Concetta Brescia Morra [*] **& Maria Iride Vangelisti** [**]

Digital Payments Market: Standardization and coopetition

SOMMARIO: 1. Introduction. – 2. Interchange fees in the card market: the past antitrust decisions and the impact of the 2015 interchange fee regulation. – 3. Non-bank payment service providers and access to payment systems (security and competition). – 4. Interoperability between networks. – 5. Conclusions.

1. Introduction

The payment system, alongside markets and institutions, is a core component of the financial system. Secure and efficient payments support the functioning of the financial system and the exchange of goods and services between economic agents. Reliability ensures that the money flows smoothly from the debtor to the creditor – without frauds, errors or malfunctioning – ensuring confidence in the money and, more generally, in the electronic means through which money is transferred. Efficiency ensures that the payment transactions are frictionless and money is delivered as timely as possible and at the lowest possible cost; efficiency is also pursued through fair competition between the payment service systems and providers.

Both conditions – reliability and efficiency – should be met for the

---

[*] Concetta Brescia Morra is a Professor of EU Financial Law, University Roma Tre, and the vice-chair of the Administrative Board of Review (ABoR) set by the European Central Bank (ECB) pursuant to the Single Supervisory Mechanism Regulation. The opinions expressed in this article are solely those of the author and do not represent the official policy or position of the ABoR or of the ECB.

[**] Maria Iride Vangelisti is a Director in the Financial Education Department of the Banca d'Italia. The opinions expressed in the paper are those of the author and do not necessarily reflect those of the Banca d'Italia.

payment system to play its role in the financial and economic system, but there is an inherent trade-off between safety and efficiency. Regulators have the difficult task to strike the right balance, reconciling public goals with the needs of different markets and agents [1]. It should also be taken into account that payment systems are networks where providers, who compete to deliver services to final customers, must cooperate among themselves for the system to link the highest number of participants and function smoothly. Moreover, initial infrastructure costs are very high, as is typical for networks – and this is an obstacle to innovation and competition that needs to be addressed.

Traditionally banks played a prominent role in offering payment services, due to the possibility to bundle payments with other (banking) services, such as current accounts. Technological innovations allowed the provision of traditional payment services using innovative means and, in some cases, the offer of new products. Technological and regulatory innovations have favored the entrance of new players in the market, small companies with high levels of specialization, and Big-tech companies that have a huge network of clients and connections. These developments have changed the scenario radically and raised new problems regarding competition between banks and non-banks.

Our analysis seeks to understand, in the light of the European regulatory framework, which are the main areas where the issues of payment system security intersect with those of fostering competition and efficiency, in terms of cost reduction and easy-to-use payment services. We will debate three different situations in which authorities had (or have) to find the optimal balance between safety and efficiency, cooperation and competition. As we will discuss in the paper, any solution is far from straightforward: it requires complicated analysis and discussions with all stakeholders involved; once taken, close scrutiny to see if the goals have been met.

In paragraph 2 we will discuss the case of interchange fees in the European card payment market, analyzing the antitrust perspective, the current regulatory framework and the issues which still remain unsolved. In the subsequent paragraph, we will examine the question of non-bank payment service providers access to payment systems, key to ensure a level playing

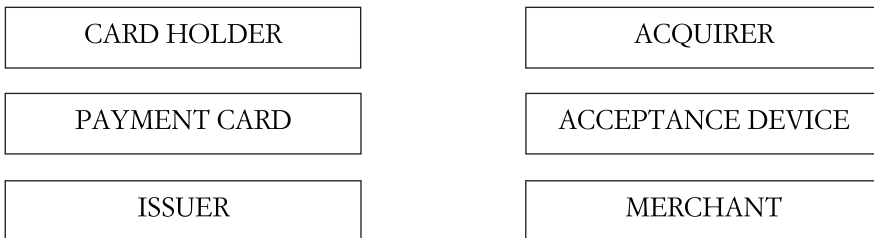
---

[1] A discussion of the balance struck by the European legislator between security and efficiency in payments can be found in the volume by Paglietti and Vangelisti, which collects the contributions presented at the joint conference Banca d'Italia/University of Roma Tre, held on 12 October 2018, *Innovazione e regole nei pagamenti digitali. Il bilanciamento degli interessi nella PSD2*, http://romatrepress.uniroma3.it/libro/innovazione-e-regole-nei-pagamenti-digitali-il-bilanciamento-degli-interessi-nella-psd2/.

