap. 2, having the support of an established bank will help new players to access the market much faster than if they had to go through the entire regulatory authorisation process by themselves. The possibility to piggyback on the established bank's regulatory licence is a contractual means of ensuring that new ideas can be realised despite high regulatory hurdles.

Some supervisors, such as the German BaFin, seem to encourage this trend.[45] A reason for this may be that when banks provide support, know-how and even their licence, regulators save significant resources (as some of these tasks would otherwise need to be handled by them). Regulators may also limit their own liability if they can successfully outsource their responsibility to the private sector. Especially in white-label banking, banks typically conduct a thorough due diligence (certainly in their own interest) of the fintech that is seeking to use their licence. However, this passive "outsourcing" regulation/licensing to the private sector may also carry the risk of regulatory arbitrage, open up opportunities for abuse and, ultimately, jeopardise financial stability.

4.1 Microprudential Risks

The key downside of the existing collaboration arrangements between banks and fintechs lies in the proposition that a contractual agreement between the two market participants is a poor substitute for effective regulatory scrutiny. Such contractual agreement appears not to allow for the effective monitoring of the fintech by the supervisor. This, in turn, may give rise to regulatory loopholes, arbitrage, and enforcement problems that may ultimately pose a threat to financial stability.

To explain the weakness of contractual solutions in our context, imagine a partnership agreement between bank B and unregulated fintech F whereby B provides F with a banking licence and access to its client base against a monthly fee. Now suppose that F does not comply with some serious regulatory requirements that concern, for example, money laundering. The key problem lies in the fact that F as the firm responsible for the legal infringement does not fall directly under the regulatory scrutiny of the relevant supervisor, which only has the power to supervise and sanction B. Under the EU framework, the supervisor can obtain documents and also inspect the outsourcee F,[46] but has no direct power of early intervention or sanction vis-à-vis F. Of course, it may ban

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[45] See also World Economic Forum, *Beyond FinTech*, cit., p. 143: "Regulators are comfortable with increased outsourcing of core business functions".

[46] EBA Guidelines, paras 87, 110.

the outsourcing bank from retaining its relationship with a delinquent outsourcee, but that may be too drastic or too untimely a solution compared to a scenario in which the outsourcee is fully within the regulatory perimeter.

One may expect that the contract between B and F could serve as an adequate private substitute to supervisory monitoring. And indeed, at first sight, B has an incentive to ensure F's compliance with regulatory requirements: since F is acting under B's responsibility, using the latter's licence, B may face regulatory sanctions for any infringement deriving from F's conduct. However, it is easy to imagine situations in which the contractual solution does not provide optimal outcomes. For example, B and F may disagree as to whether F's conduct constitutes an infringement of legal rules. Furthermore, B may have an incentive to delay or to obscure detection of the infringement, particularly where the violation of legal rules works in their favour. This may be even more problematic where different employees within B have diverging incentives resulting in governance problems: simply put, compliance officers may work according to very different incentives compared to those who are responsible for the commercial success of the fintech-bank partnership. Finally, B may have become aware of an infringement but may be hesitant to rectify the situation because the infringement is so substantial that the continuation of F's business is at risk, which may put their collaboration into jeopardy and even threaten the continuity of B's own business.[47]

Anecdotal evidence confirming that such problems are serious abound in the context of software-as-a-service agreements. For example, there have been cases where established banks were facing serious reputational and financial problems due to a partnering firm's computer failures. Several years ago, a retail bank left millions of customers unable to withdraw funds or view their balances due to a computer failure, which occurred as one of the bank's IT suppliers was performing a software update.[48] This failure proved costly as it resulted in the paralysis of critical banking functions. Another bank had to compensate thousands of customers whose personal information had been stolen and sold illegally. The data had been stored by a partnering firm on a USB stick which was subsequently "lost".[49]

More generally, the UK Prudential Regulation Authority (PRA) has stated that it is aware of the risk that confidential, important or sensitive data which are outsourced to third parties may not always be secure and accessible to firms and regulators.[50] This may become particularly problematic during or following an operational disruption of the fintech's business.[51]

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[47] Banks are required to provide so-called "exit plans" to anticipate this problem (EBA Guidelines, para 107); however, it is doubtful how reliable these are.

[48] A. Deftereos, J. Tuplin, *Banks: The Benefits and Risks of Outsourcing* (Axa XL Insurance/Reinsurance, 10 October 2016) <https://axaxl.com/fast-fast-forward/articles/banks-the-benefits-and-risks-of-outsourcing> accessed 27 September 2022.

[49] Ibidem.

[50] Prudential Regulation Authority, *Outsourcing and Third Party Risk Management* (Consultation Paper 30/19, 5 December 2019) para 1.10.

[51] Ibidem.

Although not exactly the same situation, the 2020 collapse of Wirecard, the German payments group that relied on partnering with firms in its Asian markets, also put a spotlight on the frailty of contractual arrangements. Wirecard entered into partnership contracts in jurisdictions where it did not have its own market licence such as Dubai, Singapore and the Philippines.[52] According to what we know about the scandal as we write (September 2022), the difficulty for regulators to detect the wrongdoing and the missing funds may have been aided by the opaqueness of these contractual relationships, which contributed to Wirecard's downfall. Also, neobank N26 (discussed above) was fined €4.25 for lax anti-money laundering controls in 2021 and was ordered to establish tougher internal controls and safeguards to prevent money laundering and terrorist financing.[53]

All these risks will obviously be exacerbated once the bank is not just partnering with one single fintech but, indirectly, with several fintechs simultaneously. It is common practice that outsourcees may further outsource functions to their own contractual partners, which may result in a potentially troublesome chain of sub-agreements.[54]

To conclude, the operational risks all banks run, and which are the source of the market failures justifying regulation and supervision, also characterise the relationship between banks and fintechs. Because of the supervisor's indirect focus and weaker reaction tools vis-à-vis the (unlicensed) fintechs, the operational risks of these cooperation arrangements are bound to be magnified.[55]

4.2 Negative Effects on Innovation

Where banks are taking their liability risk seriously and are stepping up their efforts to ensure compliance on the part of their partners, contracts between banks and fintechs may become so pervasive as to be perceived effectively as a straitjacket by the latter. For example, when N26 was itself still a young startup and the junior partner in an arrangement with Wirecard, the contract between them appears to have been perceived by N26 as unbearably restrictive with regard to its range of actions:[56] N26 did not control a large part of its value chain. For example, the contractual terms meant that it was not allowed to

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[52] D. McCrum, *Wirecard Relied on Three Opaque Partners for Almost All its Profit*, Financial Times, 24 April 2019.

[53] Reuters, German watchdog BaFin orders N26 to pay $5 million fine (28 September 2021), https://www.reuters.com/business/german-watchdog-bafin-orders-n26-pay-5-million-fine-2021-09-28/.

[54] C. Brummer, Y. Yadav, *FinTech and the Innovation Trilemma*, cit., pp. 275-278.

[55] See C.-Y. Tsang, *From Industry Sandbox to Supervisory Control Box: Rethinking the Role of Regulators in the Era of FinTech*, in University of Illinois Journal of Law, Technology, and Policy, 2019, pp. 365-366.

[56] R. Dillet, *Number26 is now a True Bank as it now has a Full Banking License* (*TechCrunch,* 21 July 2016) <https://techcrunch.com/2016/07/21/number26-is-now-a-true-bank-as-it-now-has-a-full-banking-license/> accessed 27 September 2022.

partner itself with other startups; and it was not in a position to build its own financing products, such as savings accounts, investment products and credit offerings.[57] Furthermore, most bank-fintech agreements, at least in Europe, appear to be drafted with a rather short time horizon and for a limited target pool of customers.[58] In other words, the contractual solution appears not to grant fintechs the flexibility they need to grow, which indirectly may serve as a hindrance to innovation.[59] In extreme cases, white-label banking partners may seek to "micromanage" their fintech partners, prescribing them which customers to take on, and which strategic goals to pursue. Such straightjacket terms may make partnerships unsustainable and may lead to the abandonment of innovative business ideas.

To be clear, this problem does not arise specifically as a consequence of the prudential rules concerning the outsourcing arrangement, but rather stems from the fact that the fintech is outside the regulatory perimeter and is therefore not allowed to develop its own business ideas and pursue its own objectives, such as finding new clients, independently. The perceived straightjacket is thus the result of the bank having to remain ultimately in charge of (and therefore liable for) those business decisions. As a consequence, it appears that drawing fintech firms into the regulatory perimeter could grant them more leeway to experiment with their own business models and make the balance of powers within the bank-fintech partnership more of a business function than a regulatory consideration.

4.3 Macroprudential Risks

Beyond the individual firm-level problems discussed above, outsourcing arrangements may also lead to complications for the financial system as a whole.

First, interconnections between banks and new non-licensed players, such as front-end neobanks, can complicate the topography of the financial system. If front-end neobanks become key distributors of banking products, non-regulated entities could become key nodes in the distribution of core financial services.

While the experience so far has been that, as they grow sufficiently, front-end neobanks tend to convert into fully-licensed banks, often by acquiring existing

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[57] Ibidem.

[58] N26 CEO Valentin Stalf is cited as saying "The deals that you get in the U.S. for white-label banks are much more favorable than in Europe. […] It's a setup for the longer term. It's good for a couple million customers". See R. Dillet, *N26 Launches its Challenger Bank in the US*, cit.

[59] See the statement about the eventual acquisition of a licence: "It was clear that the license would be key to keep fuelling innovation – it would enable us to develop and implement state-of-the-art technologies, launch new products for our customers quickly, and be more flexible towards internationalization". A. Weber, *Against All Odds: The Trials of Getting our Banking License* (18 July 2018) <https://n26.com/en-eu/blog/2-years-banking-license-n26> accessed 27 September 2022.

banks, the risk of them developing as large and systemically significant shadow banks cannot be ruled out.[60]

An intuitively much more serious source of risk is that of the interconnections between financial institutions on the one hand, and non-regulated software-as-a-service providers (especially bigtech firms) on the other.[61] The same may indeed hold true for cloud services.[62] In these contexts, a single service provider, or a small number of service providers which are very difficult to replace, may come to dominate the provision of certain outsourced and third-party services to numerous banks.[63] This may constrain banks' ability to exit outsourcing arrangements without incurring serious disruption and/or significant costs; a phenomenon that has been described as "vendor lock-in".[64] Relatedly, the development may lead to the concentration of crucial functions among market-dominating service providers (who contract with many banks simultaneously).[65] A major disruption, outage or failure at one of these service providers could create a "single-point-of-failure" with potentially adverse consequences for financial stability.[66]

Conversely, special attention should be paid to systemically important financial institutions' (SIFIs) outsourcing practices.[67] Where such institutions do not appropriately manage risks associated with third-party outsourcing at the firm level, systemic operational and cybersecurity risks may arise for the financial system as a whole.[68] As a result of such risk mismanagement, SIFIs may also become less easily resolvable in times of crisis, which may further contribute to systemic risks.

An additional dimension to consider is the limited jurisdictional reach of supervisory power. Encouraged by regulatory arbitrage opportunities, banks may be incentivised to outsource major functions to partners that are resident in offshore financial centres or in light-touch jurisdictions, where regulatory standards are lax.

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60 G. Barba Navaretti, G. Calzolari, A.F. Pozzolo, *Fintech and Banks: Friends or Foes?*, in European Economy – Banks, Regulation, and the Real Sector, 2017, vol. 3(2), pp. 27-28 <https://european-economy.eu/book/fintech-and-banks-friends-or-foes/> accessed 27 September 2022; X. Vives, *The Impact of Fintech on Banking*, in European Economy – Banks, Regulation, and the Real Sector, 2017, vol. 3(2), p. 104 <https://european-economy.eu/book/fintech-and-banks-friends-or-foes/> accessed 27 September 2022.

61 Financial Stability Board, *BigTech in Finance*, cit., pp. 15-17; M. de la Mano, J. Padilla, *Big Tech Banking*, in Journal of Competition Law & Economics, 2018, vol. 14, p. 510; C.-Y. Tsang, *From Industry Sandbox to Supervisory Control Box*, cit., pp. 366-367.

62 J. Danielsson, R. Macrae, *Systemic Consequences of Outsourcing to the Cloud* (*Vox CEPR*, 2 December 2019) <https://cepr.org/voxeu/columns/systemic-consequences-outsourcing-cloud>.

63 Financial Stability Board, *BigTech in Finance*, cit., p. 2.

64 Prudential Regulation Authority, *Outsourcing and Third Party Risk Management*, cit., para 1.12.

65 Basel Committee on Banking Supervision, *Outsourcing in Financial Services* (The Joint Forum, February 2005), p. 12.

66 Prudential Regulation Authority, *Outsourcing and Third Party Risk Management*, cit., para 2.48.

67 The Financial Stability Board maintains a list of global SIFIs. The most recent version is available at <https://www.fsb.org/2022/11/2022-list-of-global-systemically-important-banks-g-sibs/> accessed 13 January 2023.

68 Financial Stability Board, *FinTech and Market Structure in Financial Services*, cit., pp. 3-4; Financial Stability Board, *BigTech in Finance*, cit., p. 24.

This may exacerbate the problematic side of the outsourcing process by adding political risks and challenges regarding enforcement to the equation picture.[69]

Ultimately, an extensive use of outsourcing and partnership arrangements bears the risk of the emergence of "virtual" banks that are not regulated as such, if at all. Regulators' explicit prohibition of outsourcing banks becoming "letterbox" entities or empty shells may be insufficient to avert the risks outlined in this section.[70]

All of this does not substantiate the conclusion that partnerships of the kind described above ought to be prohibited. Rather, we argue that it would be safer if fintech firms were attracted into the regulatory perimeter wherever that is reasonably possible.

5. Existing Tools to Bring Fintechs Inside the Regulatory Perimeter

The previous part highlighted the risks of current forms of bank-fintech partnerships when the fintech is outside of the regulatory perimeter or is more lightly regulated than would be consistent with the risks posed by such partnership arrangements. A draconian measure would be to require fintechs integrating banking services into their products suites to convert into a bank or to be ipso facto subjected to some form of supervision by prudential and conduct regulators. That would render the scope of the regulatory framework excessively wide, and therefore wasteful, and would burden new firms with potentially prohibitive costs. A more proportionate reaction would seem to be to ease the transition from non-regulated entity to regulated entity for fintechs. Three existing regulatory instruments can serve that very function to a varying degree: regulatory sandboxes, fintech charters, and appointed representative regimes. We now briefly describe these tools and acknowledge how they may fail to fully achieve the desired goal of bringing fintechs into the regulatory perimeter.

5.1 Regulatory Sandboxes

One useful tool applied in many jurisdictions since the mid-2010s that could help to achieve the goal of drawing fintechs into the supervisory framework is the regulatory sandbox.[71]

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69 Basel Committee on Banking Supervision, *Outsourcing in Financial Services*, cit.

70 European Banking Authority, *Consultation Paper: EBA Draft Guidelines on Outsourcing Arrangements* (EBA/CP/2018/11, 22 June 2018) para 31 <https://eba.europa.eu/regulation-and-policy/internal-governance/guidelines-on-outsourcing-arrangements> accessed 29 July 2020.

71 See generally D.A. Zetzsche *et al.*, *Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation*, in Fordham Journal of Corporate and Financial Law, 2017, vol. 23, pp. 64-68, and R. Buckley *et al.*, *Building Fintech Ecosystems: Regulatory Sandboxes, Innovation Hubs and Beyond*, in Washington University Journal of Law & Policy, 2020, vol. 61, pp. 85-98 (for a list of regulatory sandbox initiatives around the globe).

A regulatory sandbox is "a controlled space in which businesses can test and validate innovative products, services and business models, and delivery mechanisms with the support of an authority for a limited period of time".[72] Its main goal is to promote innovation and competition.[73] To achieve this, financial regulators will solicit applications to the programme, based on their promise in terms of innovativeness, potential for increased competition, greater financial inclusion, and so on.[74] Admission to the programme allows fintechs to start providing licensed services with guidance from the regulator. In addition, the regulatory regime can be adapted to allow for experimentation of a product that does not fully square with the existing rules. In the process, they facilitate the transition from outwith to within the regulatory perimeter.

Yet, helping a fintech in its transition to a regulated entity is not the primary rationale of regulatory sandboxes. While they are primarily concerned with promoting innovation and competition, guiding startups to transition to become a fully-regulated entity is only a secondary, indirect goal of the sandbox. It is therefore unsurprising that, whatever their intrinsic merits, regulatory sandboxes would be insufficient to achieve that particular goal.

First of all, admission to regulatory sandbox programmes is selective,[75] and the selection is also based, at least in the UK, Australia, and some other jurisdictions, on the degree of innovativeness of the fintech products.[76] It may well be that the fintech partner's business model is simply to provide a better customer experience thanks to its application's slickness rather than using advanced technology such as machine learning or distributed ledgers. Hence, many such partners may not even aspire to be admitted to the programme.

In addition to that, some programmes, such as that of the UK, are very short for an individual fintech firm.[77] The regulatory advantage for firms admitted to the UK FCA's programme is to last only six months,[78] after which it is either up (full authorization) or out: that may well be an insufficient period of time in which to fully adapt to the new regime.

To be successful, the sandbox also requires substantial resources and the presence of flexible, committed, business-friendly staff at the supervisory authority administering the programme, which is arguably something that cannot

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72 W.-G. Ringe, C. Ruof, *Regulating Fintech in the EU: The Case for a Guided Sandbox*, in European Journal of Risk Regulation, 2020, vol. 11, p. 608.

73 R. Buckley *et al.*, *Building Fintech Ecosystems*, cit., p. 76.

74 See eg L. Bromberg, A. Godwin, I. Ramsay, *Fintech Sandboxes: Achieving a Balance Between Regulation and Innovation*, in Journal of Banking and Finance Law and Practice, 2017, vol. 28, pp. 317-319 (describing the UK and the Australian regulatory sandboxes).

75 In the first two and a half years, the FCA admitted 118 firms to its sandbox programme, out of 375 applications. See Financial Conduct Authority, *Regulatory Sandbox* <www.fca.org.uk/firms/innovation/regulatory-sandbox> accessed 27 September 2022.

76 R. Buckley *et al.*, *Building Fintech Ecosystems*, cit., pp. 61-64.

77 Ibidem, p. 68.

78 H.J. Allen, *Regulatory Sandboxes*, in George Washington Law Review, 2019, vol. 87, p. 596.

be expected in many jurisdictions. In fact, while sandboxes have become a standard feature of jurisdictions competing to attract fintech firms,[79] many of them are largely symbolic "window dressing" exercises; they are sandboxes in name only, with inadequate staff and insufficient openness to novel business models.

Finally, regulatory sandboxes (and innovation hubs generally)[80] may admit just a fraction of banks' fintech partners, due to their focus on innovativeness and their size limits, and at the same time be excessively lenient in granting waivers and reprieves. That is because regulators setting up sandboxes are also competing to attract fintech firms and may thus lower their standards to achieve that goal.[81]

As a consequence, regulators may let in some participants under a special regime that may only later prove to pose threats to financial markets.[82] Given the fintech's interconnections, such threats may well materialize outside of, and far more broadly than within, the controlled environment of the sandbox.[83]

5.2 Fintech Charters

In some jurisdictions, special licences for fintechs have been envisaged or already put in place. In the US, for instance, the Office of the Comptroller of the Currency (OCC) has declared its intention to grant a banking licence to fintechs engaged in at least one of three identified core activities: taking deposits, paying checks, and making loans.[84] Yet, the OCC has made no attempt to ease the transition from non-regulated entity to licensed bank. What makes the fintech charter special is the clarification that the licence can also be given to fintechs that carry out just one of those three core activities, meaning that it is not obligatory for a fintech-chartered entity to take deposits. The prize for fintechs obtaining the special licence to operate as federal banks is that cumbersome state-level regulations, such as anti-usury laws, would no longer apply to them.[85] In any event, there is currently no fintech to have obtained a

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[79] See R. Buckley *et al.*, *Building Fintech Ecosystems*, cit., pp. 71-76.

[80] See ibidem.

[81] H.J. Allen, *Regulatory Sandboxes*, cit., pp. 614-615.

[82] C. Brummer, Y. Yadav, *FinTech and the Innovation Trilemma*, cit., pp. 278-280 ("the design of fintech products and services – although anchored by vast troves of big and brand new types of data – introduces steep informational uncertainty for regulation" and "endogenous, computerized learning sets up the prospect that algorithms use internal processing and validation mechanisms whose reasoning and outputs are unpredictable ex ante and difficult to correct in real time, representing a kind of 'black-box' for regulators").

[83] C. Brummer, Y. Yadav, *FinTech and the Innovation Trilemma*, cit., p. 296; J. Kelly, *A "Fintech Sandbox" Might Sound Like a Harmless Idea. It's not* (*FT Alphaville*, 5 December 2018) <https://www.ft.com/content/3d551ae2-9691-3dd8-901f-c22c22667e3b> accessed 27 September 2022.

