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**Data, Innovation and Transatlantic
Competition in Finance: The Case of the
Access to Account Rule**

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Abstract

Technological innovation is transforming the structure of the retail banking sector. Traditional business models are facing a rapid disruption process led by the emergence of FinTech companies which provide innovative digitally-enabled banking and financial services.

In order to offer payment initiation services and account information services, third party providers need to access customer accounts, since data on the availability and movement of funds on the consumer's payment account are essential.

The paper focuses on two major trends that underpin this new business environment, which is known as Open Banking. First, the EU has taken the lead in the transition by providing, within the revised Payment Service Directive (PSD2), a sector-specific portability regime (the access to account rule) expressly aimed at fostering competition. Indeed, one of the key points of the PSD2 is that new market players should be granted access to account data. Second, in such a context standardization plays a crucial role with regards to the implementation process and the overall effectiveness of this new pro-competitive mechanism.

Regulators in other countries have recently expressed interest in developing frameworks that put consumers in control of their account data. Additionally, they have encouraged standardization initiatives aimed at defining shared, open application programming interfaces (APIs). Will regulators in the U.S. follow suit?

Keywords: FinTech, big data, competition law, access to account rule, standardization

JEL Codes: K21, K22, K23, L15

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1. Introduction

The rise and development of FinTech innovation is going to bring substantial change to the structure of the retail banking sector, which has long been affected by chronic deficiency in terms of its competitive structure. Traditional business models are facing an increasingly rapid disruption process led by the emergence of FinTech companies that provide innovative digitally-enabled banking and financial services via mobile applications, digital identification, big data analytics, artificial intelligence, and blockchain.¹ New players are involved in the entire financial value chain, including front, middle and back-office activities, and they provide services for both retail and wholesale markets.²

For more interaction with FinTech developers, a number of supervisors (in, for example, Australia, Canada, the U.S., Hong Kong, Japan, Mexico, and Singapore) have set up FinTech hubs. These hubs are essentially institutional arrangements where regulated or unregulated entities can engage with the competent authority to discuss FinTech-related issues and seek clarification on the conformity of business models with the regulatory framework or with regulatory/licensing requirements. Several authorities (e.g., Australia, Canada, Hong Kong, Mexico, and Singapore) have also developed

¹ H.-Y. Chiu, 'The Disruptive Implications of Fintech-Policy Themes for Financial Regulators', 21 *Journal of Technology Law & Policy* 55 (2017). D.A. Zetsche, R.P. Buckley, D.W. Arner, and J.N. Barberis, 'From FinTech to TechFin: The Regulatory Challenges of Data-Driven Finance', EBI Working Paper Series No. 6 (2017), 11-12, <https://www.law.ox.ac.uk/business-law-blog/blog/2017/05/fintech-techfin-regulatory-challenges-data-driven-finance>, distinguish between FinTechs and TechFins: while the former is focused on finance first and the application of technology to deliver improved financial services, the latter relies on large-scale data sets and businesses developed in their primary course of business and then put them to use in financial services.

² European Banking Authority, Discussion Paper on the 'EBA's approach to financial technology (FinTech)', (2017) <https://www.eba.europa.eu/documents/10180/1919160/EBA+Discussion+Paper+on+FinTech+%28EBA-DP-2017-02%29.pdf>.

regulatory sandboxes for innovative firms. These are experimentation frameworks that provide financial institutions and non-financial firms with a controlled space in which they can test innovative FinTech solutions with the support of an authority for a limited period of time.³

The EU aims to stimulate competition within retail payment markets to the benefit of customers by giving them greater bargaining power and control over their data. Financial services are awash in data and all kinds of financial services and products could be impacted. Indeed, the use of big data technologies may serve various purposes, from profiling customers and identifying patterns of consumption in order to make targeted offers and personalize products and services, to support finance and risk control activities.⁴ Notably, by introducing a sector-specific portability rule (the access to account rule), the Directive 2366/2015 on payment services in the internal market (PSD2) marked a crucial step towards the unbundling of retail payment markets to authorized newcomers, which from now on will have the right to request account information without any previous agreements with banks.⁵

The access to account rule aims to strengthen competition in the banking and financial services industry and create the path towards an Open Banking environment. Open Banking represents an evolution of banking that, through the use of open application programming interfaces (APIs), enables consumers to share their data and account functionality for access and use by third parties. However, the success or failure

³ European Commission, Communication on 'FinTech Action plan: For a more competitive and innovative European financial sector', COM(2018) 109 final, 8.