field, but debated for security and stability reasons (par. 3). Further, we will consider the case of interoperability between competing networks and examine the design of closed loop systems, exempted by the European legislation to grant access to banks; we will argue that a regulatory intervention may be needed to avoid positions of dominance in Big-tech closed loop networks (par. 4). In the last paragraph we will draw some conclusions (par. 5).

2. Interchange fees in the card market: the past antitrust decisions and the impact of the 2015 interchange fee regulation

In a card transaction, there are typically four parties involved: the cardholders and the intermediary (so called issuer) who issues the card; the merchant and the intermediary (so called acquirer) who allows for the merchant to be paid by card.



A certain degree of collaboration between issuers and acquirers must be reached to process the card transaction smoothly. The agreement concerns not only the standardization of the payment messages and their exchange, but also the collection and redistribution of transaction fees. In fact, to promote the use of cards at the point of sale, it is more effective to collect all transaction fees by merchants, avoiding charging the cardholder whenever he uses the card. Thus, merchant transaction fees also incorporate part of the issuer's remuneration.

The issuers' remuneration is called interchange fee and it is a percentage of the total amount of the transaction. Interchange fees are paid from the acquirer to the issuer whenever the cardholder makes a card payment at the shop. In payment schemes, such as Visa and MasterCard, interchange fees are multilaterally agreed by members (the so-called Multilat-

eral Interchange Fees – MIF). The merchant fee is necessarily equal to the amount of agreed interchange fee plus the acquirer's revenue. Interchange fees are an important part of the cost for card acceptance – merchant fees can never go behind the level of such fees – and contribute to determine the prices of goods and services for final consumers.

merchant fee = interchange fee + acquirer revenue

From a competition point of view, MIF appear to be horizontal agreements that, although useful to promote the use of electronic payments at the point of sale, could restrict competition. In Europe, even if MIFs appear to constitute a restriction of competition within the meaning of Article 101(1) of the Treaty on the Functioning of the European Union (TFEU), they may be eligible for an exemption under Article 101(3) of the Treaty if it can be shown that they have positive overall effects on innovation and efficiency, and allow a fair share of these benefits to be passed on to consumers. Finding the right balance between competition and efficiency has been very difficult and controversial and led to a regulatory intervention by the European Legislator in 2015.

The first decision dates back to 2002, when the European Commission decided a case concerning fees applied by the Visa scheme[2]. In particular, the Commission ruled that MIF in the Visa system amounts to an appreciable restriction of competition and could only be authorized under the following necessary conditions:

a) the MIF contributes to technical and economic progress while providing a fair share of these benefits to the different categories of users;

b) the MIF is based on objective criteria and is transparent for users;

c) the MIF is indispensable and the possible alternatives would not achieve the same advantages and benefits to consumers;

d) the MIF does not eliminate competition between issuers, which are free to set their respective client fees.

In 2007, the Commission ruled that MasterCard MIF violates Article 101 TFEU in that they restricted competition between acquiring banks

[2] Commission Decision of 24 July 2002 relating to a proceeding under Article 81 of the European Community Treaty and Article 53 of the European Economic Area Agreement (Case No COMP/29.373 – Visa International – Multilateral Interchange Fee) (2002/914/EC).

and inflated the cost of card acceptance by retailers without leading to proven efficiencies under Article 101(3) TFEU. Later the Commission also opened an antitrust investigation against Visa. Since then, there have been different disputes and pronouncements by the Commission and by national competition authorities. In 2013, the Commission adopted a legislative package in the field of the EU payments framework, which comprised a revision of the Payments Services Directive and specific Regulation on Multilateral Interchange Fees. The legislature's objective was to foster Internal Market competition. Indeed, the higher interchange fees, which applied until the regulation entered into force, could form an entry barrier for new schemes and contributed to the exit of domestic schemes with lower interchange fees. Interchange fees were also found to constitute a floor for merchant fees, resulting in higher costs to merchants and consumers.