[84] Office of the Comptroller of the Currency, *Policy Statement on Financial Technology Companies' Eligibility to Apply for National Bank Charters* (31 July 2018) available at <https://www.occ.gov/news-issuances/news-releases/2018/pub-other-occ-policy-statement-fintech.pdf>.

[85] D. Zaring, *Modernizing the Bank Charter*, in William & Mary Law Review, 2020, vol. 61, p. 1470.

special fintech licence from the OCC whose fintech charter policy has been challenged before federal courts.[86]

In Switzerland, a fintech licence regime came into force at the beginning of 2019, which is tailored, more specifically, to companies specializing in new payment services and crowdfunding.[87] It allows fintechs to operate a deposit-taking business under special, more lenient rules than for banks, provided that they stay below a deposit cap of CHF 100 million (approximately € 93.5 million).[88]

Banking requirements on liquidity, capital, and organisation are alleviated for these firms because they are prevented from engaging in maturity transformation: they cannot engage in lending or in investing depositors' money.[89] In addition, they may not pay interest on deposits.[90] While licencees are exempted from having to join the Swiss deposit guarantee scheme, they must segregate the deposits from their own assets or at least earmark them in their books so that they can at any time be identified.[91]

Licencees are still subject to capital adequacy requirements in order to ensure a level of loss-absorbency for the deposits, but the ratios are significantly less strict than they are for banks.[92] Governance and anti-money laundering requirements have also been simplified, especially for smaller institutions of low-risk profile and maximum gross income of CHF 1.5 million.[93] According to the Swiss banking regulator (FINMA), thanks to the laxer regulatory requirements, these licences can be obtained much more quickly than full banking ones.[94]

Whatever the specific design, fintech licences may suffer from the drawback that a high number of different licence types may create regulatory arbitrage and

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86 Ibidem, p. 7.

87 Baker McKenzie, *The New Swiss FinTech License* (21 March 2019) <https://www.bakermckenzie.com/-/media/files/insight/publications/2019/03/br_switzerland_newswissfintechlicense_20190404.pdf?la=en> accessed 27 September 2022.

88 If the threshold is exceeded, the Fintech licensee must report to FINMA within 10 days and submit a bank licence application. Art 1b "Innovation funding", Federal Act on Banks and Savings Banks (Switzerland).

89 Swiss Financial Market Supervisory Authority (FINMA), *Guidelines for FinTech Licence Applications Pursuant to Article 1b of the Banking Act* (2 August 2021) <www.finma.ch/en/authorisation/fintech/fintech-bewilligung/> accessed 27 September 2022.

90 Ibidem.

91 PwC, *The Swiss Fintech Licence: A Brief Introduction* (January 2020) <www.pwc.ch/en/publications/2020/The%20swiss%20fintech%20license_EN_web.pdf> accessed 27 September 2022.

92 Fintech licensees must maintain capital in the value of 3% of the deposits at all times and never less than CHF 300,000. This means that the initial capital of the fintech licensee to operate is CHF 300,000, while banks are subject to a much stricter capital requirement of at least CHF 10 million. FINMA holds the discretion to alter this requirement depending on individual cases and the risks associated with the business. See Baker McKenzie, *The New Swiss FinTech License*, cit.

93 Swiss Financial Market Supervisory Authority (FINMA), *FinTech Licence: FINMA Sets out Details of Anti-Money Laundering Due Diligence Requirements* (10 December 2018) <www.finma.ch/en/news/2018/12/20181210-mm-fintech-bewilligung/> accessed 27 September 2022.

94 PwC, *The Swiss Fintech Licence*, cit.

unlevel the playing field in that they create different legal standards for the same type of activities.[95]

5.3 Appointed Representative Regimes

With respect to a defined set of financial services, the UK allows some firms to operate without a licence while at the same time being subject to the relevant regulations and the supervisory powers of the competent authority. Such firms may do so by acting as "appointed representatives" of an authorised firm.

An appointed representative is a firm or person that performs regulated activities and acts as an agent for a principal firm directly authorised by the FCA. The principal firm takes full responsibility for ensuring that its appointed representatives comply with the FCA's rules and is accountable for any breaches committed by them. Provided the contract between the appointed representative and the principal firm meets the requirements set out in the Appointed Representative Regulations and the principal accepts responsibility in writing for the authorised activities carried out by the appointed representative, the latter will be exempt from the need to obtain an authorisation.[96]

The Financial Services and Markets Act sets out the business activities for which an appointed representative may enjoy an exemption, such as arranging a home finance transaction, credit broking, and debt collection / administration.[97] Appointed representatives may also act as "tied agents", and remain exempt from licensing requirements, provided they satisfy certain additional conditions.[98] In 2015 the FCA even toyed with the idea of introducing an "umbrella" licence, built on the appointed representative regime, where the principal would be a non-profit organisation.[99]

The ongoing compliance costs of appointed representatives are likely to be considerably lower than for authorised firms, as the former benefit from the authorised status of their principal. For instance, neither capital nor professional indemnity insurance requirements apply. The principal must ensure that the contract it enters into with the appointed representative requires it to comply with the relevant rules. Amongst other responsibilities, the principal firm is responsible for the products the appointed representative sells or arranges, any advice it gives

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95 See A. Gurrea-Martínez, N. Remolina, *Global Challenges and Regulatory Strategies to Fintech*, in Banking & Finance Law Review, 2020, vol. 36, p. 65.

96 General guidance by the FCA is available at Financial Conduct Authority, *Appointed Representatives and Principals* <www.fca.org.uk/firms/appointed-representatives-principals> accessed 27 September 2022.

97 See Financial Services and Markets Act 2000 s 39, and also *FCA Handbook*, 'Supervision' (hereafter 'SUP') s 12.2.7(1), for a clearer view.

98 See SUP s 12.2.7(2).

99 Financial Conduct Authority, *Regulatory Sandbox* (November 2015) para 4.7 <www.fca.org.uk/publication/research/regulatory-sandbox.pdf> accessed 27 September 2022. See on this in detail D.A. Zetzsche *et al.*, *Regulating a Revolution*, cit., 85 ff.

to customers, and for ensuring that it delivers the six FCA "treating customers fairly" outcomes, as would be required of a directly authorised firm.[100]

The appointed representative regime has given rise to a cottage industry of specialised "umbrella firms" whose sole business is to act as principals on behalf of unlicensed firms in financial services such as insurance and mortgage brokerage, investment management and investment services.[101] This may result in so-called appointed representatives "networks".[102] Some fintechs, such as crowdfunding platforms operators, have accessed the regulatory perimeter as appointed representatives of such firms.[103] While the UK FCA has played with the idea of replicating this model in a sandbox context, it has left the initiative to the financial industry,[104] which appears to have dropped the ball.[105]

A review carried out in 2019 revealed a number of serious shortcomings in the system, for example relating to under-developed governance arrangements and poor onboarding practices.[106] Moreover, there appears to be an issue with so-called "phoenix firms" – firms that seek to become an appointed representative to get back into the industry after having rid themselves of old liabilities in their previous guise.[107] The review gained additional momentum due to the prominent failure of Greensill Capital, which was itself an appointed representative.[108] This process led to a major reform in 2022, which introduced additional supervisory responsibilities for principals of appointed representatives and new requirements for principals to provide information to the FCA.[109]

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100 See Financial Conduct Authority, *Appointed Representatives and Principals*, cit.

101 See N. Dissanayake, K. Everitt, *FCA Finds "Significant Shortcomings" in Review of Principal Firms (Including AIFM Hosting Services) in the Investment Management Sector* (Lexology, 23 May 2019) <www.lexology.com/library/detail.aspx?g=bee06aa7-10fd-414d-a8d5-1b401f8a7192> accessed 27 September 2022.

102 Financial Conduct Authority, *Appointed Representatives and Principals*, cit.

103 See R. Wardrop, T. Ziegler, *A Case of Regulatory Evolution – A Review of the UK Financial Conduct Authority's Approach to Crowdfunding* (2016) (CeSifo DICE Report 14(2)) 23, 25, and 30-31 <www.ifo.de/en/node/28339> accessed 27 September 2022.

104 Financial Conduct Authority, *Regulatory Sandbox*, cit., p. 13.

105 See Innovate Finance / Industry Sandbox, *A Development in Open Innovation Industry Sandbox Consultation Report* (May 2017) 42 <https://issuu.com/innovatefinance/docs/industry_sandbox_consultation_repor> accessed 27 September 2022.

106 Financial Conduct Authority, *Review of Principal Firms in the Investment Management Sector* (20 May 2019), <www.fca.org.uk/publications/multi-firm-reviews/review-principal-firms-investment-management-sector> accessed 27 September 2022.

107 Financial Conduct Authority, *Regulatory Sandbox*, cit.

108 Treasury Committed, *Report: Lessons from Greensill Capital* (20 July 2021) para 85, available at <https://committees.parliament.uk/committee/158/treasury-committee/news/156684/treasury-committee-reports-on-lessons-from-greensill-capital/> accessed 27 September 2022.

109 Financial Conduct Authority, *Improvements to the Appointed Representatives regime*, Policy Statement PS22/11 (August 2022).

6. A Complementary Solution: The Mentorship Scheme

The regulatory sandbox may help to attract fintechs into the regulatory perimeter, but its availability is limited and the strategy carries its own risks, given the deviations from generally applicable rules. The fintech charter, where available, has a potentially broader scope, but again its main attraction is in the relaxation of some of the otherwise applicable rules. That is not the case with the appointed representative regime, which, however, has a limited scope where it exists and makes the principal liable for all aspects of the representative's (in our case, the fintech's) activity. We therefore suggest complementing these tools with what we call a "mentorship scheme" – a template to govern the relationship between banks, fintechs and regulators which, similar to the three experimented tools we have briefly described in chap. 5, attracts fintechs into the regulatory perimeter but without some of the limitations of those three tools.[110]

6.1 The Idea

A fintech mentorship programme would let startups enter the market more easily by making the regulatory licence one component of the partnership agreement between incumbents and fintechs. In exchange for consideration (eg, an equity stake, an exclusivity agreement, or a fee), the incumbent extends its own regulatory licence to the fintech firm.[111] To do so, after becoming satisfied that the fintech is in line with all the requirements to obtain the relevant licence, it would only need to communicate its decision to the regulator, which could not refuse or delay authorisation. Once inside the regulatory perimeter, the fintech firm[112] would be subject to the full force of regulation and supervision like any other licensed firm.

Yet, the regime would allow (and, in fact, require) the fintech to outsource its compliance and internal control systems to the incumbent, which would be responsible vis-à-vis the regulator in case of violations on the part of the fintech, resulting in a joint and several liability regime.[113] Incumbents would thus have the incentive not to be too bland with their licensing decisions.

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[110] For a comparison of the various tools, see 6.3 below and especially Table 1.

[111] In addition, this arrangement could also be used to facilitate incumbent groups' subsidiaries operating in the Fintech space. For a practical example see H.J. Allen, *Regulatory Sandboxes*, cit., pp. 589-590 (Venmo using authorizations held by parent PayPal, comparatively an incumbent. See Venmo, *PayPal State Licenses* <https://perma.cc/25RN-YBKK> accessed 27 September 2022).

[112] There is no reason to restrict the regime to "fintech" firms, however defined: financial services, which are about information and information management (see G. Barba Navaretti, G. Calzolari, A.F. Pozzolo, *Fintech and Banks*, cit., p. 18) are now necessarily technology-based, so arguably the fintech tag can apply to any new entrant in the financial services market.

[113] Note that existing rules provide for banks' liability for third-party service providers to which banks' functions are outsourced, including, of course, for integrated fintech services. See US Department of the Treasury, *A Financial System that Creates Economic Opportunities. Nonbank Financials, Fintech, and Innovation* (July 2018), pp. 73-77. Hence, it is already the case that collaboration between incumbents and fintech firms gives rise to banks' liability for fintech's violations etc.

Fintech firms would start developing their products and services under exactly the same requirements as incumbents, but with two main advantages: first, in the process of the transition to becoming a regulated entity, they would interact with their partner bank rather than with the supervisory agency, which should make the transition smoother; and, second, they would be able to outsource relevant compliance and risk management functions to the incumbent and benefit from greater expertise and easier ongoing interaction with the supervisor.

6.2 Supervisory Consequences

The key advantage of the scheme would be that the fintech partner would fall under direct supervisory scrutiny. This would be markedly different from the status quo. As seen above, under the existing rules, the supervisor is primarily focused on the bank as its first port of call and has limited powers vis-à-vis the fintech firm – merely to examine it and receive information therefrom.[114]

Under a mentorship agreement, by contrast, the supervisor would have direct responsibility for supervising the fintech too. This would include the exercise of direct intervention powers, for example to limit or halt a particular activity, which presently only extend to the outsourcing bank. The mentorship arrangement would grant the supervisor the power and the obligation to intervene directly in the fintech.

Two consequences would flow from this. First, supervisory *efficiency* would markedly improve. Under the mentorship template, the supervisor would be able to act more quickly and more effectively when things go wrong on the fintech side of the partnership. Rather than first addressing the bank to remedy the situation, which would then in turn have to address its fintech partner, the supervisor would be able to intervene directly at the source of the problem. In addition, the supervisor would be able to tap the full potential of its intervention powers:[115] this would significantly improve the current arrangement under which the bank is only able to act according to the limited contractual terms of its outsourcing contract.

Secondly, the mentorship arrangement would also create a corresponding *obligation* for the supervisor to intervene. In other words, even though the outsourcing arrangement remains part of the bank's general risk management system, the supervisory responsibility would be expanded from overseeing almost exclusively the bank to monitoring the bank as well as the fintech.

A further advantage of the mentorship scheme would be that the incumbent mentor could act as a facilitator in the ongoing interactions between the fintech and

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[114] See above chap. 3.

[115] Importantly, for countries, such as the UK, where a senior manager regime exists of special accountability rules for top officers and directors of a supervised entity, the relevant rules would apply to fintech's representatives, unlike under the appointment representative regime.

the regulator. The incumbent is likelier to share the same vocabulary as, and have a more similar mindset to, the regulator, which would enhance communication and understanding. That may in itself be helpful in cases where the regulator is called to vet new products or to identify the right regulatory framework for a "new" (if only in terms of technology) product or service.

6.3 Key Benefits

What are the overall advantages of the mentorship regime? We see its main contribution to be making advances in pursuit of the goals of putting bank-fintech partnerships on more reliable ground and ensuring a more effective supervisory regime while at the same time making the transition from unregulated fintech to regulated fintech more practicable. This, in turn, will allow fintechs to operate as fully licensed entities and therefore experiment with innovative ideas within the limits of the existing regulatory framework.

The mentorship regime would differ from the other solutions discussed above in that it has the clear objective of attracting fintech firms into the full regulatory perimeter. In doing so, it markedly diverges from the limited scope of a fintech charter, for example, which may constrain the fintech's range of activities. It also differs from the status quo, where fintech firms partner with banks on the basis of contractual agreements that may prove unnecessarily restrictive in some situations. Under the current regulatory framework, as we explained above, the bank is ultimately responsible and liable for *any* business decision such as the onboarding of new clients or the development of new innovative ideas. Granting fintechs the benefit of a full licence overcomes this limitation.

Revisiting the starting point of this paper, the mentorship regime would ensure that there is an easy, straightforward way of facilitating direct access to licensed services for fintech firms. The established bank would be able to extend its regulatory licence (or part of it, such as payment services only) to the fintech, and the latter would not have to undertake the burdensome task of applying for a licence itself.

In our view, the mentorship regime would be an attractive complement to the regulatory status quo. Not only would it grant the fintech startup a more reliable regime, with clearer allocation of responsibilities, but a more effective supervisory regime should also be welcomed by the mentoring bank. This enhanced certainty, and the broader freedom afforded to the fintech should also be reflected in a more attractive consideration being paid to the bank in exchange for granting its regulatory licence. In addition, the bank may secure reputational gains by partnering with a fintech, and helpfully complement its range of offerings towards its own clients with more and innovative products.

To be sure, since the incumbent bank is jointly and severally liable, together with the fintech, in the event of compliance violations by the latter, there remains a strong incentive for the bank to be careful when selecting its fintech partners: the

bank should therefore carry out a thorough due diligence, implement adequate risk management processes within the fintech, and monitor the fintech on an ongoing basis to avoid incurring liability.[116] Yet, its liability for the fintech's wrongs would not be as broad as for an appointed representative's principal. Similar to that regime, specialised incumbents, such as neobanks acting as platforms (think of Solaris) could populate a niche market of mentorship services for fintech startups with an appetite for accessing regulated services where regulatory sandboxes, fintech charters and appointed representative regimes are unavailable or unsuited to their specific needs and circumstances. Table 1 highlights the differences between the various regimes that we discussed in chap. 5 above.

Table 1: *Comparison of Tools to Attract Fintechs into the Regulatory Perimeter*

	Regulatory Sandbox	Fintech Charter	Appointed Representative Regime	Mentorship Scheme
General availability	No	Potentially yes.	Potentially yes, subject to availability of principals	Potentially yes, subject to availability of mentors
Easier transition to inside the regulatory perimeter	Yes (although not its main objective)	Potentially yes (but not in the US experience)	Yes	Yes
Incumbent involvement	Dependent on sandbox features (but usually not)	No	Yes (with broad liability for the representative's wrongs and obligations)	Yes (with liability restricted to compliance violations)
Special rules	Yes, but limited in time	Yes, permanently	No (other than as a consequence of the fintech not holding a licence itself)	No (other than to allow outsourcing of compliance functions, where needed)
Position with respect to regulatory perimeter	Dependent on sandbox features	Inside	Outside as an entity, inside as regards activities performed	Inside

It is important to emphasise that the mentorship regime would not replace any of the pre-existing schemes or override them. We rather see it as a complementary

[116] This should be monitored by the supervisor, see below 6.4.

device that could enrich the facilities available to nurture financial technology by fostering partnerships between fintechs and established players. In the process, it could address many of the deficiencies of the existing, outsourcing-based regulatory status quo.

To be sure, if it became widely used, the mentorship regime may negatively affect competition in the financial services industry: mentorship arrangements might absorb many fintechs into the control of incumbents and limit the emergence of stronger challenger banks over time. The trend to equip financial market authorities with an explicit competition mandate, such as the UK FCA, would, however, give regulators sufficient flexibility to address this problem.[117] In addition, at least so long as fintechs will have access to cheap venture capital finance, it is predicted that the mentorship regime will appeal to fintechs whose business model will be symbiotic with traditional banks' rather than to disruptors, who will be wary of braiding their fate with incumbents to begin with.

6.4 Implementation

Implementing a mentorship regime would not be without difficulties, particularly in a multi-layered legal regime like the EU. As large parts of the regulatory regime for financial institutions have now been moved to the EU level, it could appear to be attractive to advocate for a corresponding EU-wide mentorship regime that would operate across the Union. This might be pertinent to the pursuit of the existing goal of fostering stronger integration of the Single Market for financial services (in particular, the Capital Markets Union), and the European Commission's efforts to build a pan-European fintech space.[118]

However, building a common mentorship regime across Europe runs into a number of problems. One conceptual difficulty is that supervisory practice and responsibilities, especially as regards smaller entities, still largely rest with national supervisors. One of the benefits of such a decentralised system is the incentive for experimentation and innovation at the national level. Consistent with this, mentorship initiatives at the Member State level could lead to a discovery process for what particular design is most attractive to both fintechs and banks. While at the EU level it would probably be necessary to implement some changes in the framework to allow for Member States' individual decisions to adopt a mentorship regime, a decentralised regime also appears more flexible, and easier and faster to implement. It would also be simpler to update and revise once adopted. We could imagine mentorship regimes being realised at the Member State level while including the EU in a coordinating role.[119] In that way,

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[117] See Financial Conduct Authority, *FCA Mission: Our Approach to Competition* (December 2017) <www.fca.org.uk/publication/corporate/our-approach-competition.pdf> accessed 27 September 2022.

[118] European Commission, *FinTech Action Plan: For a More Competitive and Innovative European Financial Sector* (COM(2018) 109 final, 8 March 2018), available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0109>.

[119] Similar to W.-G. Ringe, C. Ruof, *Regulating Fintech in the EU*, cit.

the interplay between the two levels could improve mutual learning and develop best practices while safeguarding against the potential downsides, in particular any macroprudential concerns.

One specific design problem – that national supervisors will have to deal with – is ensuring that banks are employing all reasonable efforts with regard to quality control, in particular at the stage of entering into the agreement but also during the subsequent mentoring phase. It is especially important to learn from the negative experiences with the UK's appointed representative regime, where lax due diligence procedures have recently come to light.[120] One possibility to address this issue would be to impose ample documentation obligations onto the mentor, who would have to be prepared to demonstrate efforts undertaken with respect to selection and monitoring at all times. Supervisors could support this requirement with best-practice guidelines and extensive control measures. Ultimately, regulators will have ample room to learn and to develop a credible regime.

7. Conclusion

Fintech firms are no longer the enemy of incumbent banks but have rather morphed into trusted partners, bringing a fresh wind and innovative ideas. Established institutions have therefore entered into partnership arrangements with them, which brings advantages for both sides. Banks may ordinarily suffer from legacy issues and cumbersome internal processes, and therefore benefit from fintech firms' superior technology to develop new business ideas. At the same time, a bank's broad customer base may allow a startup to benefit at an earlier stage from economies of scale and facilitate market entry, while fintechs may also enjoy reputational spill-overs from partnering with an established institution.