In 2015, Regulation (EU) 2015/575 [3] on interchange fees for card-based payment transactions (IFR) introduced caps to the level of MIF. In particular, interchange fees are capped at 0.3 per cent of the individual transaction value for consumer credit cards and at 0.2 per cent for consumer debit and prepaid cards [4]. The caps were not established based on the costs incurred by the issuer banks, but based on the very debated "merchant indifference test" (or "tourist test"), aiming at calculating a level of interchange fee that makes the merchants, on average, indifferent between a transaction by cash or by card [5]. The Regulation also lays down technical and business requirements to increase harmonization and ensure the security, efficiency and competitiveness of electronic payments.

After four years from the entry into force of the IFR, have the goals of the European legislator been achieved?

In June 2020 the European Commission published a Report evaluating

---

[3] Regulation (EU) 2015/751 of the European Parliament and of the Council of 29 April 2015 on interchange fees for card-based payment transactions, published in the Official Journal of the European Union last 19 May, entered into force on 8 June.

[4] Member states have the option of applying the 0.2 per cent cap to payment card schemes (annual weighted average of all transactions) rather than to each individual payment transaction. The distinction between credit, debit and prepaid card, together with the reasons why different types of instruments developed to suit consumers' needs can be found in DE BONIS, VANGELISTI, *Dai Buoi di Omero ai Bitcoin*, Il Mulino, Bologna, 2019.

[5] EUROPEAN COMMISSION, *Survey on merchants' costs of processing cash and card payments final report*, March 2015, https://ec.europa.eu/competition/sectors/financial_services/dgcomp_final_report_en.pdf.

the effects of IFR on the efficiency of the European card market[6]. The Commission's report builds on a comprehensive study, commissioned to an external contractor and published on 11 March 2020[7]. It further relies on extensive additional input provided by stakeholders including major card schemes, as well as retailers and payment service providers including business associations, consumers and national competent authorities.

The Report shows that, as of the date of entry into force of the Regulation, the introduction of a ceiling on MIFs resulted in a substantial reduction in merchant fees[8]. The decline was particularly strong for credit cards. Moreover, based on the evidence collected, the Report indicates that the main concerns related to the introduction of a cap on interchange fees did not materialize: the reduction in interchange fees seem not to have given rise to a systematic increase in cardholder fees, nor to a reduction in innovation in card payments. The Commission will continue monitoring the situation to assess the level of efficiency of the European card payment market, also in light of technological developments.

One of the ultimate goals pursued by the IFR was to offer payment services at better prices, supporting a progressive decrease in the use of cash at the point of sale and, eventually, a general reduction of transaction costs, which would in turn impact the price of purchased goods and services. Indeed, there is still no clear evidence to prove that the benefit resulting from the reduction of costs by merchants carries over to consumers. In fact, the containment of interchange fees within predefined ceilings almost mechanically implies a reduction in the merchant fee, but does not automatically imply a reduction in consumption prices.

Legislative intervention on prices is always very problematic given that their effects depend on the decision taken by the stakeholder involved, who are not directly impacted by the rules. In terms of consumer welfare, there is no clear evidence that the choice of the legislator to establish a cap on the MIF produces better results than those resulting from the interventions of antitrust authorities. Therefore, continuous monitoring of the ef-

---

[6] EUROPEAN COMMISSION, *Report on the application of Regulation (EU) 2015/751 on interchange fees for card based payment transactions*, Brussels, 29 June 2020.

[7] EUROPEAN COMMISSION, *Study on the application of the Interchange Fee Regulation*, 11 March 2020, https://ec.europa.eu/competition/publications/reports/kd0120161enn.pdf.

[8] ARDIZZI, SAVINI ZANGRANDI, Banca d'Italia Occasional paper No. 434 "The impact of the interchange fee regulation on merchants: evidence from Italy", using a panel of Italian banks over the period 2009-17, find that, in line with the regulatory intent, the ceiling imposed on interchange fees has led to a sizeable drop in merchant fees and to an increase in the acceptance of card payments.

fect of the regulation is needed, also to evaluate the impact on efficiency of technological developments.

Moreover, there are gaps in the Regulation that need to be solved to ensure a level playing field. In the payment card market there are two business models: four party schemes and three party schemes. In four party schemes, card-based payment transactions are made from the payment account of a payer to the payment account of a payee through the intermediation of the scheme, an issuer (on the payer's side) and an acquirer (on the payee's side). As explained above, interchange fees are set by the scheme and paid from the acquirer to the issuer. In contrast, in three party schemes, the acquiring and issuing services are provided by the scheme itself and there is formally no interchange fee. This difference may disadvantage four party schemes towards three party schemes, in which there is freedom to determine the internal allocation of revenues between the acquiring part of the company and the issuing one.

The IFR points specifically to four party schemes, where the presence of an interchange fee is evident. With regard to three party schemes, the IFR provides that when a three party payment card scheme issues card-based payment instruments with a co-branding partner ('the co-branding extension') or through an agent ('the agency extension'), it is considered to be a four party payment card scheme.

American Express, one of the major three party schemes, asked the Court of Justice in 2016 whether it is a prerequisite for a three party payment card scheme to be subject to the IFR, in the case where a co-branding partner or an agent act as issuer. The Court of justice ruled (case C-304/16 [9]) that a co-branding partner or agent must not be involved in the issuing activity and caps apply whenever there are "implicit" interchange fee. The application of this regulation depends on the presence of a co-branding partner or agent, on the one hand, plus, on the other hand, on an evaluation of the types of the fees paid through the scheme to the co-branding partner or agent. If the fees paid by the partner or agent to the issuer resemble the nature and the scope of the interchange fees paid by the acquirer to the issuer, they should be capped.

The Court's decision delegates the decision to national authorities, competent in evaluating the actual characteristics of the fees paid within the three party scheme by partners or agents. This could lead to an uneven playing field among Member States.

[9] http://curia.europa.eu/juris/liste.jsf?language=en&td=ALL&num=C-304/16.

3. Non-bank payment service providers and access to payment systems (security and competition)

For many years banks have been the only agents to offer payment services using the money deposited on their accounts. The European legislator intervened in the early 2000s with two distinct pieces of regulation. First, the Electronic Money Directive [10] introduced a new form of money, so called electronic money [11], and specialized non-bank institutions – electronic money institutions – that could issue electronic money in competition with banks. Second, the Payment Service Directive (PSD) [12] disciplined the offer of payment services by authorized non-bank institutions – so called payment institutions – and provided for electronic money issuers to offer the same services alongside banks, if they wanted to.

As a result of these regulatory innovations, in Europe non-bank payment services providers – electronic money institutions and payment institutions – are competing with banks in the provision of payment services. Banks, however, continue to be the only intermediaries authorized to collect deposits, make credit and offer payment services with money deposited on banking accounts [13].

The aim of the European regulation was to increase competition by standardizing the offer of payment services and by allowing non-bank intermediaries to offer them. Security had to be ensured in order to preserve public trust: offers by non-banks were subject to the same security requirements as ones by banks; a specific prudential supervision regime was introduced for new entities, based on capital requirements, risks controls and on-site inspection. According to the proportionality principle, the regime is lighter than that applied to banks. Moreover, non-banks are not allowed to retain the funds collected from the public that need to be deposited at a bank or, alternatively, invested in safe and liquid assets.