This paper has explored the various types of partnership arrangements – including banking-as-a-service and software-as-a-service frameworks, white-label banking, and front-end neobanks. From a regulatory perspective, all of these arrangements fall under the rubric of "outsourcing" arrangements, where regulated entities outsource some of their functions to third parties, be they regulated or unregulated. The present practice and the regulatory frameworks encounter a number of regulatory problems, in particular concerning the effective supervision of fintechs that operate outside of the direct purview of regulatory

[120] See above chap. 5.3. Note, incidentally, that the appointed representative regime appears to be more prone to lax market practices and supervisory slack, because, unlike the fintech in the mentorship scheme, the appointed representative does not become a separate fully supervised entity for which the supervisory agency is responsible, but rather remains a sort of satellite per se unregulated entity. In the mentorship scheme framework, subsequent full supervisory responsibility and enforcement of due diligence obligations should lead to better screening by the incumbent *ex ante*.

authorities. Questions of enforcement and effective supervision emerge, which may ultimately result in problems regarding market stability and systemic risk.

A number of regulatory tools have been created or proposed to facilitate fintechs' entry into the supervisory perimeter, but they are imperfect. For instance, regulatory sandboxes are more geared towards creating and stimulating innovation rather than addressing the regulatory status of fintechs. Other tools, such as fintech charters and umbrella firms, can be helpful in some respects but are similarly imperfect.

We have proposed here an additional, complementary tool: a "mentorship regime", which provides for a reliable regulatory framework for partnership agreements between fintech firms and established banks. Such a regime would allow for a sort of private sandbox, where experienced firms could mentor new startups and help them to cope with a complex regulatory process. At the same time, a state-backed mentorship plan would clear up the division of responsibilities and supervision competences, and the liability questions and thus help to overcome problems of arbitrage and abuse. Ultimately, a mentorship regime may contribute to a new and more reliable system of banking that puts the well-established contractual practice of outsourcing banking services on a more reliable footing.

New Antitrust Challenges in Payment Systems

Vito Meli[*]

The operation of payment systems traditionally raises certain antitrust issues that are now well known and typified.

In addition to these, there are now new ones, which are much more complex to understand and deal with, due to:

- the important progress in the sector related to the reforms of the regulatory framework originating in the EU and to;
- the technological innovation and to;
- the entry of big tech, *i.e.* digital ecosystems that are in the public eye and attracting a lot of attention.

A constant issue in the antitrust analysis of payment systems is the horizontal cooperation that necessarily takes place between operators. In the past, this issue has given rise to numerous interventions by competition authorities and extensive literature.

For a payment system to function in a circular flow, i.e, for a transaction to be successful, there must be relationships between all participants in the system, namely the banks and other payment service providers. But, the creation of a network of bilateral relationships is impossible because they would be too numerous and thus entail excessive transaction costs.

Multilateral agreements are therefore needed, often managed by trade associations, consortia, networks or entities which, regardless of the legal form they take, are, from an antitrust point of view, exponential entities of the interests of the companies they represent.

These constitute agreements between competitors, *i.e.* horizontal agreements. They usually concern technical aspects, which may be relevant from a competition point of view, but often they also concern services and economic conditions, which are even more sensitive in the eyes of the competition authorities. In particular, there are often also financial fees; we speak of multilateral interbank commissions, the so-called interchange fees that characterise payment cards and also other instruments.

Multilateral interchange fees in payment cards are paid by the merchant acquirer to the card issuer in each transaction, on the assumption that the

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cardholder is unwilling to pay any transaction commission and the merchant being charged fees, cannot opt out. These are therefore intermediate prices, but they are the basis for calculating the final price. It is therefore convenient for the payment system as a whole to increase the total amount of merchant fees charged.

Moreover, the schemes, which compete with each other to persuade licensees (banks and other intermediaries) to issue their own cards, have an incentive to increase the interchange fee rather than to reduce it. The higher the interbank commissions, the greater the incentive for an intermediary to issue a card from that scheme. Thus, in this area, competition by definition does not lead to a fall in price, as is normally the case.

It is therefore not surprising that competition authorities have taken a great interest in this phenomenon.

In the numerous interventions of the European Commission and the Italian Authority, two phases can be distinguished.

During the first phase (roughly from 1986 to 2007), the competition authorities agreed to allow the Multilateral Interchange Fee (MIF) only to the extent that it could be demonstrated from time to time that its value did not exceed the costs incurred by the issuers in providing services to the acquirers. At this stage, the competition authorities essentially perceived the MIF as a mere remuneration for the costs incurred.

In the second phase, competition authorities took a different procedural approach, moving from exemption approval to commitments, a more "regulatory" institution than article101.3 of the Treaty on the Functioning of the European Union (TFEU).

Most importantly, in the second phase, the competition authorities took a more general interest in the reasons for "overall efficiency" and introduce the so-called "tourist test".

Subsequently, with the 2015 Regulation, regulation directly intervened at EU level to cap certain interchange fees.

I am pleased to recall that as early as 2002, in an opinion addressed to the Bank of Italy, the Italian Competition Authority called for regulatory intervention for reasons of overall efficiency of the system, thus preceding the European decision by several years.

The new EU approach tends to reduce the general scope of intervention to protect competition, targeting it at specific situations, but does not preclude it; the April 2015 Regulation explicitly states that "The application of this Regulation should be without prejudice to the application of Union and national competition rules".

And, in fact, the Authority intervened requiring, for example, that interchange fees for paying bills through the domestic Bancomat network (so-called bill payments) be well below the cap set by the EU Regulation.

Furthermore, I would like to emphasise that, from an antitrust perspective, the concerted provision of remuneration schemes other than the interbank commissions is not necessarily preferable to the interchange fee.

At the national level, there are at least two cases (case I794-ABI/SEDA and case I849-BANCOMAT-PRELIEVI CONTANTI, which is still pending) in which the Authority has investigated the concerted establishment of remuneration schemes other than the MIF, as it considered that the alternative system to the interchange fee could also lead to significant restrictions of competition.

So, to sum up, traditionally we have the fact that competition takes place between payment systems or payment networks and between members of the various systems, and that competition is limited by horizontal cooperation, which is at least partly needed. The control of this cooperation gives rise to agreements, dealt with as we have seen.

What is new in this area is the emergence of possible abuse of a dominant position, also in relation to the entry of big tech companies in the sector. In December 2021, the Italian Competition Authority opened an investigation – still ongoing, so I will only touch on it – finding a possible abuse of Mastercard's dominant position against Bancomat.

This issue is intertwined with that of Big Tech, as the investigative hypothesis is that Mastercard has acted in such a way as to exclude Bancomat's access to e-wallets on major smartphones, which are important digital ecosystems. This exclusion would have a decisive impact on the future of the Bancomat network, given the importance that payments via smartphones already have, and will increasingly have in the future.

Equally new is the prospect of antitrust intervention in the sectors opened up by the reforms introduced by PSD2 and the introduction of open banking.

As far as we are concerned here, through Open Banking, third party operators (including non-banks) are allowed to access the current accounts of banks, initiate payments and issue debit cards on these current accounts. All of this is of course done securely (using high standards of strong authentication) with the consent of the account holder.

With these reforms, it must be acknowledged that the payments industry has become one of the most competitively open sectors, much more so than others subject to regulation.

Openness must be understood in many ways:

- it has become a sector open to new, non-banking and – to some extent – also non-financial competitors;
- it is also open to competition from incumbents themselves, and thus from banks that – by exploiting the spaces opened up by PSD2 – can offer payment services to the customers of their competitors, thus reducing the lock-in of account holders towards their banks of origin; and
- lastly, it is also open to competition from players who only want to enter a specific payment phase, possibly even only as technology operators.

What antitrust issues may arise today or in the future from the entry of these new players, whether they are start-ups or big tech companies?

Firstly, the question of a level playing field has been raised by banks on several occasions – but has in fact never been formally raised with the Italian Competition Authority: do new entrants enjoy a regulatory advantage over incumbents?

If this were the case, the Competition Authority would not have its own specific investigative competence, but could intervene with its advocacy powers. My personal impression is that in fact regulation treats those who do the same business in the same way. Therefore, if there is a problem of regulatory favour, it would have more to do with new competitors choosing to enter Europe from the country they perceive to be the most favourable. But this clearly applies to all sectors, not only to payments.

Instead, the Competition Authority could apply its enforcement powers in the presence of exclusionary behaviour by incumbents.

In addition to the assessment that may be brought by the regulator, barriers that may prevent the entry of new operators in the banking sector may constitute an antitrust offence in the abstract of concerted action between banks, which may fall under the prohibition of restrictive competition agreements. In this case, the competition authorities' assessment is rather 'standardised' and any form of balancing of interests would be difficult. Outright collusion aimed at excluding competitors is a prohibited serious offence, and it is unlikely to be possible to find justification in terms of consumer interests.

I should also say that, in fact, the Authority has not received any complaints in this regard and that, on the one hand, access to the accounts appears to be feasible and, on the other, not very widespread.

The situation is different when banks set up obstacles individually, rather than in concert with other banks. And here, as in the case of concerted behaviours, it is not only about barriers to entry, but also about barriers to the supply of new services.

Typically, unilateral conduct is only subject to antitrust scrutiny where it is carried out by dominant players, as it may constitute an abuse in these circumstances. But this case hardly seems applicable to the Italian banking industry today, as it is not higly concentrated.

However, it should also be noted that the privileged position that each bank holds in terms of access to its customers' accounts is in some ways similar to the monopoly that telephone operators have established in terms of call termination.

Therefore, while it cannot be ruled out that individual conduct could be raised under the heading of abuse of dominance under the bank's customer lock-in, we are not aware of any similar case law in this area, so we are dealing with a new and certainly controversial issue rather than working within the framework of a classic case, as in the case of concerted practices.

These, then, are the barriers to competition that the incumbent may put in place in the process of opening up the sector. Competition issues posed by Big Tech companies are even more complex.

I will not attempt to provide a description, let alone a definition, of large technology companies, but will instead refer to the endless literature on the subject. I will limit myself to what serves our purposes: big tech companies tend to be exceptionally large and offer a wide range of services, which in turn constitute increasingly self-sufficient ecosystems. In doing so, they are also moving towards offering financial services, including payment services. Indeed, the entry of big tech companies – with their known characteristics, among which one cannot forget their enormous power, both in the antitrust sense of market power and in a broader sense – has created entirely new scenarios, for which the term disruptive seems fitting.

In abstract, in the future one could expect all users of Facebook or Google – millions in our country alone – to be able to make reciprocal payments, including commercial and crossborder ones without having to "step out" of the system. The transactions could be of the kind known as "on-us" in credit cards, *i.e.* a single operator could carry out the transactions without the need for horizontal agreements with its competitors.

In such large ecosystems, the area of competition problems due to horizontal cooperation (as described so far) tends to be reduced, as cooperation with competitors is not needed.

Competition will be between major payment systems, each driven by a single operator, and between these large ecosystems and traditional ones made up of a multitude of members.

However, this raises a new question: can such an ecosystem's interference with interoperability be an antitrust issue? In other words, if a Facebook customer were prevented from making and receiving payments to and from a non-Facebook customer, does this constitute an unlawful act? Certainly, the Facebook customer in the example could have processed and completed the payment outside of

Facebook. However, depending on Facebook's market position, such conduct may also constitute an abuse of a dominant position.

More generally, I believe that interoperability between payment systems, and thus also the setting of common standards, should be assessed not only from an antitrust perspective but also, and perhaps more so, in relation to other public interests, which would perhaps impose it as a system rule.

In any case, regardless of interoperability issues, it is logical to assume that big technology companies will use the market power they have in other areas to improve their position in the payments market.

But does the use of market power acquired in other sectors constitute competition infringements and should it generally be prevented? It certainly does not amount to abuse per se, and there is no reason to introduce a general prohibition. Indeed, leaving aside specific antitrust analysis, it is clear that high-tech companies are often characterised by very high efficiency (due in part to the exploitation of economies of scale and scope), which allows them to offer very good services at low prices. An absolute ban could deprive consumers of some very good opportunities.

From a more strictly antitrust point of view, however, the use of market power acquired in another context may constitute a breach of competition law when one starts from a position of dominance and when this constitutes an abuse, *i.e.* two cumulative conditions are required.

However, in the case of big tech companies, certain aspects inherent to their activities complicate the assessment of wrongdoing.

There is no denying that there are difficulties in defining the relevant markets in which they operate, in determining their product and geographic boundaries, in identifying their competitors and in mapping their supply structure and market shares.

Apart from the topic of big data – which we might consider a productive input rather than a market – we often find ourselves in multi-sided markets, where one side is priced at zero. Revenues may not be fully indicative of market dominance, making it difficult to apply typical antitrust analysis and specific tools such as the so called SSNIP test.

However, it must also be said that, to date, there have been a number of antitrust cases and a taxonomy of markets is being established. Overall, it appears that these markets can be dealt with by means of traditional competition analysis, even in relation to the measurement of market dominance.

This suggests that the EU competition authorities and the toolkit they have in place are capable of dealing with the competition problems posed by big tech. But of course they are not capable of dealing with other types of problems relating to major issues such as systemic stability, pluralism, democracy and power.

At EU level, however, with the Digital Market Act, new notions are being introduced, such as that of “gatekeeper”, which is based on a presumption in relation to the requirements set out in the regulation.

There are two main likely consequences of the DMA. The first is that the possibility for competition authorities to intervene in Big Tech will be very limited.

The second is that EU antitrust law – which is based on the interaction of legal and economic analysis and ex post intervention to correct illegal conduct – will therefore be replaced by a more regulatory, and for this reason ex ante, approach in areas where detailed economic analysis is essential to understand dynamics, tangible effects and long-term effects.

However, returning to the behaviour of big tech in the payments market, we can expect that large ecosystems may eventually engage in binding practices, initially for exclusionary purposes, and eventually for exploitative ones when they become strong in payments.

With the caveats already mentioned, these behaviours can certainly take on the character of antitrust offences and I believe that the competition authorities would have the tools to detect and sanction them.

Finally, a word about big data. There is no doubt that it is an important asset for the payments market. Although there is also the question of whether big tech is entering payments to make a profit or simply to acquire new and important data. In any case, the concept of essential facilities has been discussed with regard to big data, and indeed in some cases antitrust enforcement may be able to achieve the goal of specific data sharing.

But my impression is that the most fitting instrument for greater data dissemination is regulation, since not only a competition issue is at stake but also the broader issues I mentioned earlier.

And I wonder whether the GDPR, which stipulates that the ownership of the data lies with the subject to whom the data relates, can help us in this respect.

I would like to end with a question: much has been done in the payments sector thanks to the incumbents, who in fact still handle the vast majority of transactions.

But much of what has been done is also due to the competitive pressure from new players and fintechs:

who misses the days when we used cheques, which would take ages to clear and which were the result of a banking world that was so closed and not very innovative?

I therefore find it crucial to avoid the risk of under-enforcement of competition rules, but at the same time we must absolutely avoid discouraging innovation.

TIPS, the Eurosystem Platform for Instant Payments Fostering the Competition amongst Operators for Euro and Beyond

Francesco Di Stasio[*]

Summary: 1. TIPS – The Eurosystem Instant Payment Settlement Service – 1.1 The Concept of Instant Payment and the Eurosystem Strategy – 1.2 TIPS Main Features – 1.3 Governance and Actors – 2. Pan-European Reachability Measures – 2.1 The Case for Eurosystem Action – 2.2 The Measures and the Settlement Options – 2.3 Implementati on and Results – 3. TIPS Beyond the Euro – 3.1 The Multicurrency Feature and the TIPS Currency Participation Agreement – 3.2 The Cross Currency Developments – 3.3 TIPS and €-CBDC

Technological innovation reshaped the retail instant payments market in the last years, creating new opportunities for competition. However, while in many instances this occurred because of the action of market actors, it might be argued that direct intervention of the Eurosystem also contributed to it. The reference here is to the launch of the TARGET Instant Payment Settlement (TIPS) Service. The analysis that follows aims at (i) describing the main features of TIPS, (ii) the benefits it already provided to competition in the retail instant payments market, especially following the adoption and implementation of the pan-European reachability measures decided by the Governing Council of the ECB, and (iii) other future advantages connected to the development of the service.

1. TIPS – The Eurosystem Instant Payment Settlement Service

1.1 The Concept of Instant Payment and the Eurosystem Strategy

Before discussing TIPS in detail, it is useful to first define what an instant payment is. The Euro Retail Payments Board (EPRB) provides the following definition for the concept: "e*lectronic retail payment solution available 24/7/365 and resulting in the immediate or close-to-immediate interbank clearing of the transaction and crediting of the payee's account with confirmation to the payer (within seconds of payment initiation)*".

Under the impetus of the ERPB, the European Payments Council (EPC) introduced in November 2017 a scheme for instant payments, the SEPA Instant Credit Transfer (SCT-Inst), providing the basis for pan-European instant

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payments in euro, envisaging a maximum execution time of 10 seconds for the processing of each transaction, and availability 24/7/365.

Following the introduction of the SCT-Inst, the Eurosystem decided to intervene in the instant payments market, launching a new system for settlement of instant payments in central bank money (CeBM). This decision was taken in order (i) to avoid possible market fragmentation, (ii) to foster systems integration among the various Payment Service Providers (PSPs), and (iii), more in general, to fulfil task of promoting the smooth operation of payment systems (art. 127 TFEU, art. 3 ESCB Statute). At the same time, it was also clarified that the whole endeavour should have been neutral with respect to the potentially different business models that the market could adopt. Banca d'Italia then delivered TIPS as a part of the TARGET Services, provided to the Eurosystem by the so-called 4CB (*i.e.* Deutsche Bundesbank, Banque de France, Banco de España, and Banca d'Italia). TIPS is one of the three new projects composing the broader Vision 2020 Strategy (the other two are the Consolidation of TARGET2 and TARGET2-Securities, and a new collateral management system, ECMS). With the Vision 2020 strategy, the Eurosystem has aimed at providing new services to support financial markets, citizens, and businesses in Europe and at fostering the innovation of market infrastructures and harmonization of financial services related to securities and cash. The Vision 2020 strategy is part of the European Commission's Capital Markets Union project, aimed at achieving full integration of the European financial market.

1.2 TIPS Main Features

Conceived as a multi-currency settlement platform, TIPS was developed with the aim, inter alia, of fostering the integration of retail payment services offered by the European financial community and of eliminating barriers due to lack of interoperability between different settlement platforms.

Operating on a voluntary basis and in compliance with the SCT-Inst scheme, TIPS offer the possibility to send and receive gross instant payments on a 24/7/365 basis, handling also the recall of instant payment transactions (recall requests) and the return of funds previously settled. Moreover, the platform provides the settlement for the liquidity transfers from accounts owned in TIPS to accounts opened in RTGS systems denominated in the same currency, during RTGS opening hours, as well as any information (in the form of query, report, notification, etc) a TIPS participant may request.

The processing times per payment does not exceeds the 5 seconds, with a theoretical capability of processing over 43 million transactions per day. At the same time the system guarantees very high availability and resilience (reaching 99.9% service availability, and the capacity to restart within 15 minutes in a site disaster scenario), as well as extreme scalability from a performance viewpoint (the ability to sustain a doubling of the volume of payments over a year).

With TIPS, it is possible to achieve synergies between the other Eurosystem market infrastructures (TARGET2 and TARGET2-Securities, especially in the context of the aforementioned Consolidation project). This is becoming possible via the integration of their software together with technical and infrastructural elements, and development shared applications (Common Components) to manage centrally certain crucial activities such as data archiving, billing, reference data, and connectivity via a single gateaway.

It should also be noted that TIPS operates on a full cost-recovery and not-for-profit basis. There are no entry or account maintenance fees. The price per instant payment transaction is fixed at 0.20 cent (€0.002).

About four years after the go-live, the number of payments settled in TIPS still falls short of the technical and business potential of the service. However, albeit at different speeds in the various European countries, instant payment services are growing and it is reasonable to expect that this trend will only increase in the years to come.

It is in this context that Banca d'Italia has already identified a series of actions (see sections 2 and 3), aiming at making of TIPS an essential component of the foreseeable spread of instant payment services in Europe.

1.3 Governance and Actors

TIPS is delivered as a service within the TARGET framework. This collocation postulates certain consequences on various crucial aspects regarding the funding of the accounts, the governance, and the participation criteria.

TIPS hosts TIPS DCAs (Dedicated Cash Account). Each TIPS DCA is linked to a TARGET2 payments module (PM) account, which allows its holder to manage the liquidity between both accounts. So, in order to settle instant payments a TIPS DCA holder needs to prefund its DCA via a liquidity injection from a TARGET2-Payment Module (PM). Credit balances on TIPS DCA are incorporated into the TARGET2 end-of-day balance. This means that at the end of each TARGET2 business day, the credit balances on the TIPS accounts are taken into consideration both in terms of ensuring compliance with the minimum reserve requirements and when making recourse to automated overnight credit.