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

[11] Electronic money (e-money) is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer.

[12] 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.

[13] As a matter of fact, a banking account, offering a whole lot of functionalities in addition to just payments, continue to be the preferred options by the majority of customers.

To favor the entry in the market of new intermediaries, the legislation provided for their use of the banking network, avoiding the necessity to set up a new – and probably very expensive – alternative system. In particular, the legislation provided for non-discriminatory and open access to payment systems. Recital 49 of PSD2 [14] states the need for any payment service provider to be able to access the technical infrastructures of the payment systems. Recital 50 reinforces its meaning, explaining that "provision should be made for the non-discriminatory treatment of authorized payment institutions and credit institutions so that any payment service provider competing in the internal market is able to use the services of the technical infrastructures of those payment systems under the same conditions". Accordingly, Article 35 of the same Directive – *Access to payment systems* – provides that the rules on access of intermediaries to payment systems are "objective, non-discriminatory and proportionate".

Although PSD2's provisions provide for a non-discriminatory and open access to payment systems, two obstacles limit the creation of a fully competitive market. First, access can be denied if it is necessary to safeguard the system against specific risks such as settlement, operational and business risk and, more generally, to protect the financial and operational stability of the payment system. Second, payment systems designated under the settlement finality directive are explicitly exempted from the application of the discipline on open access, given that those systems are relevant for the stability of the financial system.

According to the Directive, in all cases in which the regulation cannot provide direct and open access to non-banks, such as in the case of designated systems, at least two conditions should be ensured: a) no discrimination among service providers, meaning that intermediaries having the same characteristics should be treated equally; b) indirect access through bank accounts. In particular, Article 36 of PSD2 (*Access to accounts maintained with a credit institution*) specifically requires Member States to "ensure that payment institutions have access to credit institutions' payment accounts services on an objective, non-discriminatory and proportionate basis. Such access shall be sufficiently extensive as to allow payment institutions to provide payment services in an unhindered and efficient manner".

Are these two principles enough to ensure the goals of an effectively

---

[14] 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 (see footnote 12).

competitive market and a level playing field between banks and non-bank payment service providers?

On the first point – no discrimination among non-banks intermediaries – it is worth considering that, when access to non-banks is denied, effective compliance with the principle of non-discrimination can only be achieved following interventions by antitrust authorities. Infrastructures providing payment services can be considered *essential facilities*[15] and therefore conditions for access to such a system should be objectively justified and applied in a non-discriminatory manner and rules on anti-competitive practices, such as exclusionary practices, apply. Moreover, recital 52 of the PSD2 provides that closed proprietary payment systems[16] – such as three-party card schemes, payment services offered by telecommunication providers and internal systems managed by banking groups – be exempted to grant access.

The goal of this exemption is unclear, and the most likely explanation is that the legislator sought to establish a favorable treatment for newcomers in the payment market. However, it discriminates between smaller non-bank intermediaries, which cannot set up a private closed system, and bigger ones, that can rely on their own network, such as telecommunications companies and e-commerce platforms, to offer payment services.

On the second point – indirect access by non-banks through bank accounts – it should be underlined that currently, direct access of non-bank payment providers to the core of the European payment system is not possible. Indirect participation is the way chosen by the European legislator to ensure a balance between competition and security, whenever a direct participation of non-bank institution is not advisable from a financial stability point of view.

Currently, in all Euro countries, non-banks are only able to access the Real Time Gross Settlement System (RTGS) TARGET2, connected with central bank settlement accounts, only indirectly, through the services of a bank. Therefore, in order to enable payment service providers to provide

---

[15] See on this point Communication of the European Commission (*Competition Guidelines for cross border transfer systems*, September 1995) stating that payment systems constitute an essential facility i.e. a system access to which is crucial for banks wishing to handle the credit transfers concerned. Therefore, in the same Communication the Commission clarifies that conditions for access to such a system should be objectively justified and applied in a non-discriminatory manner. See also M. LIBERTINI, *Regolazione e concorrenza nei servizi di pagamento*, in *Dir. banc.*, 2012, p. 620.