The governance largely shares the structure (and the participation) foreseen for TARGET2. Therefore, a three level construction has been followed, reflecting the various responsibilities and competences allocated at each level. Level 1, *i.e.* the Governing Council of the ECB, has final competence on all strategic decisions on TARGET2 issues and is responsible for safeguarding the public function of TARGET2. As a service of TARGET2, this also applies to TIPS.

Level 2, *i.e.* Eurosystem NCBs, has a subsidiary competence with respect to Level 1, operating under a mandate of the latter, and deciding on business, technical, and operational matters. The main decision making body of the Level 2

is the market Infrastructure board, which takes its decision based on two principles: (i) one member one vote, and (ii) simple majority.

Level 3, *i.e.* the 4CBs as Providing CBs, are collectively responsible for development and operation of TIPS, in accordance with the relevant Service Levels agreed with Level 2. Moreover, the Level 3 provides support to Participating NCBs, not having a direct relationship with the market, except that for connectivity issues. However, within the 4CB organization for the internal distribution of tasks, Banca d'Italia is exclusively responsible for all the Level 3 activities for TIPS. It is therefore correct to say that, while the existing agreements bind the 4CB collectively vis-a-vis the Eurosystem, from an operational point of view TIPS is a system entirely managed by Banca d'Italia. In order to ensure a smooth management of the Level 2 and Level 3 tasks, Banca d'Italia has established a separate unit dedicated exclusively to Level 3 activities

From the collocation of TIPS within the TARGET2 framework, it follows also that TIPS adheres to the same participation criteria foreseen for TARGET2. This means that it is allowed for banks and other institutions authorized by a Eurosystem Central Bank to participate in TIPS, typically under the acceptance of a set of Harmonized Terms and Conditions (annex II-b of the TARGET Guideline) and compliance with the rules and criteria provided therein.

Various types of TIPS Actors interact with the TIPS Platform. It is possible to distinguish between market actors, Eurosystem CBs, and ESMIG Network Service Providers (NSPs). In particular, the following definitions may contribute to give a picture of the types of actors and types of interaction that are possible in and with TIPS:

- TIPS DCA Holder – an entity holding at least one TARGET2 PM account and a TIPS DCA with a Eurosystem CB;
- Reachable Party – an entity addressable through TIPS, *i.e.* able to submit instant payment orders and receive instant payment orders via the TIPS DCA holder or the ancillary system;
- Instructing Party – an entity operating as a technical counterparty (e.g. a different participant, a technical service provider, or a clearing system), sending and/or receiving payment orders to/from the TIPS Platform on behalf of TIPS DCA Holder/Reachable Party;
- ESMIG NSP – an undertaking that has been awarded a concession with the Eurosystem to provide connectivity services via the Eurosystem Single Market Infrastructure Gateway;
- Service Desk of Eurosystem CBs – office of a Eurosystem CBs offering support to the TIPS Actors of their national community;
- TIPS Operator Service Desk – Run by Banca d'Italia, provides general support to NCBs, and also to TIPS Actors directly on connectivity related issues.

2. Pan-European Reachability Measures

2.1 The Case for Eurosystem Action

The ability of participants to reach each other is a crucial element for the success of a payment scheme. Although many banks have been adhering to the EPC's SEPA Instant Credit Transfer scheme in the years since it was launched, they have not been able to exchange payments in every case. The main reasons for this are that banks participate in different clearing systems which, in some cases, have a purely national focus, and that not all of these clearing systems are interconnected.

Although TIPS offered a solution to this inconvenience, the fact that it operates on a voluntary basis meant that not all bank joined the community of TIPS Actors, making it impossible to obtain full pan European reachability among payment service providers (PSPs). As of early 2020, it was clear that in the field of instant payments market failures made difficult for PSPs to achieve full pan European reach. In fact, in order to achieve reachability among PSPs, it was necessary the setup of a network of bilateral or multilateral connections among the participants and/or Automated Clearing Houses (ACHs). In addition, the use of these type of links also entailed the need to manage the resulting credit risk properly.

For all these reasons on 24 September 2020, the Commission adopted a retail payments strategy for the EU setting the objective to ensure full reachability amongst EU-based PSPs.

Following a consultation with the market (AMI-Pay), a demand emerged for facilitated interoperability, connecting it to the possibility to pay and be paid from a single liquidity pool.

Stemming from these considerations was the idea that a solution to the problem could be achieved using TIPS. It should be noted, however, that its very launch in 2018 already provided a first improvement for PSPs adhering to ACHs and participating in TIPS, allowing instant settlement in TIPS through their ACH, acting as instructing parties. ACHs could not participate or hold accounts in TIPS. ACHs could open technical accounts in TARGET2, which PSPs used to provide the necessary liquidity to guarantee the settlement (in CoBM) that takes place at the same ACHs.

However, also for TIPS participants unsolved issues remained. Specifically, time constraints on access to CeBM for the settlement of instant payments (determined by the TARGET2 service hours) were not resolved, as well as the lack of reachability among PSPs using different ACHs and not participating in TIPS.

2.2 The Measures and the Settlement Options

The ECB's Governing Council approved in July 2020 a set of mandatory measures (known as "Pan-European reachability package"):

- Measure 1: all PSPs in TARGET2 that adhere to the SCT scheme and are reachable in TARGET2 must become reachable in a TIPS DCA, either as a TIPS DCA Holder or a reachable party;
- Measure 2: all ACHs offering instant payment services migrate their technical accounts from TARGET2 to TIPS.

As a result, clearing systems will be connected via the TIPS platform and their participants will be able to exchange SCT Inst payments. In addition, this shift to TIPS has the advantage that the cover amounts required to settle payments in clearing systems could be transferred from the participants' TIPS accounts to clearing systems' technical accounts around the clock (24/7). Before the implementation of these measures, this was only possible during TARGET2 operating times.

The adoption of the described measures has not limited the freedom of choice of PSPs concerning settlement options, and therefore market neutrality has been kept. In fact, each PSP adhering to an ACH can choose for each instant payment instruction among any of the following possibilities:

a. Instruction and settlement in ACH – ACH provides finality in its own books, backed by CeBM;

b. Instruction in ACH and settlement in TIPS – PSP instructs in ACH and ACH instructs in TIPS, debiting the PSP's TIPS DCA;

c. Instruction and settlement in TIPS – the PSP settles directly in TIPS, debiting the PSP's TIPS DCA.

Only options b. and c. available for payments to PSPs participating in a different ACH.

There is no obligation for the PSP to settle at least a part of its received instant payments in TIPS, but the PSP shall be ready to receive instant payments on a TIPS account.

Both measures are however mandatory: this means that all PSPs that i) adhere to the SCT-Inst scheme and ii) have accounts in TARGET2 need to be also reachable in a TIPS Dedicated Cash Account/CMB, either as a participant or as a reachable party (*i.e.* through the account of another PSP which is participant). Therefore, being only reachable via an ancillary system technical account is not sufficient to meet the requirement (irrespective of whether the ancillary system technical account belongs to an ACH operated by a Central Bank or by a private entity).

2.3 Implementation and Results

TARGET2 Guideline has been amended to entail the changes introduced with the pan-European reachability dossier. In particular, it is now required:

i. for PM account holders which have adhered to the SCT Inst scheme, to hold a TIPS DCA or to be reachable via another TIPS DCA holder (migrated technical accounts of ACHs do not qualify);

ii. for indirect participants or addressable BICs which have adhered to the SCT Inst scheme, to hold a TIPS DCA or to be reachable via another TIPS DCA holder (migrated technical accounts of ACHs do not qualify).

The obligation related to the first measure applies for the legal entity. This means that there is no obligation for the branches of a PSP to become reachable in TIPS as long as the head office is present in TIPS. As branches and head office are part of the same legal entity, to meet the pan-European reachability requirements it is sufficient that the head office or its branch (including a branch of an entity located outside the euro area) are reachable via a TIPS DCA.

Migration of ACHs technical accounts from TARGET2 to TIPS was completed 26/03/2022.

Through the implementation of these measures, the market of instant payments obtained various advantages. Firstly, now over 16.000 BICs of are reachable, with full interoperability and SCT Inst compliance. Secondly, fragmentation of the liquidity of a PSP in various pots is no more a concern, because of the reliance on a single infrastructure. In addition, the settlement of intra ACH transfers has become immediate, without any exposure to credit risk thanks to the use of CeBM. Finally, liquidity management for PSPs has improved, being now possible to fund or defund accounts 24/7/365 in CeBM.

Moreover, the adoption of the pan-European reachability measures has enabled several new business cases, which before were non-existing or not possible:

a. Intra-service liquidity transfer from a TIPS DCA to an ACH technical account and vice versa;

b. Processing of instant payments between two participants of two different ACHs;

c. Processing of instant payment between a participant of an ACH and a TIPS participant;

d. Processing of recall answer between two participants of two different ACHs;

e. Processing of recall answer between a participant of an ACH and a TIPS participant.

3. TIPS Beyond the Euro

3.1 The Multicurrency Feature and the TIPS Currency Participation Agreement

During the investigation phase of TIPS, the ECB laid out various principles that should have guided the design of the platform and the service. Among these principles, the number 2 stipulates the following: "*The primary objective of TIPS is to provide efficient settlement services in euro; however the service shall be technically capable of settling currencies other than the euro. The technical implementation of TIPS shall be currency agnostic in order to provide flexibility in the design,* i.e. *potential settlement in non-euro Central Bank money.*"

This principle has been reflected also in a recital of the TIPS L2-L3 Agreement, where it is stated that: "*TIPS has been designed as a multi-currency platform (…). Should TIPS be used, in the future, for the processing of non-euro payments, Currency Participation Agreements (CPA) should be negotiated and entered into between the Eurosystem and the central banks of issue of the relevant non-euro currencies.*"

The TIPS Service is compartmentalised per currency, meaning that settlement of instant payment orders in a particular currency is independent of the settlement processes in another currency.

Originally dormant because of the lack of currencies other than the Euro on the platform, the multicurrency feature has recently become operative due to the adoption of TIPS by Sveriges Riksbank. In fact, in April 2020 the Swedish Central Bank entered into a Currency Participation Agreement (CPA) with the Eurosystem. The purpose of the agreement is to allow Sveriges Riksbank to make use of the TIPS technical platform for the domestic settlement of instant payments in CeBM (denominated in Swedish Krona).

The TIPS CPA with Sveriges Riksbank is closely based on the current T2S CPA signed between the Eurosystem and the Danmarks Nationalbank. In addition, Sveriges Riksbank specific requirements are also taken into account (Schedule 9 caters for NCB specific requirements, such as the fact that Sveriges Riksbank is subject ex lege to audit by the Swedish National Audit Office).

On May 23 Sveriges Riksbank has successfully completed the first phase of the migration to TARGET Instant Payment Settlement (TIPS), opening the way for the instant settlement of payments in Swedish kronor in TIPS. At the end of this phase a connection has been established between the Swedish real-time gross settlement (RTGS) system RIX and the Eurosystem's TIPS (hence the name RIX-Inst). The connection is a prerequisite for funding and defunding the accounts of future Swedish participants in TIPS.

In the second phase, scheduled for the first quarter of 2023, the Swedish market will migrate its traffic to the platform.

Besides Sveriges Riksbank, also other non-euro Central Banks have shown interest in TIPS. In particular, the Danmarks Nationalbank is scheduled to join TIPS in 2025, and Norges Bank too has expressed a (non-committing) interest in joining TIPS with its national currency in order to offer instant payment settlement in central bank money to its community.

3.2 The Cross Currency Developments

With the start of multicurrency operations in TIPS, the interest for other possible developments arose concerning a potential cross currency functionality.

In the aforementioned principle 2 of TIPS it was clarified that such a feature was not in the immediate scope of TIPS, meaning that the Governing Council of the ECB may decide on that only following an assessment of all the potential risks and implications of such an endeavour. The ECB, Banca d'Italia, and Sveriges Riksbank are currently still investigating whether and how TIPS could support instant payment transactions across different currencies.

Actually, the work to enable a cross-currency capability in TIPS began in October 2020, when the ECB and Sveriges Riksbank announced their collaboration to explore whether the platform could process transactions between the euro and the Swedish krona. The next step in the investigation is to define the operational model and legal setup of a potential cross-currency settlement feature in TIPS.

With the aforementioned inclusion of Swedish and Danish currencies, TIPS will become a fully active multi-currency service, which is the basis for advancing it into a cross-currency system. Danmarks Nationalbank has also expressed its interest in the potential cross-currency settlement option in TIPS.

The Governing Council of the ECB has expressed the view that the investigation of a cross-currency settlement functionality in TIPS should is in line with the Eurosystem's strategic objectives, and should therefore continue. Various work streams are currently analyzing technical, regulatory and policy aspects of such functionality while conducting an informal exchange of views with market participants.

The improvement of cross-border payments beyond the European Union is a key goal of the Eurosystem's retail payment strategy to better support European businesses and individuals who make and receive payments overseas, and to foster competition amongst operators for Euro and beyond.

Currently, the market charges high costs for consumers and businesses wishing to send or receive payments to or from a country outside of the euro area. For this reason, Central banks around the world are studying initiatives to make cross-border payments more accessible to the end user. The cross-currency investigation in TIPS contributes to this effort and deepens the understanding of the practical challenges that need to be addressed when implementing cross-border payment initiatives.

A cross-currency solution would be among the world-firsts for Central Banks leveraging on the multi-currency function and instant settlement in TIPS. It could also generate market demand from new markets strengthening the international role of the euro.

In this context, and in line with the G20 roadmap for enhancing cross-border payments, Banca d'Italia and the Arab Regional Payments Clearing and Settlement Organization (ARPSCO, fully owned by Arab Monetary Fund), conducted an experiment focusing on the settlement of cross-currency instant payments across different technical platforms.

The Proof of Concept (PoC) was between TIPS and BUNA, a cross-border multicurrency payment system operated by ARPSCO, with the participation of Intesa Sanpaolo as test Originator and Jordan Ahli bank as test Beneficary PSP.

The experiment was successful, although there are various technical gaps, due to a lack of harmonization between the two systems, which necessarily require a resolution in order to allow the correct exchange of messages for the reduced set of business cases foreseen by the PoC.

Another cross-currency PoC involving TIPS is the Nexus project. Launched by the Bank for International Settlements Innovation Hub (BISIH), Nexus is a model for connecting multiple national payment systems into a cross-border platform while coordinating currency exchange between financial institutions. The project involves the BISIH, the Monetary Authority of Singapore, Banca d'Italia, Central Bank of Malaysia, BCS in Singapore and PayNet in Malaysia and aims at creating a model for the connection of the payment systems of Singapore, Malaysia and the euro area in an experimental proof of concept. As well as the TIPS-BUNA PoC, also the Nexus experiment processes simulated payments and not handles real money or actual payments from real users.

However, exploring potential cross currency models for settlement in CeBM entails to a certain degree treading in unchartered waters, and therefore precaution is necessary. In fact, depending on the solutions adopted, from the perspective of Eurosystem Central Banks certain risks may arise from running a cross-currency operation. One possible source of operational risk is recourse to CoBM for the purpose of currency conversion processes, as opposed to the final settlement of transactions, which would take place in CeBM in the accounts of the corresponding central bank.

A second source of risk could come from the on the services that third parties may provide to their customers. The Eurosystem's exposure to, and possible mitigation of, legal risks will, in part, depend on the efficient distribution/ assumption of legally binding obligations on/by those third parties, and on the contractual or other legal documentation between them and the central bank of the relevant non-euro, EU/EEA currency.

Another source of operational risk is linked to the foreign currency trading/ exchange leg of the cross-currency instant payment transactions they would

facilitate. This would be a novel source of risk for the Eurosystem in the operation of TIPS, which is absent from single currency transactions currently processed by the platform. However, it is important to note that not all models of cross currency settlement under assessment foresee a design where there is an fx risk for the Central Banks (e.g. a linked transaction model where the conversion layer is outside of the settlement platform).

Finally, sources of legal risk may be linked to the difference between the relevant jurisdictions and potential problems in ensuring the enforceability of judgements among the different countries involved, as well as geopolitical risk. This latter is the risk associated with wars, terrorist acts, and tensions between States that affect the normal and peaceful course of international relations. In order to manage this type of risk various mitigation measures should be deployed, encompassing technical solutions, operational procedures, and legal arrangements.

3.3 TIPS and €-CBDC

Cross-border payments is not the only area where digitalization is posing challenges to which TIPS try to respond. In this regard, another field where stronger is call for Eurosystem action may be found at the intersection between the safety provided by CeBM and the evolving consumer attitudes to digital means of payment.

The reference here is to the possible issuance of a digital euro. The ECB decided to start working on this hypothesis to make sure that end users continue to have unlimited access to central bank money in a way that meets their needs in the digital age. For this purpose, it started a preliminary analysis of potential solutions for the implementation of a central bank digital currency (CBDC) from the perspective of the Eurosystem.

As a result, on 2 October 2020, the ECB published a report on a digital euro. The report examines the necessity to issue a CBDC in the euro area. To this end, the ECB formulates seven scenarios under which a digital euro would become relevant. Based on these scenarios, it derives seven requirements for a digital euro. These are: enhanced digital efficiency, cash-like features, competitive features, monetary policy option, back-up system, international use, cost savings and reduced environmental impact.

In this context, Banca d'Italia is contributing with the ECB and other Eurosystem Central Banks to the investigation on the compatibility between a digital euro and existing central bank settlement services, such as TARGET2 and TIPS.

In fact, it is clear that using an already existing infrastructure to develop a CBDC brings about several advantages, including technological resilience and resource efficiency since no new payment rails need to be established. A CBDC relying on the TIPS architecture for its operation would be able to fulfil manof

the aforementioned requirements for a digital euro set out by the ECB in its report on a digital euro.

For instance, an account-based retail D€ may be implemented, by leveraging on the high scalability of TIPS, and exploiting its usability, speed, and cost-efficiency. As noted earlier, the TIPS platform could process one billion transactions per day and managing hundreds of millions of accounts without modifying the architecture of the system.

However, a digital euro using (part of) the architecture of TIPS would not have certain cash like features, e.g. neither full anonymity nor offline payment capabilities can be integrated.

It can be concluded that it is extremely difficult to design a CBDC that meets all requirements set out by the ECB. Instead, it seems likely that there will be trade-offs that need to be balanced.

The API Economy and Data-Sharing Regulations in Finance: Emergence of New Business Models, Architecture and Competition in Banking

*Markos Zachariadis**

The topic of open finance and data sharing regulations and lasting impact on competition has attracted significant interest to a lot of research scholars, industry practitioners, policy makers and regulators. In the academic literature of industrial economics, economics of innovation and technology management some of the big questions, and the reason of my research focus in this space, have always been: 'how does technology change business models at the firm level', but also, 'how does technology change industry architecture at the market level and shifts competitive dynamics and productivity for the economy overall'. Therefore, data openness within financial services is a really interesting topic indeed beyond just academia but also with relevance to policy.

As academics we want to create, some sort of impact in the real world that makes society and the economy better, so, in my role as an academic I also advise the Hellenic Competition Commission (HCC)[1] and particularly help with the fintech consultation during 2021 and 2022. The big idea there of course is how do you enhance competition in financial services, in Greece in particular, but also in the loop of other kind of policy discussions that are happening across Europe and globally. This is a similar discussion with the one we're having within our Counsel of Financial and Monetary Systems at the World Economic Forum on competition and productivity issues, and at the UK FinTech Strategy Group as part of our strategic collaboration with the University of Manchester and Innovate Finance which is the Fintech representing body in the UK. So it has been very interesting to be on this side of discussions and hear what financial services global leaders have to say about competition, about business models challenges, as well as their thinking around industry threats such as the entrance of BigTech platforms in the financial services sector, and regulatory challenges amongst others things. On that note, we also had a very recent development that some of you may

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[1] For more information see: https://www.epant.gr/en/enimerosi/sector-inquiry-into-fintech.html

have heard and is very relevant to the topic: Apple introduced a '*Buy Now-Pay Later*' (BNPL) solution in the US and it's for the first time that they are not using an underline bank to do the underwriting and support the financial services that they offer. For previous services Apple had used Goldman Sachs to be the issuer for their credit card, but this time around, they are taking on the actual underwriting risk, so essentially Apple for the first time is really into offering financial services and that is a tiny detail that not many people paid attention to, but I think it is very interesting and important to observe the appetite of BigTech firms to enter the sector.

As part of my academic role, I have published a lot of papers and books on relevant topics which you probably can access online, on questions such as: 'how does money move around the global economy', 'what elements are important for payment and financial telecommunication infrastructures', 'how do they emerge, what are some of the key characteristics if you think about the *standards* that are predominant in the discussion of open finance as well, the actual *technology*, the *architecture* of the infrastructure, the *community* that is developing around, and *governance* which is one of the top topics right now'. Also, as Beck mentioned, UK is one of the big case studies around open banking not only because they just follow PSD2 (through its transposition into the PSR law), but also because they created their own implementation entity to manage all the above issues. So the UK is the only country in the world that actually runs the entire infrastructure, banks pay for it, so these, according to the CMA order, we have the implementation entity facilitating the co-designing of all the APIs, and provide huge amount of detail around customer authentication, how to translate all the RTS, the technical standards into actionable processes, etc. that banks and FinTechs will have to use for consent, authentication and everything else. So it is pretty outstanding, it is like the regulator is becoming a technology provider in some ways, if you think about it.

So all this questions are really important and as we move on the discussion, a big part of this debate is how do you inspire innovation in the sector and how technology actually transforms the entire setting. At the firm level, business models are really important, so I am going to talk about platform business models as part of the API discussion, but then also how consumers in the end will have access to different services and different value propositions to adopt and use, and that is a big question also for banks so, some of the other work I have been doing, is to try and work with large banks and get them to think on how to design their global strategy in terms of data banking and open finance going forward. These are real questions that will have real impact in the industry and its shape, not just at the firm level but at the market level as you will see.

When one considers the driving forces of change in financial services (FS), technology is only one of the big defining factors changing finance. We have several case studies where we challenge a lot of technology enthusiasts that say "technology is going to change everything" – it's not! There have

to be a lot of other things happening at the same time and of course industry competitive forces, the organisational and market structure are really important, as well as customer demands and the appetite from consumers to adopt and use technology. There were cryptographic solutions for money transfer 20-30 years ago, but they were never implemented the same way cryptocurrences are, or at least in theory or according to certain metrics, today, because there was no e-commerce at that point in time, so demand and organisation market structure are really important. But, ultimately it is also about the regulation, and in industries that are heavily regulated like financial services you need to have reform of regulation to address and push forward with a lot of the developments in the financial services sector.

Now what does regulation do? And of course regulators have conflicting targets to achieve. From one hand they want to guarantee stability – and I think that was discussed in the previous sessions – they want to have integrity in the market, but they also want to maintain competition. So by competition we mean to have more innovation in order to deliver better outcomes for consumers essentially, that's the ultimate purpose. This can also be achieved through reduction of prices and potentially through productivity gains for the industry. Having said that, such decisions often conflict one another, that is why sometimes it can be difficult to get the balance of market stability and innovation right. Current statistics for the financial services sector using OECD data, show that R&D in finance is very poor compared to R&D proportionally in other industries. This mean that, as far as competition goes, there was a lag and there is still a lag in terms of innovation in the sector, so encouraging further competition to produce more innovation is quite important. And that is how we arrive to open finance and open data in financial services as it can be used to demonstrate that openness of data can enhance competition in the sector. If you take, for example, a lot of the conditions of a well-functioning market we have in the economic literature, you have to have transparency in terms of prices and quality of products, low switching costs, and low barriers to entry. All of these (if they are not functioning well like in the UK market for example), can be tackled one way or another with more openness of data. And that's essentially what regulators, in the UK and of course across Europe, with PSD2 tried to achieve.

However, to share data in financial services is not a new concept whatsoever. In the past we had even APIs, which is one of the technology that we know which is being used heavily these days, used internally for systems to communicate and innovative solutions to integrate with one another. If you think about certain solutions like VISA Checkout, MasterPass, PayPal, Amazon Payments, they have a lot of APIs to interconnect with the external systems and plug into the services with different providers or websites and applications. The issue there has been that these are proprietary APIs and firms can be quite selective on how these APIs are used and who is usines them (hence these are not necessarily open). For example, you have to partner with VISA to do that and VISA has to embrace you as a customer and agree privately on their and your terms.

As a result, a lot of the FinTechs, with whom the big banks did not necessarily want to partner with, had to use other techniques like screen-scraping to extract data and a lot of these other techniques are very risky for customers. This is mainly because customers will have to share their logging credentials to their bank accounts but there's also a lot of other technical and processual issues and regulatory challenges that we stumble across when we think about screen scraping or similar processes.

This is the reason we have seen recently an abundance of firms like Plaid predominantly in the US and Yodlee across the world and perhaps even more in Europe, who are trying to tackle this kind of screen-scraping challenges and become data brokers or intermediaries, by building an additional layer in the middle between banks and FinTechs to solve a lot of these frictions, whilst in the end providing APIs for FinTechs. But screen-scraping wasn't, and still is not, to a very large degree embedded in this process of accessing data. In addition, many of these firms as data intermediaries, have been the matter of competition issues in different jurisdictions. You may have noticed the case of VISA trying to take over PLAID in the US, which the Department of Justice denied and VISA ended up buying Tink (which is a European competitor of PLAID) in the EU, without facing any challenge from European regulators or competition authorities. In any case, and as far as competition goes, such firms do not solve all the issues the industry faces since, in order to use their APIs, you still need to be a client of Yodlee or Plaid for example. In that context, regulators decided to make this fairer and provide open APIs that go beyond private APIs. In this spectrum, such APIs would be described as 'acquaintance APIs' – according to this Euro Banking Association publication (2016)[2] – that are essentially subject to a particular regulation and then you have to have the licence to be able then openly and accessibly or freely in most situations, access the relevant data. Having said that, this description is not as rigorous and I haven't seen a much better than this one, that's why when I was Visiting Professor at Ivey Business School in Canada and researched the open banking consultation that was taking place at the time, I developed my own template because it's not just about APIs, but data openness has many different dimensions.[3] So there's openness around accessibility, so who can access APIs, but there's openness around functionality for example, what categories of data, what functionalities these categories of data will give access to the third parties, then how much data bandwidth you allow for, how open are the data and interface standards and so and so forth. There is even an alternative non-financial data and APIs that can be later brought into this kind of financial API prospective.

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[2] ABE-EBA (2016). "Understanding the business relevance of Open APIs and Open Banking for banks", European Banking Association Working Group on Electronic Alternative Payments, Information Paper, Version 1.0.

[3] M. Zachariadis, *Data-Sharing Frameworks In Financial Services: Discussing Open Banking Regulation for Canada* (August 25, 2020). Available at SSRN: https://ssrn.com/abstract=2983066 or http://dx.doi.org/10.2139/ssrn.2983066. This research was funded by the Global Risk Institute in Canada to provide policy makers and regulators a roadmap or framework to follow for open finance regulation/policy.

A key characteristic of APIs, is that it's meant to be a 'near-plug and play' technology, so the standardisation is really important. That means that even though regulators may order institutions to have APIs (or similar open data interfaces or technologies as we have across the European Union), if they don't have standards in the end everybody is going to deliver their own version of APIs, and it is going to be very difficult for any third party to work with and integrate. So the standardisation bit essentially is quite important.

However, APIs go beyond than just being a plug and play technology, and extend into being commercial, legal and innovation vehicles. For example, APIs could be seen as **products**: a firm can develop APIs and sell APIs, maintain them by releasing various versions and price them accordingly. In addition, through the accessibility of data you can treat them as **boundary resources** that can facilitate the development of innovation ecosystems as articulated in the literature of innovation and technology management. Finally, from the legal perspective, APIs can be seen as 'mini **contracts**' so when one uses an API you have the terms and conditions of use specified in the API documentation that dictate the relationship between stakeholders and its really crucial because it solves a lot of the issues that you would have to manage, when partnering with specific firms or organisations and/or negotiating the terms, etc.

In summary, APIs are potentially useful to give access to data and allow third parties to provide solutions, but from the business model perspective you can think more about creating platforms. This is something that we do a lot of research to understand the response from incumbent institutions, and how they can become players that aggregate not just data between/across different systems, but also offer accessibility to innovation propositions of third parties to their customers. So this platform business model idea in banking has been something that has been discussed a lot but we haven't seen huge amount of progress. At the University of Manchester we are also investigating a few of the challenger banks and trying to build case studies around them and how they develop their own ecosystems and platforms, which has been an intriguing and challenging idea at the same time.

If you think about it, the basic value proposition that platform business models offer is for banks to move beyond brokering money, which is the transposition of asset that they perform, to essentially becoming brokers of data and services. In that way they can become the pillars of the financial services digital economy by holding data and becoming the gatekeepers that would be able to maintain your data in a 'safe deposit' and then based on consent, through a dashboard for example, share data with any given organisation, or retract access to data based on this 'in-situ' data access idea, which is really interesting. Then as a consumer you can enjoy all the benefits of actually sharing your data through accessing new value propositions. So that's in principle the business model idea that has been quite fascinating and we studied the variety with which these platforms can be built, we have an entire paper, again accessible

online through the Swift Institute a few years back, which was probably one of the first academic papers on open banking as it goes back to 2016.[4]

But there are different ways to build platforms depending on the layer in the banking architecture that you want to operate in. For example, you can have an API aggregation as a platform, you can have a distribution channel as a platform, you can even have core banking infrastructure as platform, depending on the level of integration you want have. There is similar but different categorization done by the European Banking Authority (EBA) which proposes an alternative grouping to ours – the strength of our framework is that it uses definitions that are grounded to economic literature and around platform theory.

Another important topic that we identified and part of another paper that we are working on at the moment, that goes beyond the question of 'how do you actually develop a platform that incorporates an entire ecosystem around it' it looks at the idea of innovation bottlenecks in ecosystems. By leveraging existing literature we identify different kinds of bottlenecks, such as data bottlenecks, technology bottlenecks, processual bottlenecks, and even strategic bottlenecks. As a result, organisations that are part of this new value chain that is emerging in open finance, will then choose to strategically occupy space where they can broker action and play to their advantage, essentially creating some kind of other monopoly, or inefficiency in the value chain so they can profit from it. If you think about it, that's what banks do essentially, they're making money out of the inefficiencies of the market because we don't have access to capital, so somebody who suffers less from information asymmetries (such as the banks) needs to broker that activity. This idea of innovation bottlenecks is quite important in this kind of API ecosystem and the open banking ecosystem going forward and needs special attention by regulators and policy makers.

Finally, something that has been quite interesting to us scholars at the University of Manchester is how the entire architecture in the industry is changing, not just at the firm level, but what happens to the entire industry when all these new players and this new value chains emerge, and it depends on the nature of the firm and the traditional kind of vertical integrated pipeline business models we have and how we move on to more modular architecture, as we say, in innovation studies. This is something we observed and this is in the latest publication we published again with Swift.[5] More specifically, banks maintained this vertical integrator play offering pretty much everything from beginning to end, which was very siloed according to products, but now you have a more distributed set up. So for any given service consumers benefit

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4 M. Zachariadis, P. Ozcan, *The API Economy and Digital Transformation in Financial Services: The Case of Open Banking* (June 15, 2017), SWIFT Institute Working Paper No. 2016-001, available at SSRN: https://ssrn.com/abstract=2975199 or http://dx.doi.org/10.2139/ssrn.2975199.

5 P. Ozcan, M. Zachariadis, *Open Banking as a Catalyst for Industry Transformation: Lessons learned from Implementing PSD2 in Europe* (September 1, 2021), SWIFT Institute Working Paper No. 2017-006, available at SSRN: https://ssrn.com/abstract=3984857 or http://dx.doi.org/10.2139/ssrn.3984857.

from, you have a variety of players in the background, let's say participating as part of these value chain interactions, some may be providing the core infrastructure and the data, somebody else may be doing the risk analysis, maybe with payment process, you have payments gateway or a processor to do some part of the processing depending on your integration, the country you're in, then, you have the API layer and so and so forth. So this pretty interesting to see, how it develops and what are the new players that are dominating, what are the Mastercards and Visas of the future? What are the incumbents of the future?

In road-mapping all the above and creating a comprehensive open banking framework, for any other country where you are the regulator, there are different decisions that one would need to take. Of course, the idea of objectives was one of the key issues that a lot of countries had to and are still discussing a lot these days. For example, in Europe, we have a policy **mandated** open banking/ open finance, but in other countries you may have or end up with more market-driven solutions – for instance, the US has been discussing about that quite a lot and we have some recent developments. But then policy makers will also need to think about other kinds of **regulations** that may be necessary to have in sync in order to deliver an open banking infrastructure, and/or within issues that you may have to tackle. Another notorious issue around banking has been the **liability**: what happens if a third party messes up? Does the incumbent pay or somebody else (i.e. the TPP) should pay for it, or maybe the customer pays for it? Issues around **data privacy**, for example, consent. Explicit **customer consent** has been an important topic to look into for the academics but also for policy makers. It can be very complicated and there is now a new category of firms, more frequently FinTechs, that are only trying to tackle consent because they realise that, at the bank level, data is so messy that the banks ultimately do have access to all this data, but they cannot use them because then we say "oh actually we have consent to keep customers' data, but we don't have the explicit consent to analyse the data, so we can offer this so and so product". In such scenario, they have to go back to their customer, and ask for consent for that particular purpose, offer the product, and if the customer is not interested they can't offer another product because they have to get consent again. So **consent management**, in an open data and open finance economy, with APIs, is becoming a very important issue and I think it is going be one of the key issues to crack going forward.

As a closing note and taking into consideration all the above, in the context of open finance – even after paying attention to all the above – execution is really important. In the end, pushing forward with an open finance framework is all about developing the infrastructure that would allow the easy and productive access to data to boost innovation and competition. As mentioned, in the UK we have the implementation entity that makes a lot of these decisions, but other countries don't, and I think part of what we are trying to discuss for example in the Hellenic Competition Commission is how to come up with solutions on many of the above matters, either by creating an entity which is probably the

hardest thing to do, so you have to be very decisive and just create a new body in the financial services sector just because of that, or through existing regulators, and if it's existing regulator then, who would be responsible to tackle the above challenges, because some of them are pretty daunting tasks.

I am going to pause here, and thank again the conference organisers and Banca d'Italia for the invitation and opportunity to share my research on this platform.

A Comparative Approach to Open Banking and Competition[1]

*Maria Casoria**

Summary: 1. Setting the Scene for Open Banking and Competition – 2. The European Union Approach to Open Banking and the Main Competition-Related Issues – 3. Open Banking and Competition in Selected Jurisdictions Outside the European Union – 3.1 Open Banking Beyond Competition: The Gulf Cooperation Council Approach – 3.2 Made-in-Canada Open Banking and Competition – 4. Towards a More Efficient Open Banking Ecosystem: Legislators and Authorities at the Crossroad of Financial Stability and Competitive Markets – 5. Concluding Remarks

1. Setting the Scene for Open Banking and Competition

It is a widely known theorem that the market of banking and financial services has been traditionally characterised by weak competitive pressure mostly due to concerns related to preserving financial stability at both national, and international levels and the "one size fits all" approach to currency management and related services. In fact, for a long time banking institutions have been the sole providers of payment and other financial services and they have controlled the market of retail banking through the so-called "data advantage". Such a theorem seems to be rebutted by the recent widespread use of technologies in the banking sector and, more specifically, by the rise and consolidation of Open Banking as a disruptive ecosystem that enables third-party to access banking transactions and other financial data through Application Programming Interfaces (APIs)[2] and has caused incumbent banks having to compete with different players and rethink their business model to

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1 Presented at the conference *Competition and Payment Services* organised by the Bank of Italy and the University of Siena – Department of Law in the context of the Jean Monnet Project titled *European Legal Strategies for Payments Systems in the Open Banking Age*, Rome, 16-17 June 2022. Thus, the paper captures the legislative developments occurred in the legal systems investigated until the date of the conference.

2 Open Banking has been defined in several ways. A comprehensive definition is the one provided by the Basel Committee on Banking Supervision which has defined Open Banking as follows: ("the sharing and leveraging of customer-permissioned data by banks with third party developers and firms to build applications and services, including for example those that provide real-time payments, greater financial transparency options for account holders, marketing and cross-selling opportunities"). For more information see the Basel Committee report on Open Banking and application programming interfaces available *at* https://www.bis.org/bcbs/publ/d486.pdf, 2019. As explained in more detail in the following paragraph, the EU recognises two types of Open Banking services as regulated activities: (i) account information services; and (ii) payment initiation services.

survive in the newly shaped banking and financial landscape treasuring on their existing reputation, trust, and regulatory expertise.[3]

The core features of Open Banking are market openness, since for the first time banking services can be performed outside the traditional banking channels; a platform-based approach that links conventional banks and non-conventional operators with customers via APIs; regulation or licensing system as a requisite to offer Open Banking services. Moreover, scholars, policymakers, and field experts all concur that by allowing third-parties providers, *i.e.,* FinTechs and BigTechs, to access customers' banking data as well as by conferring to consumers the power to exploit their own transaction data through a single online application,[4] Open Banking has a pro-competitive potential.[5]

Before the massive emergence of technological innovation, the sector of retail banking was affected by core competition-related problems such as lock-in effects, high market concentration, low elasticity demand, high barriers to entry, abuse of market power by incumbent banks, and product tying practices to the detriment of newcomers and consumer welfare because the banks were acting as the gatekeepers for customers data.[6] Hence, the appearance in the Open Banking landscape of different players alongside incumbent banks has increased the level of competition through minimisation of the historical competitive advantage of the incumbents and enhanced the contestability of banking markets, while creating, however, novel antitrust concerns.

In addressing the question of whether one should be alarmed by the possible competition problems stemming from opening the market of banking and financial services to new entrants, the following aspects seem of particular interest:

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[3] OECD, *Digital Disruption in Banking and Its Impact on Competition*, available at https://www.oecd.org/daf/competition/digital-disruption-in-banking-and-its-impact-on-competition-2020.pdf, 2020. For an overview of the competitive challenges banks are faced with due to the spread of technological innovation and the progressive importance assumed by BigTechs in the market of banking and financial services, see J.R. Martinez Resano, *Regulating for competition with BigTechs: banking-as-a-service and beyond banking*, in Revista de Estabilidad Financiera, 2021, 4, pp. 113-150.

[4] Due to the central role played by the consumer in opening the market of retail banking, some refer to Open Banking as "consumer-directed finance". The term was proposed in Canada by the Advisory Committee on Open Banking appointed by the Minister of Finance in 2018. In this regard see the report titled *Consumer-directed finance: the future of financial service*s available at https://www.canada.ca/en/department-finance/programs/consultations/2019/open-banking/report.html, 2018.

[5] O. Borgogno, A. Manganelli, *Financial Technology and Regulation: The Competitive Impact of Open Banking*, in Market and Competition Law Review, 2021, 1, pp. 105-139.

[6] About the transformation that occurred in the market of retail banking due to the diffusion of Open Banking, see P. Ozcan, M. Zachariadis, *Open Banking as a Catalyst for Industry Transformation: Lessons Learned from Implementing PSD2 in Europe*, Swift Institute Working Paper, 2021, available at https://swiftinstitute.org/news/open-banking-as-a-catalyst-for-industry-transformation/.

- The role of data as a key input to entering the Open Banking ecosystem, which may make the retail banking market more competitive in the short term because of the relatively low bars to access customers' banking information but may result in even more market concentration in the long run due to the presence of extreme indirect network effects, strong economies of scale, and significant economies of scope.

- Platform-based banking and abuse of dominance through data exploitation by BigTechs,[7] since the digital platforms can leverage their data assets in downstream or conglomerate markets, attaining significant portfolio effects. These large online companies can harness their analytical tools and skills in processing and cross-referencing the data at their disposal to offer a vast array of tailored products and mutually integrated services in the banking sector.

- Partnerships between incumbents and FinTechs, which – as the Open Banking ecosystem corroborates – might evolve from a simple alliance between economic operators trying to merge their forces and adapt to the effects of the technological disruption into collusive conducts in the form of anticompetitive agreements to face the competitive pressure imposed by BigTechs.[8]

Considering the ongoing turmoil in the retail banking sector, which is leading towards the establishment of a customer-centric platform-based model, and the competition concerns on the horizons, the paper provides an overview of three diverse regulatory strategies adopted in selected jurisdictions to deal with Open Banking with reference to competition aspects. Our analysis begins with the European Union as an example of advanced regulatory framework where competition-related concerns have been raised by several stakeholders in the aftermath of the adoption of the PSD2; it continues with some Arabian Gulf States that have quite recently enforced *ad hoc* laws enabling Open Banking services or encouraging industry-led approaches, but have overlooked any competition profile; and then it focuses on Canada as a lonesome example of pro-active approach by the competition authority which has warned against praising the pro-competitive connotation of Open Banking *per se* in the absence of a specific normative system addressing competition matters. Moreover, the paper lays down recommendations on how to improve the existing legislative framework, as it pertains to antitrust issues, with reference to the role to be played by the competition and other authorities through the *ex-post* enforcement.

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[7] J.R. Martinez Resano, *Regulating for competition with BigTechs: banking-as-a-service and beyond banking*, cit.

[8] For some considerations regarding the interactions between banks, FinTechs, and BigTechs in terms of cooperation, competition or coopetition, see J. Harasim, *FinTechs, BigTechs and Banks. When Cooperation and When Competition?,* in Journal of Risk and Financial Management, 2021, 14, available at https://doi.org/10.3390/jrfm14120614.