[16] Such systems can operate either in direct competition to traditional payment systems, or, more typically, in a niche.

payment services, it is indispensable that they have the possibility to open and maintain accounts with credit institutions. The reasons for this limitation date back to the time of origin of banks and central banks [17]. Banks (credit institutions) are counterparties of the central banks within the monetary policy framework. For these reasons, they benefit of standing facilities (marginal lending facilities and deposit facility) and in case some conditions are met, they can ask for Emergency Liquidity Assistance (ELA) to the central bank. Although there is no single model of central bank in the world, as a rule, subjects other than banks are not possible counterparties of central bank operations (an exception was made by the Federal Reserve at the time of the 2007-2009 global financial crisis to allow access to emergency liquidity assistance for some investment banks in crisis) [18].

As banks and non-bank regulated entities compete in the provision of payment services, but the latter do not enjoy direct access to certain payment systems, such as those of systemically important nature (they can only access them indirectly through banks), this creates an uneven level playing field between competitors [19].

In 2019 the Bank of England (BoE) extended direct access to RTGS accounts to non-bank payment providers. Indeed, the BoE decided to allow non-bank intermediaries to open settlement accounts in the BoE RTGS system, subject to appropriate safeguards. In particular, a non-bank must be authorized by the UK Financial Conduct Authority (FCA) to provide payment services and meet some core requirements. The settlement account held by the non-bank payment provider is only used to settle the payment obligations arising from the payment schemes which are settled at the BoE. Moreover, the BoE has clarified that non-banks are not eligible to participate in the Bank of England's Sterling Monetary Framework (i.e.

---

[17] See S. UGOLINI, *The Evolution of Central Banking: Theory and History*, Palgrave Macmillan, London, 2017; C. GIANNINI, *The Age of Central Banks*, Edward Elgar, Cheltenham, 2011; C.A.E. GOODHART, *The Evolution of Central Banks*, MIT Press, Cambridge MA and London, 1998.

[18] This was the case of Bear Stearns, an investment company, that in March 2008 an emergency loan received from the Federal Reserve of New York to avoid the failure. In particular, the FED provided a "back-to back" loan involving JPMorgan that bought Bear Stearns a few days after. See TIMOTHY F. GEITHNER, *Stress Test, Reflections on Financial Crises*, Broadway Books, New York, 2014, p. 151, stating that the FED crossed a line that had not crossed since Great Depression, indirectly lending to a brokerage house that was supposed to function outside the bank safety net.

[19] The Commission (Digital Finance Strategy for the EU – Brussels, 24 September 2020 COM(2020) 591 final) stated that it will address this issue in the framework of the forthcoming revision of the Settlement Finality Directive.

the operationalization of the BoE monetary policy and liquidity insurance facilities) or the intraday liquidity, as they do not undertake maturity transformation activities.

This is a very innovative choice of the BoE, one which will allow non-bank payment providers to compete with banks on a more level playing field. They will be less dependent on competitors and will be able to offer a wider range of payment services. Moreover, according to the BoE, in the "longer term, the innovation stemming from expanded access should promote financial stability by creating more diverse payment arrangements with fewer single points of failure; identifying and developing new risk-reducing technologies; expanding the range of transactions that can take place electronically and be settled in central bank money" [20].

While the benefits in terms of more competition are clear, the benefits in terms of financial stability require a deep analysis and empirical evidences. Furthermore, considering that one of the public goals of central banks is to ensure the good functioning of the payment system, the consequences of this choice for central banks should be carefully evaluated, particularly in the event of failure of a non-bank intermediary which has a settlement account with the central bank.