2. The European Union Approach to *Open Banking* and the Main Competition-Related Issues

A study about the convulsive relationship between Open Banking and competition cannot disregard the existing legal framework in the European Union (EU), a pioneer in this field. It is widely recognised that the PSD2[9] with its focus on the right of third-party operators, namely Payment Information Service Providers (PISPs) and Account Information Service Providers (AISPs), to gain access to data about the consumers' payment history through APIs has a pro-competitive vocation since the directive has explicitly recognised, for the first time, services that facilitate Open Banking.[10] More specifically, the PSD2 attempts to open the market of retail payments in the EU by introducing a sector-specific data portability rule, the so-called "Access to account rule" (XS2A), which enables the transfer of data about payment accounts services from incumbents to authorised payment institutions upon the customers' consent and on an objective, non-discriminatory, and proportionate basis in order to allow payment institutions to provide payment services in an unhindered and efficient manner.

Prior to taking a closer look at the XS2A rule, it shall be noted that the PSD2 justifies its enactment also by highlighting the lack of competition in the market of payment services in some of the recitals, specifically Recitals No 29, 51, 52, 67, related to payment initiation services, fair competition between service providers, access to payment systems, and card-based payments. Apart from the recitals, a reference to the need to foster competition in this sector is contained in Article 62 which, while setting rules for the charges that the payment service providers can apply states that, when incorporating the directive into their domestic laws, Member States may either prohibit or limit the right of the payee to impose charges in the light of the need to encourage competition and promote the use of efficient payment systems; Article 98 on the technical standards concerning authentication and communications of the payment service providers, which establishes that the regulatory standards shall be developed with the aim, amongst others, to secure and maintain fair competition among all payment service providers; and Article 108 which, in regulating the mechanism for reviewing the impact and application of the PSD2, stresses upon the importance of assessing the degree of access to payment systems having regard, amongst other factors, to the level of competition. Such principles have been subsequently confirmed by the EU Commission in its Communication on a Retail Payments Strategy for the EU released in September 2020.[11]

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9 Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC).

10 O. Borgogno, A. Manganelli, *Financial Technology and Regulation: The Competitive Impact of Open Banking*, cit.

11 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Region on a Retail Payments Strategy for the EU – COM/2020/592 final.

As aforementioned, the key tool to foster competition in the market of payment services is the so-called XS2A rule regulated by Article 36 PDS2, according to which incumbents shall allow TPPs to access real-time data on users' accounts as well as provide access to such accounts to enable TPPs to offer the payment-related services requested by the customer, on the condition that the account is accessible online and the customer has given his explicit consent. Moreover, to limit the bank's discretion to refuse such access, any rejection shall be duly motivated. It has been emphasised that this rule aims to "prevent[ing] foreclosure as the result of the banks' refusal to deal with the Fintech companies covered by the regulation" and that it promotes competition in the market of banking services through the exploitation of technology-enabled solutions provided by the FinTechs in the attempt to rebalance a market where banks can extract supra-competitive profits to the detriment of consumer welfare.[12] Consequently, at first glance the main goal of the XS2A rule seems to be fostering the growth of the newly born industry of Fintech payment services. Yet, since BigTechs are progressively entering the market of online retail banking, they will also benefit from this norm, putting a much stronger burden on established banks. In fact, when compared to the BigTechs, incumbent banks have less access to data about consumers' behaviour (such as preferences, habits, and conducts), less analytics and technological capacity, and so they are placed at a competitive disadvantage by the XS2A rule in comparison with their BigTech rivals, a circumstance that may result in an increased level of competition in the short term but cause competition harm, consumer welfare reduction, and instability in the financial sector in the long run.

Given that the impact of the XS2A rule on the incumbents differs based on the counterpart which receives access to such data, one shall question whether a uniform XS2A rule is well-suited and proportionate for both FinTechs and BigTechs or if corrective mechanisms shall be implemented to balance the interests of all stakeholders involved. In the attempt to respond to the potential drawbacks of the XS2A rule regarding the BigTechs, part of the doctrine has proposed to complement the XS2A rule with a "reciprocity clause". According to such theory, instead of gaining free access to customers' account data, BigTechs should pay by providing counter access to the behavioural data in their possession about the same customers concerned by the XS2A and upon their consent. Reciprocity would increase the circulation of data among market participants while fostering competition among them, creating incentives for more innovation, and, as a result, enhancing the overall proportionality of the XS2A rule.[13] However, to balance the competitive outcomes of the reciprocity clause, the data received by the banks should be used exclusively to enhance the provision of payment services in accordance with Articles 66 and 67 PSD2 and, thus, a controlling

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[12] O. Borgogno, G. Colangelo, *Data, Innovation, and Competition in Finance: The Case of the Access to Account Rule*, in European Business Law Review, 2020, 31, pp. 573-610.

[13] In this sense, see F. Di Porto, G. Ghidini, *I Access Your Data, You Access Mine: Requiring Data Reciprocity in Payment Services*, in ICC – International Review of Intellectual Property and Competition Law, 2020, pp. 307-329.

mechanism should be developed to avoid any distortion. A point of contention in this regard is that, since FinTechs are more likely to work alongside incumbent banks rather than compete with them due to the mutual gains their cooperation may achieve, imposing a reciprocity obligation might amount to a barrier to entry for BigTechs, which could result in removing the only effective source of competitive pressure for incumbents in case the tech giants refuse to access the market due to the burden of the reciprocity rule.

Reciprocity might also give rise to free riding, which represents a further threat to the competitive outlook of the Open Banking framework since the fact that some service providers can potentially profit from the innovations of others decreases the return on those innovations, making them less likely due to a subsequent lack of incentives to invest and can also lead to the BigTechs not being willing to enter the banking market not to give up returns in their primary market. In this regard, it has been highlighted that a key to an effective reciprocity regime is an appropriate distinction between "proprietary" and "non-proprietary" data,[14] where non-proprietary data is required to be shared between service providers to activate the Open Banking system, whereas proprietary data should not be made available by one service provider to another to safeguard the service provider's interest to invest in innovative products without the risk of losing its investment in innovation. However, an improper designation of data as proprietary can deprive rivals of competitively important information, making them less able to use customer data to deliver competitive financial products and, thus, lower the degree of competition. Hence, if the PSD2 aims to open the market of payment services to third parties by giving them access to data owned by incumbents, the possible drawbacks of the access to account rule combined with the proposed reciprocity obligation should be identified and addressed.

As aforementioned, the Open Banking ecosystem, as fostered by the PSD2, has been extensively and correctly praised for its virtues to facilitate the establishment of a competitive retail banking market. Nevertheless, the relationship between Open Banking and competition is complex and, thus, an analysis of the core antitrust concerns stemming from opening such a market to new entrants shall be conducted to assess the existing rule of law and decide if and how to fill in its gaps.

The first aspect to be scrutinised is the definition of the relevant market(s) which underpins any competition-related analysis. Pursuant to the PSD2, the relevant markets are defined by Articles 66(4)(b) and 67(2)(d) for payment initiation and account information services respectively. In the first case, the PISPs have access to: "all information on the initiation of the payment transaction and all information accessible to the account servicing payment service provider regarding the execution of the payment transaction". As for the AISPs, they can access "the information from designated payment accounts and associated

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[14] G. Lang, *Maximizing the Competitive Potential of Open Banking: Insight from the Canadian Conversation*, in CPI Antitrust Chronicle, April 2021, pp. 13-20.

payment transactions." Although, as evident from these provisions, from a banking point of view we are dealing with a case of market definition by regulation, from a competition law perspective a wider or narrower relevant market can be identified at the stage of enforcement. For instance, one might look at the market of the transaction data only or only at a type of payment or the payment services, the market of customers' account payment history (such as behavioural data from internet searches, social networks, and comparison sites pertaining to the bank's client) and so forth. Therefore, defining the relevant market can be challenging and vary depending upon the focus chosen by the competition authority investigating the specific market and the breach that occurred.[15] Yet, this case-by-case approach might not be the right one considering that BigTechs, already dominant in other markets, are the key players for the success of a competitive Open Banking ecosystem.[16] In this framework, the Commission's Proposal of Enforcing a Digital Markets Act published in December 2020 might serve as a guide for further regulatory intervention since it aims at regulating the conduct of large online platforms to ensure fairness in the digital markets.[17]

A second critical aspect are the barriers to entry, which in the reference market are represented by the customer account data and the consequential information asymmetry between incumbents and newcomers.[18] The PSD2 attempts to lower entry barriers by unbundling the retail payment market to the benefit of authorised newcomers. As previously highlighted, since the entry into force of the XS2A rule TPPs have enjoyed the right to request account information without any previous agreements with the banks and only upon securing the customer's consent. Also, standardisation and interoperability of the APIs have been seen as ways to lower barriers to entry into the market. Yet, for this to happen reliability of the technology shall be guaranteed also in connection with the need to ensure data integrity and, thus, another issue arises, which is the relationship between data security and competition.[19] Furthermore, since customer trust is crucial to the success of Open Banking, incumbents still seem to have a competitive advantage over non-banking institutions and, considering that the functioning

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[15] For the EU approach to the definition of the relevant market, see the Commission Notice on the definition of relevant market for the purpose for the purposes of Community competition Law – 97/C and C 372/5; Commission Staff Working Document Evaluation of the Commission Notice on the definition of relevant market for the purposes of Community competition law of 9 December 1997 – SEC (2021) 295 final.

[16] On this topic, see J.U. Franck, M. Peitz, *Market Definition in the Platform Economy*, CRC TR 224 Discussion Paper Series, 2021, available at https://www.crctr224.de/en/research-output/discussion-papers/archive/2021/DP259v2.

[17] Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act) – COM/2020/842 final. For a recent review about the main profiles of the DMA, see K. Bania, S.-P. Brankin and others, *The Digital Market Act,* September 2022, in Concurrences, 2022, 3.

[18] O. Borgogno, G. Colangelo, *The Data Sharing Paradox: BigTechs in Finance*, in European Competition Journal, 2020, 16, pp. 492-511.

[19] For an overview of the issue of data security in the field of digital payments, see A. Palmieri, B. Nazeraj, *Open Banking and Competition: An Intricate Relationship*, in EU and Comparative Law Issues and Challenges Series, 2021, 5, pp. 217-237.

of Open Banking relies upon the consumer's consent, the element of trust might amount to an additional entry barrier and hinder the pro-competitive outcomes envisioned by the PSD2.

According to competition norms, access to data can be obtained only in exceptional circumstances, that is following the essential facility doctrine, pursuant to which a firm in a dominant position cannot refuse to share its assets with new entrants if such assets are essential to access the market.[20] In this regard, the core question is if the customers' account data qualify as an indispensable asset and, thus, meet the criteria for the essential facility doctrine to be triggered. Some scholars believe that with the XS2A rule the legislator tried to reduce an insurmountable informational barrier to entry, because "entrants may not compete effectively [...] unless they have access to the credit history and, possibly other hard and soft information, as incumbents do". In other words, what this position contends is that the XS2A rule can be understood in terms of access to an essential facility.[21] Cautious Italian doctrine, instead, has referred to account data as "essential infrastructure" or as facilities that are "necessary" to open the market but not "essential".[22] In our view, from a pure competition law perspective arguing that account data amount to an essential facility is difficult to sustain due to the following reasons: there is consensus about the criteria to be used to identify the relevant market; the data circulating in the digital market are overabundant and easy to collect;[23] the requirement of paying a price to access the facility is not met; there is no contractual relationship between TTPS and incumbents to access the data; and, lastly, it is the customers' consent that defines the boundaries of the data to be (directly and continuously) transferred to the third-party provider. Thus, not all the conditions set forth Commission's Guidance on the enforcement priorities in applying Art. 102 TFEU are met.[24]

The last key profile that requires special antitrust scrutiny is the possible abuse of dominance by the BigTechs entering the market of Open Banking. If one tries to foresee the medium and long-term effects of the XS2A rule, the first question which comes to mind is: Are we moving from a "de facto" monopoly of the incumbent banks towards a "de facto" monopoly of the already dominant Tech Giants if they decide to access the market of financial services

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[20] On the essential facility doctrine and digitalisation, see I. Graef, Rethinking the Essential Facilities Doctrine for the EU Digital Economy, TILEC Discussion Paper, 2021, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3371457.

[21] O. Borgogno, G. Colangelo, *Data, Innovation, and Competition in Finance: The Case of the Access to Account Rule*, cit.

[22] F. Ciraolo, *Open Banking, Open Problems. Aspetti controversi del nuovo modello dei "sistemi bancari aperti"*, in Rivista di Diritto Bancario, 2020, IV, pp. 611-650.

[23] On the relationship between data and the market power of the digital platforms, see E. Calvano, M. Polo, *Market power, competition and innovation in digital markets: A survey*, in Information Economics and Policy, 2021, 54; I. Graef, *Market Definition and Market Power in Data: The Case of Online Platforms*, in World Competition, 2015, 38, pp. 473-506.

[24] Communication from the Commission, Guidance on its enforcement priorities in applying Article 102 TFEU to abusive exclusionary conduct by dominant undertakings, 2009.

more consistently? It is renowned that banks and FinTechs have adopted a "mix and match approach" to Open Banking, because they have realised that they have mutual gains out of their cooperation, which, for the FinTechs, are easy access to clients and their data, a reduced burden of regulatory compliance and a remedy to the lack of trust by the customers, whereas for the banks is the access to innovative technologies and products without incurring research and development costs. Instead, banks and BigTechs relate with each other more with a "mix and crash approach" since there is very little doubt that banks do not have at their disposal the same level of technological equipment as the digital conglomerates and this, along with the access to bank's data, might lead the BigTechs to gain anticompetitive advantages over incumbents in the market of retail banking services.[25] Indeed, BigTechs could decide to become banks or intermediaries themselves and exploit their economies of scope or act as a multisided platform and either try to exclude the incumbents by using their data and technological superiority or become gatekeepers that control the interface of the customers in their platforms and oblige the banks to supply products and services through such an ecosystem.[26]

Even if one was to impose a reciprocity obligation as a condition for accessing the data as proposed by part of the doctrine,[27] the banks will still not be best equipped to exploit and gain profits from the amount of data granted to them without incurring significant costs or partnering with FinTechs. On the other side BigTechs, by benefiting from the access to payment account information enabled by the PSD2, could rapidly monopolise the market of retail banking through combining different types of financial and non-financial services and engaging in self-preferencing, *i.e.,* giving preferential treatment to their own products and services compared to those provided by incumbents and FinTechs and linking such information to the huge amount of data about customers profiles and preferences already at their disposal, thus consolidating their market power and creating vertically integrated platforms. In other words, BigTechs could leverage the proprietary data stores derived from their non-financial-service operations to provide consumers with tailored financial offers. Moreover, since the digital conglomerates have access to the analytical skills and the most advanced technologies (including artificial intelligence, cloud computing, and machine learning), BigTechs could scale up in financial markets very quickly, thereby posing a significant competitive, and potentially disruptive, threat to traditional banking and customer welfare. Thus, platform-based banking might be added soon to the list of conducts that antitrust watchdogs need to keep under their radar and legislators shall attempt to regulate.

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[25] A. Tanda, C.M. Schena, *BigTech Strategies Approaches: Worrying Competition?*, in A. Tanda, C.M. Schena (eds.), *FinTech, BigTech and Banks*, London, 2019, pp. 37-50.

[26] OECD, *Digital Disruption in Banking, and Its Impact on Competition*, cit.

[27] F. Di Porto, G. Ghidini, *I Access Your Data, You Access Mine: Requiring Data Reciprocity in Payment Services*, cit.

3. Open Banking and Competition in Selected Jurisdictions Outside the European Union

After its official launch in the EU with the PSD2, Open Banking has gained momentum in other areas of the world with several jurisdictions allowing Open Banking services whilst adopting different policy and regulatory approaches.[28] As shown in the map below,[29] some policymakers have opted for a market-driven approach, enabling data-sharing between incumbents and licensed non-traditional banking operators,[30] whereas others have put into place *ad-hoc* regulatory frameworks either following the prescriptive model of the EU and the UK or adopting facilitating techniques by issuing guidance and recommended API standards and specifications on the example of Hong Kong and Singapore.[31] Another classification that has been proposed to describe the worldwide regulatory status of the art relies upon the distinctions amongst mandatory jurisdictions, where the regulators have mandated Open Banking, supportive jurisdictions, where Open Banking has been encouraged by the legislators, and neutral jurisdictions, where policy makers have not made any official regulatory step but there are some industry-led initiatives.[32] Despite such differences, what all the governmental strategies have in common is a supportive attitude towards the adoption of Open Banking.

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[28] For an interesting data collection on the implementation of Open Banking worldwide see T. Babina, G. Buchak, W. Gornall, *Customer Data Access and Fintech Entry: Early Evidence from Open Banking*, Stanford University Graduate School of Business Research Paper, available at https://ssrn.com/abstract=4071214, 2022.

[29] See the Open Banking map developed by the company Konsentus and available at https://www.konsentus.com/wp-content/uploads/The-World-of-Open-Banking-Map.png (updated as of December 2021).

[30] An important example is represented by the U.S where the major banks, conscious of the strategic importance of Open Banking, are already developing API-based offerings in partnership with fintech companies in the absence of a specific rule of law. However, in July 2021 President Biden signed the Executive Order on Promoting Competition in the American Economy, which encourages the implementation of legal rules on Open Banking by stating that the Director of the Consumer Financial Protection Bureau should consider: ("commencing or continuing a rulemaking under section 1033 of the 2010 Dodd-Frank Act to facilitate the portability of consumer financial transaction data so consumers can more easily switch financial institutions and use new, innovative financial products".) The full order is available in full text at https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/.

[31] Detailed information about Open Banking regulations in different countries can be found at http://www.openbankingmap.com/ and https://www.openbankingtracker.com/. On the different regulatory approaches, see P. Kayrouz, *Getting Open Banking Right: Key Considerations for Regulators*, in MENA Business Law Review, 2021, pp. 33-34.

[32] For more information see the report published by Microsoft, Linklaters and Accenture in 2019 titled *Open Banking: A Shared Opportunity*, available at https://www.microsoft.com/cms/api/am/binary/RE489V8, where the possible implications of the different regulatory approaches are also addressed. According to the report, the first category includes the EU, UK, Australia, and Hong Kong; the second, Singapore, Malaysia, Japan, US, India, South Korea, Taiwan, and New Zealand; the third, China, Indonesia, and Sri Lanka.

Due to consistent number of Open Banking initiatives worldwide and considering the specific scope of this paper which attempts to shed lights on the competitive impact of opening the market of retail banking services to new entrants and on the different approaches adopted by the regulators across the globe, in the following paragraphs we will be looking at the strategies implemented in some countries located on the shores of the Arabian Gulf and members of a regional organisation known as the Gulf Cooperation Council (GCC), namely, Bahrain, Saudi Arabia, the United Arab Emirates,[33] where competition-related aspects have not been at the forefront of the debate about the strategic importance of Open Banking, although in these jurisdictions Open Banking is gaining importance and competition is subject to some legal scrutiny,[34] and at the Canadian approach, where the Competition Authority has intervened in the regulatory process at the very early stages of the debate on Open Banking raising some doubts on the automatic pro-competitive impact of Open Banking. The rationale behind choosing such an angle of observation is twofold. On the one hand, our purpose is to understand if the

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[33] Other three countries, Oman, Kuwait, and Qatar are also members of the GCC. However, at the time this paper is written the Open Banking frameworks of such states are still in their infancy and are mostly tackled in the context often the country's Fintech Sandbox, and for this reason they are not examined. General information in this regard can be found at http://www.openbankingmap.com and https://www.openbankingtracker.com/.

[34] On the competition norms in force in the GCC, see N. MEMETI, *Evolving Dynamics in Competition Law: A GCC Perspective,* in Yearbook of Antitrust and Regulatory Studies, 2019, 19, pp. 173-197; M. CASORIA, *Competition Law in the GCC Countries: The Tale of a Blurry Enforcement*, in Chinese Business Review, 2017, 16, pp. 141-149.

antitrust concerns which have been voiced at the EU level are a phenomenon peculiar to the old continent and connected to the features of the European single market, its operators, and the existing cross-sectoral legislative interventions especially in the digital arena or if, as Open Banking disseminates, similar issues could emerge in markets outside the EU; on the other hand, based on the different types of involvement of the competition authorities, we aim to reflect on the degree of intervention needed by antitrust and other authorities to guarantee an optimal level of competition in the Open Banking ecosystem.

3.1 Open Banking Beyond Competition: The Gulf Cooperation Council Approach

Open Banking in the Middle East is, for the most part, still in its early stages,[35] although the Arab Monetary Fund (AMF)[36] released in 2021 a report titled *A Vision of Open Banking in the Arab World* that acknowledges the importance of Open Banking and the core role of digitalisation in the banking sector in the Arab world in line with international standards and trends. In the same year, the Arab Regional Fintech Working Group published another important report that provides a list of nine guiding principles that the Arab rulers should follow while implementing Open Banking regulatory regimes.[37]

In this context, an exception is represented by some countries in the GCC that, under their national economic visions, whose pillar is to minimise the government's reliance on the revenue generated from the exploitation of natural resources, attract foreign direct investments, diversify their economies, and foster financial inclusion, have decided to ride the waves of the digital disruption in the banking sector and have embraced the opportunity of enabling Open Banking services also in the

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[35] For an overview, see the report *Open Banking in the Middle East: Time is of Essence* published in 2021 by the information technology company Accenture available at https://bankingblog.accenture.com/wp-content/uploads/2021/04/Accenture-Open-Banking-In-The-Middle-East-Part-1.pdf.