4. Interoperability between networks

In the last paragraph we discussed the issue of access to payments systems and the exemptions justified for security grounds (e.g. designated systems) and competitive reasons (e.g. private closed loop systems). Here we would like to focus the attention on the case of closed-loop networks owned and managed by a Big-tech, which collect huge and diversified amounts of data on consumer's preferences. In our opinion these developments raise new issues regarding the effective competition between banks and non-banks, unforeseen by PSD2.

Authorities need to tackle two types of risks [21]. The first risk is that Big-techs, when entering the payment market, exploit economies of scale relat-

---

[20] Bank of England, Financial Conduct Authority, Pay.Uk, *Access to UK payment Schemes for Non-Bank Payment Service Providers*, December 2019.

[21] See A. POZZOLO, *PSD2 and the Transformation of the Business Model of Payment Services Providers*, in *European Economy. Banks, Regulation and the Real Sector*, April 10, 2020, available at https://european-economy.eu/next-issue/psd2-and-the-transformation-of-the-business-model-of-payment-services-providers/forthcoming in E. BANI, V. DE STASIO, A. SCIARRONE ALIBRANDI

ed to network effects, bundling payments with different services (e.g. sales in e-commerce platforms or social communications). Thus they gain a large market share in payments leveraging on an existing network, and their position – together with the protection granted as private closed loop systems – may hinder competition. The second risk is related to data collection and management. PSD2 provided for payment service providers (banks, payment institutions and e-money institutions) to share the data of their clients, with the clients' consent, with two new categories of intermediaries (so-called third party providers) who offer very specific payment services: the initiation of a payment transaction or the collection of information on different payment accounts [22]. These provisions are called "open banking" and have the goal to improve competition in the payment market. The intention of the legislature was to favor newcomers, having in mind mainly small providers that had to be encouraged to enter the market and offer innovative payment services, for instance to support e-commerce.

The entrance in the payments' market of Big-tech companies radically changed the attitude of regulators, who had previously vied for private closed loop systems access exemption and "open banking" without any kind of reciprocity in the sharing of data [23]. In the last years, Big-techs have been very active in the market of digital payments, leveraging on the capacity to exploit innovative technologies and covering the cross-border needs through their presence in multiple countries, often setting up closed loop systems to settle transactions.

(Edd.), *The transposition of PSD2 and open banking*, Bergamo University Press, Sestante Edizioni.

[22] The "payment initiation service" is a service in which an intermediary initiates a payment order at the request of the payment user on the account held at a different intermediary. The service offers a solution to shopping online alternative to cards. The intermediary that initiates the transaction can confirm to the payee (the e-commerce merchant) that the payment has been initiated in order for the merchant to promptly release the goods or service purchased. The "account information service" is an online service to provide consolidated information on one or more payment accounts held at other intermediaries. As a matter of fact, both services require an exchange of information between the intermediary who offers the services and those who hold the account for the client. V. PROFETA provides a description of the new services disciplined by the PSD2 in the Legal Research Paper of the Banca d'Italia No. 87 – *Le nuove frontiere dei servizi bancari e di pagamento fra PSD 2, criptovalute e rivoluzione digitale*, Rome, December 2019.

[23] See also L.F. SIGNORINI, *Regolamentazione, tecnologia e redditività,* speech delivered at ABI conference, Supervision, Risks & Profitability 2019 "Beyond basilea", Palazzo dei Congressi, Roma 25 June 2019, where the need is acknowledged to study some kind of reciprocity in the sharing of data among different intermediaries together with the difficulties faced by authorities in the international context to ensure a level playing field.

Is there the need for regulatory intervention to create a level playing field?

Allowing other payment service providers to access closed loop systems, eliminating the exemption established in the PSD2, may be an important step to increase competition. Moreover, to guarantee a level playing field among all players using individual data, it should be considered to allow other intermediaries to access information collected by Big-techs. This could be done according to the same philosophy which led the regulator to permit – through "open banking" – third party providers (i.e. payment initiation providers and account information providers) to access information collected by financial intermediaries, when users gave their consent.

The Commission recently announced[24] that it is reviewing its competition policy to ensure that it is fit for the digital age. In this context, it will also determine whether sector-specific measures are needed to ensure fair access to platforms for all financial service providers. In particular, the Commission will explore initiatives at EU level to address the current issues faced by payment services providers when trying to access near field communication (NFC) antennas available on certain mobile platforms (such as phones or tablets) and used for effective contactless payments[25].

The data protection goal explains why a regulatory intervention is important[26]. The PSD2 established the principle that data are available to the customer who "generated" them. This allows all players in the payment industry – including Big-techs, if they are willing to enter this market – to collect information on payments linked with those on purchases, in addi-

---

[24] *Digital Finance Strategy for the EU* – Brussels, 24.9.2020 COM(2020) 591 final.

[25] See M. MAGGIOLINO, *Focus 4: Big Data Companies in Banking and Financial Services Markets: an Antitrust Issue?*, in *The Rise of Tech Giants. A Game Changer in Global Finance and Politics*, BILOTTA, ROMAN (eds.),, Bern [etc.], Peter Lang, 2019, p. 119-129, with a discussion of the Australian case about Apple Pay and the request of banks to acquire direct access to NFC controller located in Apple phones.

[26] See the *Digital Finance Strategy for the EU* – Brussels, 24.9.2020 COM(2020) 591 final where the Commission declares that it will launch the review of the Payment Services Directive in 2021, including an assessment of its scope. «Open finance can lead to better financial products, better targeted advice and improved access for consumers and greater efficiency in business-to-business transactions. Access to more customer data would also enable service providers to offer more personalized services that are better tailored to customers' specific needs. A balanced regulatory framework for the sharing of data on financial products will support the financial sector in fully embracing data driven finance, and effectively protect data subjects, who must have full control over their data. The Commission will therefore propose legislation on a broader open finance framework by mid-2022. It will build on the upcoming initiative focusing on data access, including the upcoming Data Act, and the Digital Services Act28.».

tion to what they already collect, for example through social media. In this context, the real question is if the usual clause of asking "explicit consent" is a suitable measure to protect consumers. According to the EU Commission by 2024, the EU should have an open finance framework in place, in line with the EU Data Strategy, the upcoming Data Act, and Digital Services Act. This will be coordinated with the review of the Payment Services Directive, ensuring a balance between different needs.

5. Conclusions

This study analyses three relevant cases in which the interaction between payment service providers requires cooperation between competitors, which is referred to as "coopetition". In order to ensure efficient and secure payment systems in a market in which competitors must cooperate, ex post antitrust authorities' action is not sufficient, as we have showed in the first case analysed on interchange fees. A legislature intervention was needed; it produced some positive outcomes, in terms of the fees applied to firms, although an overall assessment of the results achieved by through these new rules is still ongoing. An intervention of the regulator seems necessary also regarding the second topic analysed, "non-bank payment service providers and access to payment systems", in order to establish an equal footing among the protagonists of the payments system market, while reserving stability and security. In the third case addressed, "interoperability between networks", a legislative intervention is crucial considering the need to protect a wider spectrum of interests. In the past, banks enjoyed a strong market power in the payment system.

In the last decades, non-bank intermediaries have gained a relevant market share in some specific segments, such as the card business and international payments. The legislator therefore intervened with rules to favor newcomers over incumbents. Furthermore, technological innovation has favored the entrance of new players in the market, small companies with high level of specialization, and Big-tech companies that have a huge network of clients and connections. In particular, with the entry in the payment system of Big-techs, which have a significant power in the market for information on consumer preferences, the scenario has changed radically; interventions on the part of authorities are required aiming at two different goals. First, rules must establish a level playing field between agents; Big-techs, in fact, are not weak players, considering the playing field is not limited to payments. Second, rules must be established to en-

sure not only the security of payments and competitive pricing conditions but also the protection of consumer data. The European institutions are working in this direction, as testified by the 2020 *Digital Finance Strategy*. Our study shows the importance of this latter program, and stresses the need for an acceleration in its implementation.