[36] The AMF is a regional Arab organisation comprising 22 Member States that aims at laying the monetary foundations for Arab economic integration and promoting economic development in the Arab countries. For more information and the official publications of the AMF see https://www.amf.org.ae/en.

[37] Such principles are: ("Enable Locally Relevant Use-Cases to Emerge prior to the Full-Fledged Launch of Open Banking Regulations; Plan for Regulatory Mechanisms to Encourage Regulated Entity Take-Up within Set Timelines; Enable Permission Based Access Technologies Prior to Widespread Adoption of Open API Infrastructure in Order Not to Delay Innovation; Drive the Early Adoption of Industry Standards on Regulated Entities & Certification of PISP/AISPs; Ensure Robust Data Governance & Protection Frameworks are Applied by PISP/AISPs and Third Parties; Require Consumer Protection & Liability Frameworks to be Adopted Across Open Banking Eco-Systems; Actively Promote Early Industry Collaboration; Adapt Phased Approaches to Reflect National Strategic Objectives and Use-Cases; Broaden Scope & Regulate Not Only Banks".) The report is available at https://www.amf.org.ae/sites/default/files/publications/2021-12/open-banking-regulatory-principles.pdf, 2021. More information on the working group, whose functions are promoting the exchange of knowledge and expertise, strengthening the capacity of the Arab regulators, as well as building a network of Arab and international experts from the public and private sectors to advance the fintech industry and foster innovation can be found at https://www.amf.org.ae/en/publications/regional-committees-task-forces-publications/arab-regional-fintech-working-group.

attempt to transform the Arabian Gulf into a hub for the banking and financial services offered across the Middle East and North Africa Region (MENA).

Amongst the GCC states, Bahrain stands out as a pioneer, having been the first state in the region to develop an Open Banking regulated framework. The Central Bank of Bahrain (CBB) began the drafting process in 2017 and issued Open Banking norms as a section of the *CBB Rulebook* in December 2018. Such norms, which have mandated the adoption of Open Banking for all retail banks in the country and regulate AISPs and PISPs as examples of "ancillary service providers", at their core are consistent with the PSD2 and underpin the importance of ensuring the security and confidentiality of customers data in the Open Banking ecosystem.[38] In October 2020 the CBB launched the *Open Banking Framework*[39] to boost the adoption of Open Banking services by improving the existing procedures and standards regarding customer experience, security, compliance, APIs' technical specifications, and the overarching governance framework.[40] In addition, in September 2021 it published a circular setting the requirements for the roll-out of the second phase of Open Banking which included guidelines and standards related to sharing Open Data, added new business-use cases, and set June 2022 as the deadline for the implementation of the Open Banking requirements.[41] Currently, the CBB continues to monitor the compliance with its rules by retail banks, both conventional and Islamic, and the TPPs and issue corrective measures as appropriate[42] with the aim to ensure a holistic execution of Open Banking services in the country by all the players involved[43] and further

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[38] See the *Open Banking Module* contained in Volume 5 of the CBB Rulebook under the section dedicated to Business Standards accessible at: https://cbben.thomsonreuters.com/rulebook/ob-open-banking-module. Following the PSD2, the Rulebook specifically states that: ("The provision of account information services and payment initiation services entails obtaining access to customer accounts through "application program interfaces" (APIs) with licensees maintaining customer accounts include conventional retail bank licensees, Islamic retail bank licensees financing companies and PSPs operating electronic wallets, referred to in this Module as "licensees maintaining customer accounts". Given the nature of the risks inherent to online activities, the ancillary service providers undertaking such activities will be subject to strict regulatory standards to ensure the integrity and safety of customer data, the APIs, customer onboarding process, authentication process, communication sessions, the process for tracking of security incidents and associated standards of dealing with the customers while undertaking this activity"). The rules also specifically state that customer data confidentiality and security should be subject to internal controls in a way that is consistent with the Bahrain Personal Data Protection Law.

[39] All the information related to the framework is available at https://bahrainob.atlassian.net/wiki/spaces/BH/overview?homepageId=295043.

[40] CBB Rulebook, Volume 1, Section GR-6 *Open Banking*, available at https://cbben.thomsonreuters.com/rulebook/gr-6-open-banking-0.

[41] See https://www.cbb.gov.bh/media-center/cbb-issues-circular-regarding-the-second-phase-of-bahrain-open-banking-framework/, 2021.

[42] As an example, see the circular issued in May 2022 to address delays in accessing the developer portal by AISPs and PISPs available at https://cbben.thomsonreuters.com/sites/default/files/net_file_store/Bahrain_Open_Banking_Framework_Developer_Portal_18_May_2022.pdf.

[43] The compliance status can be found at https://bahrainob.atlassian.net/wiki/spaces/BH/pages/1031012353/Compliance+Status.

enhance competition, innovation, and efficiency while protecting consumers' interests and supporting the development of customer-centric solutions.[44]

It follows on the heels of its geographical neighbour Saudi Arabia, where the Saudi Arabian Monetary Authority (SAMA) launched an *Open Banking Policy* in January 2021 in an attempt to foster economic growth and safeguard financial and monetary stability.[45] The Policy outlines a three-phases approach to Open Banking, *i.e.,* a design phase occurred in the first half of 2021, consisting of designing the ecosystem and defining the Open Banking governance; an implementation phase in the second half of 2021, characterised by the development of the defined frameworks, technology building blocks, and rollout activities including testing with financial market participants and enhancement of customer awareness; and the go-live phase, which began in early 2022 with the official launch of Open Banking.[46] However, it is worth pointing out that earlier in August 2020, the SAMA had already issued the *Payment Service Providers Regulations* governing the access to data about payment accounts by Account Information Service Providers and Payment Information Service providers on grounds similar to those set by the PSD2 but without mandating to open an API infrastructure.[47]

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[44] To this end and to accelerate the country's transition toward a digital economy, the CBB established a Digital Lab called *FinHub 973* and very recently launched a nationwide innovation challenge entitled *Bahrain Open Banking Supernova 2022* where regional and local financial institutions and startups are called to tackle real market problems revolving around Open Banking and develop innovative solutions across FinTech, RegTech, and InsurTech. For more information see https://www.cbb.gov.bh/media-center/central-bank-of-bahrain-launches-the-bahrain-supernova-fintech-challenges-2022-on-finhub-973-to-drive-open-innovation-across-the-financial-services-industry/ and https://www.finhub973.com/bahrain. For an up-to-date overview of Fintech and Open Banking in Bahrain, see the *Bahrain Fintech Ecosystem Report 2022* available at https://www.bahrainfintechbay.com/fintech-ecosystem-report.

[45] The policy is available at https://www.sama.gov.sa/en-US/Documents/Open_Banking_Policy-EN.pdf, 2021. For an analysis of the key aspect of the Policy see N. Bardawil, J. Abboud, *Saudi Central Bank Launches Open Banking Initiative*, 2021, available at https://www.mondaq.com/saudiarabia/financial-services/1041936/saudi-central-bank-launches-open-banking-initiative-. An overview of the implications of the development of Open Banking in the Saudi market can be found in the *White Paper Beyond the Hype: A Practical Guide for Open Banking in Saudi Arabia* published in 2021 by the open-source software company WSO2 and available at https://wso2.com/whitepapers/beyond-the-hype-a-practical-guide-for-open-banking-in-saudi-arabia/. Due to the lack of active scholarly debate on the topic, for other practical information and views on the Open Banking approach in Saudi Arabia see https://fintechnews.ae/12080/saudiarabia/2022-open-banking-in-saudi-arabia-report/; https://www.strategyand.pwc.com/m1/en/reports/2021/open-banking.html; https://www.tamimi.com/law-update-articles/digital-banking-fintech-and-the-payments-ecosystem-in-the-kingdom-of-saudi-arabia/; https://www.strategyand.pwc.com/m1/en/reports/2021/open-banking.html#:~:text=Open%20banking%20regulations%20require%20banks,for%20the%20financial%20institution's%20customers; https://www.sama.gov.sa/en-US/News/_layouts/15/osssearchresults.aspx?u=http%3A%2F%2Fwww%2Esama%2Egov%2Esa%2Fen%2DUS%2FNews&k=open%20banking.

[46] See https://www.finextra.com/pressarticle/91180/open-banking-exchange-launches-in-saudi-arabia.

[47] See Art. 16.1 and 16.2 of the Regulations available at https://www.sama.gov.sa/en-US/payment/Documents/PSPs%20Regulations%20111.pdf, according to which incumbent banks are under an obligation to grant access to payment accounts in an objective, non-discriminatory and proportionate basis and in such a way as to allow the PISPs and AISPs to provide payment services to the end user in an unhindered and efficient manner.

Open Banking is also spreading in the United Arab Emirates, with the Central Bank (CBUAE), the Dubai Financial Services Authority (DFSA) operating in the Dubai International Finance Centre (DIFC), and the Financial Services Regulatory Authority (FSRA) active in the Abu Dhabi Global Market (ADGM) all being supportive of it although not in the context of a comprehensive regulatory framework since, up to date, the UAE has mostly implemented a market-led approach to Open Banking complemented by some sectorial regulations at federal level and the granting of licensees to TPPs primarily located in the free trade areas.[48] In July 2021 the CBUAE published the *Retail Payment Services and Card Schemes Regulations (RPSCS)* which licenses nine categories of digital payment services in the UAE including payment initiation services and payment account information services, whose providers are granted direct or indirect access to the customer data in an efficient and unhindered manner but in the context of a contractual arrangement with the incumbents and, of course, subject to the explicit consent of the retail payment service user.[49] Also, in November of the same year the UAE regulatory authorities[50] issued jointly *Guidelines for Financial Institutions Adopting Enabling Technologies*[51] that cover the use of APIs for providing financial services – although with the *caveat* that this term does not have the same meaning as Open Banking – and further regulations seem to be on the agenda of such authorities.

Alongside the aforementioned normative approaches, to accelerate the use of Open Banking and foster financial inclusion the GCC governments have welcomed market-driven initiatives, such as the one announced by the first and largest regulated Open Banking platform in the Middle East and North Africa, Tarabut Gateway, to build an API to connect banks and FinTechs located in Bahrain, Saudi Arabia, and the United Arab Emirates.[52]

Open Banking is taking a foothold in the Arabian Gulf mostly because it is seen as a way to enhance transparency, efficiency, and competitiveness and, as a result, boost prosperity through new revenue streams despite the absence of a harmonised framework at the regional level, a fact that has driven each country

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48 An example is represented by the Bahrain-based Tarabut Gateway, whose Open Banking platform has become in April 2022 the first-ever regulated platform in the UAE after being granted a license by the DFSA to provide payment services to and from the Dubai International Finance Centre. See the news reported at the following link https://www.openbankingexpo.com/news/tarabut-gateway-becomes-first-regulated-open-banking-platform-in-uae/; https://www.zawya.com/en/press-release/companies-news/difc-based-tarabut-gateway-becomes-the-first-regulated-open-banking-platform-in-the-uae-after-dfsa-grants-licence-csqyefju; https://www.finextra.com/newsarticle/40114/uae-grants-open-banking-licence-to-tarabut-gateway.

49 See Art. 17 of the Regulations available at https://www.centralbank.ae/sites/default/files/2021-08/2021%20C%2015-2021%20Retail%20Payment%20Services%20and%20Card%20Schemes%20Reg.pdf.

50 Central Bank of the UAE, Securities and Commodities Authority, Dubai Financial Services Authority, Financial Services Regulatory Authority.

51 The Guidelines are available at https://www.centralbank.ae/sites/default/files/2021-11/Guidelines%20for%20Financial%20Institutions%20adopting%20Enabling%20Technologies%2020211107.pdf.

52 For more information see Tarabut Gateway's official website https://tarabutgateway.com/.

to implement its own strategy through regulation or market-led practices. All the stakeholders involved in shaping the new ecosystem recognise that Open Banking is pivotal to increase competition in the banking market and, as such, it benefits consumers although, for the time being, competition-related concerns have not been at the forefront of the debate. This circumstance leads to the question of whether the possible anti-competitive tenets of Open Banking voiced across Europe and in other jurisdictions are just the outcome of a scholarly dialectic and not real antitrust problems. In our view, this is not the case, but the current lack of focus in the GCC on the possible competition distortions stemming from opening the market of retail banking services is mainly due to the following reasons:

- Status of implementation of the Open Banking framework: In the Arabian Gulf Open Banking is seen as a catalyst for economic diversification and as an ecosystem able to provide customers with faster, better, and more competitive products and services; thus, the prospective advantages for the consumers and their ability to consciously control and share their data are still stealing the spotlight.

- Economic operators involved in the reference ecosystem: At present, only FinTechs, mainly in the form of startups, are offering Open Banking Services along with incumbent banks whereas BigTechs, which are the source of great concern in the old continent, have not appeared yet on the GCC stage – at least not in a concerning way.

- Features of the reference market: Even though, as aforementioned, the countries under scrutiny are all part of the same regional organisation, share common traditions, culture, and language, and have economic and political similarities, they are still at the stage of a customs union and not a common market which entails the absence of market integration. Furthermore, irrespective of the gradual shift towards becoming digital economies, natural resources remain the key economic sector in the region, and this implies that other sectors are still seen as marginal, at least from the perspective of governmental revenue.

- Policy and enforcement development: Although all the countries concerned have in place not only some degree of Open Banking regulation but have also issued *ad-hoc* competition and data protection laws, characterised by a high degree of similarity with the EU norms, the enforcement of such legal tools is in its infancy even when public authorities in the mentioned fields are operational. This is mainly due to the relatively young age of modernised legal systems in the region and the absence of a specific agenda addressing the challenges of digitalisation from a market perspective and its possible distortive effects.

3.2 Made-in-Canada Open Banking and Competition

The Canadian approach to Open Banking, or "consumer-directed finance" as it has been renamed in a report of the Canadian Department of Finance dated 2019,[53] has progressively evolved from being market-led to a more government-driven phenomenon. The path toward the implementation of a regulatory framework is the result of a series of initiatives undertaken at both the governmental and private levels. The most important milestones are the following:

- The appointment by the Minister of Finance in September 2018 of an Advisory Committee on Open Banking to review the potential merits of Open Banking in response to the rise of financial technology.[54]
- The launch in January 2019 of a public consultation on Open Banking[55] which resulted in the publication of a report by the Department of Finance that highlights the benefits of implementing a structured Open Banking apparatus, particularly to protect consumers and their privacy, and suggests replacing the terminology Open Banking with consumer-directed finance.[56]
- The publication in June 2019 of a Standing Senate Committee on Banking, Trade and Commerce, which recommended the implementation of reforms supporting Open Banking in the interest of Canadian consumers and financial service providers while stressing the importance of protecting consumers' financial information.[57]
- The activities of the so-called Open Banking Initiative Canada (OBIC), a not-for-profit organisation composed of finance, technology, and regulation experts, whose mission is to support an open, transparent, and trusted banking system that fosters the growth and well-being of all Canadians.[58] In April 2021 the OBIC released an Open Banking Manifesto[59] that praised the benefits and opportunities for all the stakeholders involved in the Open Banking ecosystem.

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53 See the report titled *Consumer-directed finance: the future of financial services*, cit. For a general overview of the Canadian approach, see A. Palmieri, B. Nazeraj, *Open Banking and Competition: An Intricate Relationship*, cit.

54 See https://www.canada.ca/en/department-finance/news/2018/09/minister-morneau-launches-advisory-committee-on-open-banking.html.

55 See https://www.canada.ca/en/department-finance/programs/consultations/2019/open-banking.html

56 See the report titled *Consumer-directed finance: the future of financial services*, cit.

57 The report, titled *Open Banking: What it Means for You*, is accessible at https://sencanada.ca/en/info-page/parl-42-1/banc-open-banking/, 2019. The Report identifies three primary reasons why consumers need Open Banking regulations as soon as possible: To safeguard personal financial information; to provide greater choice and improved financial products and services; to keep the Canadian financial sector strong and internationally competitive.

58 For more information *see* https://www.obicanada.ca

59 The Manifesto is available at https://www.obicanada.ca/_files/ugd/713c7c_0c378fc927e34e59b9659323128e16b0.pdf, 2021.

- The final report of the Advisory Committee on Open Banking dated April 2021 which emphasised the advantages of Open Banking, particularly for consumers and SMEs, recommended the steps that the government should take to implement Open Banking, suggested that the official regulatory framework should be launched not later than January 2023 due to potential benefits for all the stakeholders involved and also to eliminate financial data screen scraping, and proposed the establishment of a hybrid, made-in-Canada approach, that combines government-led and industry-led Open Banking practices.[60]
- The partnership between OBIC and Open Banking Expo, a global community of Open Banking and Open Finance executives responsible for digital transformation across the financial services sector[61] established in August 2021 to promote the use of Open Banking services amongst the community.
- The appointment by the Canadian Government in March 2022 of an Open Banking lead, whose mandate is to develop common rules and technical standards to make Open Banking operational.[62]

From a competition point of view, it shall be noted that the Competition Bureau Canada has kept a watchful eye on the evolution of the banking and financial markets triggered by the increasing use of digital technology and adopted a preventive or, perhaps, pro-active approach to the possible anticompetitive distortions caused by an Open Banking framework that does not take into careful consideration the possible antitrust repercussions of Open Banking. In December 2017, the Authority conducted a market study into the financial services sector[63] to assess, through a competition lens, the impact of financial technology, highlight issues that may restrict competition, and suggest policy or regulatory intervention.[64] With specific reference to Open Banking the Bureau, after having reviewed the approaches taken by various jurisdictions, such as UK, EU, and Singapore, underlined that the development of common standards for the APIs implemented in

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60 See https://www.canada.ca/content/dam/fin/consultations/2021/acob-ccsbo-eng.pdf, 2021. In particular, the report states that: ("A hybrid, made-in-Canada Open Banking system should have the following core foundational elements: 1. Common rules for Open Banking industry participants to ensure consumers are protected and liability rests with the party at fault. 2. An accreditation framework and process to allow third party service providers to enter an Open Banking system; and 3. Technical specifications that allow for safe and efficient data transfer and serve the established policy objectives".)

61 See https://www.openbankingexpo.com/about-us/

62 See https://www.canada.ca/en/department-finance/news/2022/03/government-moves-forward-with-open-banking-and- names-a-lead.html

63 The study focused on three categories of banking services, that is retail payments, lending and equity crowdfunding, and investments.

64 See Competition Bureau Canada, *Technology-Led Innovation in the Canadian Financial Services Sector: A Market Study*, available at https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04322.html, 2017.

such jurisdictions could be a valuable solution to ensure competition in the market by increasing efficiency and consumer choice, reducing barriers to entry, and fostering interoperability and innovation in the financial sector. However, the Authority pointed out that developing standards could also raise competition concerns as they might create regulatory "moats" that reduce price and non-price competition, foreclose innovative technologies, and restrict the firms' ability to compete by denying or providing access to the APIs on discriminatory terms. Thus, the final – although quite vague – recommendation for policymakers was to continue analysing the experience of other countries and adopt best practices as they strike a balance between potential risks and competitive benefits.

After releasing follow-up submissions to the Minister of Finance and its Advisory Committee in support of Open Banking between 2017 and 2019,[65] the Bureau intervened again in the debate in January 2021[66] by publishing comments and submitting competition-related recommendations to the Advisory Committee on Open Banking in response to the launch of the second phase of the Open Banking review, focused on ensuring data security.[67] The Bureau based its report on the assumption that an effective Open Banking system has the potential to increase competition and innovation by placing greater competitive pressure on incumbents, while also supporting the business models of new and innovative service providers. Nevertheless, such a pro-competitive outcome should not be assumed since it can be achieved only through "careful design and ongoing regulatory support".[68] As such, the Authority drew up a list of six "universal principles of pro-competitive regulatory design" suggesting that any regulation on Open Banking should have the following features to ensure that competition and innovation are preserved: being sufficiently flexible to adapt itself to the ever-changing technological advancement; being based on principles that aim at achieving policy goals and are not prescriptive; being able to ensure a level playing field for all the stakeholders; being proportional to the potential risks that an activity can cause to the financial system; being harmonised to facilitate cross-border operations; and being reviewed continuously to guarantee that the normative framework is up to date and properly addresses market developments. Moreover, the Bureau identified five areas of focus for a regulatory intervention that aspires to support competition and innovation to the highest degree, that is: APIs standards, accreditation requirements for Open Banking operators, liability system for security and privacy breaches, reciprocity in the access to data; an

[65] See the two reports available at the following links: https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04313.html, 2017; https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04416.html, 2019.

[66] See Competition Bureau Canada, *Supporting a Competitive and Innovative Open Banking System in Canada*, available at https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04571.html, 2021.

[67] See https://www.canada.ca/en/department-finance/news/2020/01/minister-morneau-announces-second-phase-of-open-banking-review-with-a-focus-on-data-security-in-financial-services.html

[68] In this regard, see A. Palmieri, B. Nazeraj, *Open Banking and Competition: An Intricate Relationship*, cit.

effective redress system to safeguard the adaptability of the Open Banking regime.[69]

It is our position that the preemptive approach taken by the Canadian Competition Bureau shall be commended inasmuch as the Authority has provided sector-specific guidance to the legislator as the country undertakes progressive steps toward the implementation of Open Banking. Nevertheless, the set of principles drafted by the Bureau appears quite generic and, most importantly, does not directly address the core issues related to lowering the barriers to entering the retail banking market nor the risks related to the "intrusion" of BigTechs into the Open Banking ecosystems and the consequential problems of market power and possible abuse of dominance through data exploitation, which are all aspects of much concern amongst policymakers and scholars in the EU single market.

4. Towards a More Efficient Open Banking Ecosystem: Legislators and Authorities at the Crossroad of Financial Stability and Competitive Markets

Open Banking is an endevour of competing goals. If on the one side, it has been rightly commended for its ability to drive greater competition and innovation in a market customarily reserved for an elite of chosen incumbents, on the other – and in the light of the experience of different jurisdictions – regulatory oversight is necessary to deal with the consequences of digital disruption in the banking sector and protect the interests of the various players involved, *i.e.,* incumbents, FinTechs, BigTechs, and consumers. In this scenario, it seems critical to understand what contributions legislators and relevant authorities can provide to improve the existing regulatory framework and balance the different interests at stake.

An effective regulation can only be drafted having a clear understanding of the policy goals it seeks to achieve which, in our case, seem to be financial stability, data privacy and security, effective competition and innovation. If a consensus is reached about such goals, the following step is defining the main principles that shall lead the overhaul process considering the gaps in the

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[69] The final recommendations of the report are the following: ("To support the development of a Canadian Open Banking system that promotes competition and innovation, the Bureau recommends that: i. Decision makers assess each element of any proposed Open Banking regime against the principles for pro-competitive regulatory design set out in this submission; ii. APIs used to facilitate data exchange be standardized across service providers in order to ease entry, but that a process be enacted to allow new standards to emerge on an as-needed basis; iii. accreditation decisions be made by an independently led body, such that no party or group of parties that has a stake in the commercial outcomes of an accreditation decision should be able, on its own, to determine accreditation; iv. liability requirements be well-vetted to ensure that they neither create unnecessary barriers nor rely on un- or under-developed insurance markets; v. data access be governed by the principle of reciprocity, and claims that certain information held by a service provider is proprietary, and therefore exempt from exchange, be substantiated by evidence; vi. an effective redress mechanism be put in place to ensure the adaptability of the Open Banking regime").

current rule of law and the fact that the type of regulation will have an impact on the competition dynamics between incumbents and new entrants and, thus, influence or alter the degree of openness of the retail banking market. In our opinion, any legislative intervention aiming at resolving the existing and prospective competition-related issues in the Open Banking framework shall take into consideration the following queries:

- Is the development of common pro-competitive technical standards *per se* sufficient to regulate anticompetitive conducts in the market of retail banking or there is a need for *ad-hoc* rules that go beyond setting the standards?
- Should the regulation aim at establishing a level playing field among the different economic operators involved or should it favour new entrants to promote competition? In other words, should legislators enforce activity-based or entity-based norms?
- Should the legislators consider prudential regulation and competition policy so that compliance does not become a barrier to entry, and, at the same time, the entry does not destabilise the market?
- Is there a need to harmonise the regulatory landscape worldwide since a lack of harmonisation might make Open Banking more difficult for operators engaged in cross-border financial services transactions?
- Does a tight antitrust scrutiny on digital platforms entering the banking sector hinder the pro-competitive potential of Open Banking since BigTechs seem to be the only players able to impose effective competitive pressure in a market historically characterised by a minimal level of competition? Or do BigTechs operating in finance effectively deserve special attention leading to the creation of a specific regulatory regime?

As far as the authorities are concerned, due to the multidisciplinary features of Open Banking multiple authorities might be involved within each jurisdiction to tackle the issues related to banks' sharing of customer-permissioned data with third parties, such as bank and financial supervisors, competition authorities, consumer protection authorities, privacy watchdogs, and cyber agencies with the decision related to the role and power of each of them depending upon the specific government's policy objectives about measuring the success of Open Banking. Thus, domestic, regional, and international supervisory cooperation and coordination are indispensable to avoid potential inconsistencies or regulatory gaps stemming from the overlap of competences between the different authorities.

From our perspective, it is also critical to understand where the competition authorities position themselves and what kind of contribution they can provide in support of the ongoing regulatory attempts in such a complex field. Indeed,

policymakers, regulators, and scholars have highlighted the inefficiency of relying solely on the *ex-post* antitrust enforcement and have called for the development of an *ex-ante* regulatory framework to complement the existing general antitrust rules to address competition issues in the digital context, since digital markets evolve continuously and so cannot be supervised only after a breach occurs. From here, the need to evaluate the effectiveness of the current competition norms and explore what special responses might be needed to prevent anticompetitive practices, especially by BigTechs, instead of adopting a *lassaiz-fair* approach and relying only on the competition rules currently in force to oversee the digital transformation of financial markets.[70]

5. Concluding Remarks

With the advent of Open Banking as a new financial ecosystem based upon interoperability and data-enabled services, customers can easily perform banking activities with different providers through APIs and rely on a single online app to collect all the data necessary to manage their finances, bringing together payment accounts and other products like mortgages, pensions, and investments just to name a few. This has resulted in the opening of a market that, before the digital disruption in banking and finance, was monopolised by a few banks and, so, self-referential, but it has also led to the rise of new competition problems related to data migration from the incumbents to TPPs and to the possibility of a consolidation of the market power of the digital platforms that decide to access the world of Open Banking, which might result in a novel form of abuse of dominance or otherwise collusive conducts.

Banks and other financial operators possess a rich database of consumer information which over the years has given them a competitive advantage against other economic operators. As such, Open Banking has been praised for its ability to provide equal opportunities for incumbents and new TPPs to compete in the same market through authorised access to consumers' data and, also, because it brings consumers to the forefront of financial services. On the latter profile, there seems to be a broad consensus that Open Banking gives consumers an advantage by enabling them to have a centralised view of their financial situation and improve their decisions with a single open data platform integrating individual financial information from different service providers. Indeed, consumer protection is a key area for the regulations on Open Banking, because only with the explicit consent of the consumer the TPPs can access and share information. This approach confers a greater control to consumers, yet it also entails the necessity to regulate further the other side of the coin, that is to say, the consequences of the concentration of personal data in the hands of the BigTechs caused by the access to account

[70] With reference to the EU and the PSD2, see O. Borgogno, G. Colangelo, *Data, Innovation, and Competition in Finance: The Case of the Access to Account Rule*, cit.

rule, to limit the possible distortions stemming from an increased market power of the digital conglomerates able to leverage on the amount of personal data already at their disposal in other markets to become dominant in the sector of banking and retail payments.

Regulators and policymakers worldwide have adopted different strategies to deal with the varied facets of Open Banking, but, with a few exceptions, the competition dimension has not been at the core of the debate beyond the assumption that Open Banking fosters greater competition. As demonstrated by the foregoing analysis, the type and degree of competition issues are variable depending on the state of evolution of the Open Banking ecosystem, the type and size of the market, and the operators involved. Nevertheless, as Open Banking consolidates, the magnitude of competition-related problems cannot be overlooked.

As far as the EU is concerned, the review of the existing rule of law has already begun. In October 2021, the European Commission requested the European Banking Authority (EBA) to advise on a series of aspects related to the implementation of the PSD2, including the EBA's opinion on the achievement of the competition-enhancing objectives of the directive.[71] On this point, the Commission asked the EBA to advice on the existence of any impediments to the ability of payment institutions and electronic money institutions to access payment systems, and/or payment accounts held by credit institutions, in a way that would undermine the competition enhancing objective of PSD2 and the report is set to be released by 30th June 2022. Moreover, in May 2022, the European Commission launched a public consultation to assess if and to what extent the PSD2 has achieved its objectives and whether amendments are needed to ensure that its rules are effective in regulating online payments.[72]

While waiting for the outcome of the EU reflection process on the different angles of the payment services in the single market and given the ongoing global attempts to minimise the anti-competitive conducts of the tech giants in several markets, such as social media, e-commerce, internet search, and advertising, the author believes that *ad hoc* norms are necessary to ensure the competitiveness of the market of retail payments and that it is indispensable to establish a variety of technical and legislative standards that incumbents and TPPs operating in the Open Banking ecosystem shall abide

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[71] Topics to be examined include the licensing of payment institutions and supervision of payment service providers under PSD2, transparency of conditions and information requirements, rights and obligations under Article 75 of PSD2, strong customer authentication (SCA), as well as enforcement of PSD2 and cross-sectoral topics. The request is available at: https://www.eba.europa.eu/sites/default/documents/files/document_library/About%20Us/Missions%20and%20tasks/Call%20for%20Advice/2021/CfA%20on%20PSD2/1024411/EBA%20Call%20for%20advice%20final.pdf.

[72] The other aim of the consultation is to gather views on the broader concept of open finance, which could cover a range of financial services, such as investment in securities, pensions, and insurance. More information can be found at https://ec.europa.eu/commission/presscorner/detail/en/mex_22_2975; https://finance.ec.europa.eu/regulation-and-supervision/consultations/finance-2022-psd2-review_en.

by. In particular, it is our position that since the use of generalist competition tools, the reliance on the *ex-post* enforcement alone, and an activity-based regulatory approach have not proven to be an effective method to deal with the conduct of the digital conglomerates, the development of a legal framework crafted to address the specificity of the different market players in the Open Banking landscape is the only viable option.[73]

[73] In the same sense, see J.C. Crisanto, J. Ehrentraud, M. Fabian, *Big Techs in Finance: Regulatory Approaches and Policy Options*, in Financial Stability Institute Briefs, 2021, 12, who propose to assess the possibility of introducing a bespoke approach for BigTechs encompassing a comprehensive public policy framework considering that there seems to be a need for enhancing cross-sectoral and cross-border cooperative arrangements.

Final Remarks

Ciro Gennaro Corvese[*]

First, I would like to thank every speaker and I would like to say that I enjoyed all the reports presented from which I have learned so much.

I would also like to thank conference organizers, in particular Professor Alessandro Palmieri and Bank of Italy, for entrusting me with the final remarks that I am about to make even with some embarrassment.

I am embarrassed because usually the conclusions have to be entrusted to someone who is a great expert in the topic of the congress and I am not an expert in the field.

Moreover, summing up is like sewing with needle and thread, but the outline of many conclusions reached thanks to the huge number of speeches (18, to be exact) has already been excellently drawn, albeit with reference to the single sessions, by Marino Perassi, Vittorio Santoro, Alessandro Palmieri and Gianluca Scarchillo.

This perhaps makes my task easier also because I have to do final remarks and not conclusions!

I would thank you for inviting me to the conference as it gave me the opportunity to deepen my knowledge on a topic I know something about but, as said before, I am not an expert; however, I believe it has a strong connection with the themes of the company law, specifically with the organizational structure of the company and with the themes of company governance (particularly mentioned in the speech of Professor Ringe) and with other research fields that are much closer to mine.

I recently prepared a chapter in the commentary on PSD2 edited by Gabriella Gimigliano and Marta Božina Beroš where I dealt with PI corporate governance profiles on which, if there is time, I will focus on it at the end of these remarks. Profile of corporate governance mentioned yesterday by Marta Beros with regards to initial capital, own funds, and many other profiles.

First, as I am not able to go in deep in a complete way on each very interesting single speech, and trying to summarize the study profiles covered by the many and very interesting reports, I could divide them in two large groups that contain all the most important issues related to payment services and competition: in the first group we can include all the reports that were held yesterday and in the first part of this morning that revolved around PSD2, opportunities and risks of PSD2 and beyond PSD2; in the second group, the reports presented this afternoon

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talked about the future; competition, antitrust profiles, digital markets, platforms, data sharing, data becomes commoditized, etc.

Said that, I would accomplish the task assigned to me by highlighting some of the many points of deep consideration that have emerged from the many interesting and relevant works presented at this conference.

We may say that the papers presented at this conference, all together, outlined the perimeter of a territory not yet described by official rules, hard law and soft law, with a vision towards the future and not only in those speeches more specifically dedicated to the future (see, for instance, the last two sessions), which starts from the urgent need, if I have understood well, to understand the transformations that the phenomenon described in the speeches determines in governance models (see specifically the speech of Gabriella Gimigliano, such as transformation in business organizational structure (as Wolf-Georg Ringe explained), transformations in the market (see the papers on competition), that inevitably have effects on the legal level and the task of law: that is to say how the law, hard and soft law, and particularly the European law is entrusted with the task of accompanying these transformations, if not anticipating them!

This central aspect (the role of the law) starts by the relevant introduction of fintech in the framework of enabling technologies of the financial world (see the speech of Giuseppe Pala), of the financial ecosystem (Marta Božina Beroš talks about "open banking ecosystem", regards expressively money laundering concerns) but we may talk about financial ecosystem: it starts from the milestone of the PSD2 directive (see in particular the speech of Francesca Provini), but which then starts a regulatory perspective that has gone far, beyond PSD2 (see particularly the speeches of the second session Donato Salomone, "Stablecoins on the way to the EU regulation on markets in crypto-assets"; Giuseppe Pala, "Perspectives and prospects for EU rules on (some) FinTech service providers"; Maria Rosaria Maugeri, "Crypto-assets, Proposal for a Regulation on MiCA (Markets in Crypto-assets) and consumer protection"; Filippo Dami, "Tax law aspects of cryptocurrencies").

If we consider the questions link to cryptocurrencies, crypto-assets, it is relevant to consider the Communication of Bank of Italy published some days ago where the Bank of Italy puts particularly the attention on the various risks regarding crypto-assets, fraud risk, for instance, also mentioned yesterday by Piero Cipollone, especially because at this moment we do not have a specific uniform European legislation on this subject.

We need to think about the centrality of data and platforms, in this context, that involve new problems on governance and supervision.

New legal issues of governance and supervision, different dimensions of supervision that open banking poses (we often heard the term "risks" in many speeches, see Piero Cipollone, fraud risk and other risks and Beck about new financial and non-financial risks), and vulnerability (Maria Cecilia Paglietti), and, before that, the dimension of competition (see the papers present in the

Third session of this congress) and that treatment of data that is relevant in this context (see, in particular, the papers present in the last session of this congress).

All papers has been very interesting for many ideas, the open banking seen in different ways (if we consider the last session of this congress dedicates almost open banking: Giuseppe Colangelo, “Open Banking and the data sharing paradox”; Markos Zachariadis, “The API Economy and Data-Sharing Regulations in Finance: Emergence of New Business Models, Architecture and Competition in Banking”, Konstantinos Stylianou, “Beyond Open Banking: What happens when data becomes commoditized” and Maria Casoria, “A Comparative Approach to Open Banking and Competition”) we may consider the “open finance” as a multiplier of conflicts that it takes a radial character, conflicts between payment providers and customers, between payment providers and other intermediaries with a specific connection with the organizational dimension of the company (see the speech of Wolf-Georg Ringe) on one hand, and the dimension inherent in the contractual relationship (Maria Cecilia Paglietti and Maria Rosaria Maugeri) on the other hand, and in the background, the change in the services transactions, in the object of the service, and the relationship which was also the subject of the contract.

We heard also many competition profiles emerged especially in the Third session, in particular, concerning the bigtech (the speeches of Roberto Pardolesi, Thorsten Beck and Vito Meli): Roberto Pardolesi, “The anti-monopoly scrutiny of digital markets”; Thorsten Beck, “Bank Competition in the Time of Digitalisation: The Good, the Bad and the Ugly”; Vito Meli, “New antitrust challenges in payment systems” and Francesco Di Stasio, “TIPS, the Eurosystem platform for Instant Payments: fostering the competition amongst operators for Euro and beyond”.

The relevance of the entire interoperability of the systems which is the real issue if the API system is a real collaborative and open system (Markos Zachariadis, “The API Economy and Data-Sharing Regulations in Finance: Emergence of New Business Models, Architecture and Competition in Banking”), but is that system really competitive and collaborative?

Markos Zachariadis told us there are critical profiles raised which leave an open or left ajar door and which, although the provisions of the directive provides for non-discriminatory access, lead to persistent barriers to the access (Provini and Beros) and not so much in the management of data as precisely for the interoperability of payment beyond the risks in addition to risks related to the network operated by fintech (many speakers talk about risks) that then brings us to the chiasmus (it is a pity to not know if Enrico Camilleri considers so): banks as platforms or platforms as banks?

All this basically imposes a paradigm shift, a practical and law model at the same time precisely competitive and collaborative that is characterized by the imposition, alongside the obligations, of incentives, benefits to the mutual opening between the actors participating in the system (mentorship as explained

by professor Wolf-Georg Ringe) even just for the mutual use of technologies that is the natural consubstantial character of the payment system (if I have understood correctly, the question is “the software as a service”, as Wolf-Georg Ringe told us yesterday).

A new model that still imposes a new vision of business (Markos Zachariadis, “The API Economy and Data-Sharing Regulations in Finance: Emergence of New Business Models, Architecture and Competition in Banking”); therefore, a collaboration that goes beyond the perimeter of financial intermediaries and at the same time a supervision that goes beyond the subjective dimension.

Two final considerations about my specific research profiles: on one hand, the insurance perspective and, on the other hand, the corporate governance profile.

First, the open banking, open finance in general, is not only the PSD2 directive but it presents additional uses, the creation of “open financial ecosystem” in particular, links with other actors, other intermediaries present in the financial market (Martina Beros talks about “open banking ecosystem”, regards specifically money laundering concerns), for instance, the problem of money laundering is not exclusive of banks.

Given that, when we talk about open finance, is it possible to talk about also open insurance?

I do not think so or, in other words, it is not easy to give an exact answer.

First of all, we must certainly note the distance that there is between the banking and insurance market, banking activities and insurance activities that requires to avoid precisely mere transpositions of those who is already more ahead, and the tendency of the insurances company could be to refer to those intermediaries who have already more experience; this must be done with judgment and critical scrutiny precisely because of the difficulty of replicating solutions it would be dangerous.

Why? Because even if it is clear there are common profiles between banks and insurance company, there are also important peculiarities between these two financial intermediaries.

In other words, the question regards the intermediaries who are not present in open finance and the critical issues presents where we want to make the sharing of data mandatory with the possible anti-competitive effects that could derive from it and that could be limited by selecting clusters of non-personal data.

Selection of data, as we heard, is the theme of the next new rules because we are naturally dealing with not only GDPR (as Vito Meli said), but also with digital market Act and then, with digital service act; however, these rules are present in a context that must be considered from a perspective of more than mere compliance, that is to say, it will not be sufficient to evaluate individual regulations alone, but it will also be necessary to place the phenomenon on a competitive level, especially considering the disciplinary interrelationships

between all the regulatory measures mentioned (Vito Meli, “New antitrust challenges in payment systems” and Francesco Di Stasio, “TIPS, the Eurosystem platform for Instant Payments: fostering the competition amongst operators for Euro and beyond”).

We must also remember that the new financial ecosystem will impose settling the proposal for reforms and also for consumer protection (see the papers of Maria Cecilia Paglietti, “Vulnerability of the digital-financial consumer in the retail payments market” and Maria Rosaria Maugeri, “Smart contracts, crypto-assets and consumer protection”).

Finally, I would like to do some considerations regarding corporate governance.

Professor Wolf-Georg Ringe talked about questions regarding corporate governance especially relating to outsourcing and the internal control system, and we have another profile on corporate governance provided by PSD2; a specific profile of governance could be solicited by the possible connection between the new open finance policies in its various conformations (let’s say we use Internet in a broad sense) and sustainability policies, the ESG factors, under a double profile:

- on one hand, it is recognized that the management of financial intermediaries needs data to fulfill the obligations regarding ESG factors, also to build upstream the related strategies and to ascertain downstream the actual impact of the same with respect to the stakeholders involved; the directors receive data that allow them to understand what the real requests are coming from the stakeholders, and they lead them to synthesis, to fix the real activity objects, purposes, even with respect to their remuneration policies that on those objectives to after defining a significant part of the variable remuneration;
- on the other hand, a second consideration could be that the opening of the data of all financial intermediaries allows a greater degree of knowledge on sustainability risks, therefore, it has a positive effect precisely because of the relevance also in terms of sustainability of the accessibility of data that becomes relevant in the open finance context.

The profile of the governance of these data goes beyond the compliance that the company already must comply with in the coordination of data as well as the requirements for opening data to the general sectoral cooperation (also in this case I am referring to the speech of Wolf-Georg Ringe) and horizontal or vertical one.

It is undoubtable, we are towards the future, in this context we might say “futuribile”, in English I guess “futureble”, a word used by Franco Belli, my professor, who I like to remember in this occasion, in this wonderful place where he was a speaker several times.

Franco Belli writes "banking and financial legislation is one of the great current issues, but, as it is so often the case, with an ancient heart", "ancient heart" are words of Carlo Levi.

We cannot see, analyse and interpret the future without knowing the past.

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