⁴ European Supervisory Authorities, Joint Committee Discussion Paper on 'The Use of Big Data by Financial Institutions', (2016) 8-10, https://www.esma.europa.eu/sites/default/files/library/jc-2016-86_discussion_paper_big_data.pdf.

⁵ Directive 2015/2366 on payment services in the internal market (2015) OJ L 337/35.

of such regulatory intervention is going to be determined by the implementation process. Even though policy makers took a clear stance in favor of standardization, there is no agreement among undertakings whether to adopt standardized, open APIs or to let incumbents compete and autonomously develop their own interface to share financial data.

The paper is structured as follows. After discussing the data-enabled developments brought about by technology innovation in financial markets, attention is focused on the changes that took place in the payments services arena, which can be regarded as the forefront of the FinTech wave. Following this overview, the third part provides a brief description of the evolution of EU payments law which culminated with a “regulation for competition” approach that underpinned the access to account rule introduced with the PSD2. The fourth part sheds light on the rise of Open Banking as a natural consequence of FinTech innovation and the key role which standardization is called to play to ensure an effective interoperability in the market. The fifth section offers a conclusion.

2. Setting the scene. Big data and industry disruption: The turn of finance

The application of technological innovation to finance and banking is not new, but its widespread deployment to nearly every level of the financial value chain is a more recent phenomenon.⁶ Such development involves big data exploitation as well as the provision of new services based on interoperability among different players. FinTech companies can perform many services, including domestic and cross-border payment services (through digital wallets or pre-funded e-money), customer relationship services (by

⁶ D.W. Arner, J. Barberis, and R.P. Buckley, ‘The Evolution of FinTech: A New Post-Crisis Paradigm?’ 47 *Georgetown Journal of International Law* 1271 (2016).

providing price comparison, switching services and robot-advisory services), retail and commercial banking (by offering innovative lending and borrowing platforms), wholesale banking and markets, wholesale payment, and clearing and settlement infrastructure.⁷ Therefore, technological developments are expected to fundamentally change the way customers and merchants access services and markets.⁸ Since all new players interact among competitors and are likely to disrupt traditional markets, competition law and regulation cannot disregard such development.⁹

FinTech has the potential to trigger a process of unbundling banking into its core activities, such as sharing risk, settling payments, allocating capital and performing maturity transformation.¹⁰ Such a development represents a double-edged sword. On the one hand, it generates substantial benefits for businesses, consumers and the overall industry. Indeed, new FinTech-enabled products, such as price-comparison tools and interoperability, can mitigate consumers' unwillingness and inability to switch among firms and shop around to get the most convenient deals by developing bespoke comparison-tools and other pro-competitive applications.¹¹ On the other hand, it is

⁷ European Parliament, Report on 'FinTech: the influence of technology on the future of the financial sector', (2017), 16, <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2017-0176+0+DOC+PDF+V0//EN>.

⁸ Accenture, 'Seizing the Opportunities Unlocked by the EU's Revised Payment Services Directive PSD2: A Catalyst for New Growth Strategies in Payments and Digital Banking', (2016) [https://www.accenture.com/t20170707T153413Z_w_/ca-fr/acnmedia/PDF-15/PSD2-Seizing-Opportunities-EU-Payment-Services-Directive-\(1\)-\(1\).pdf](https://www.accenture.com/t20170707T153413Z_w_/ca-fr/acnmedia/PDF-15/PSD2-Seizing-Opportunities-EU-Payment-Services-Directive-(1)-(1).pdf), estimates that evolving customer preferences, advances in technology and increased competition by fintech companies and large technology companies may cause a dramatic erosion of UK banks' payment revenues, down to 43% of current payments-based revenues by 2020.

⁹ J. Hoffmann, M. Bakhoum, and F. Beneke, 'Digital markets, mobile payments systems and development – Competition policy implications in developing countries in light of the EU experience', Max Planck Institute for Innovation & Competition Research Paper No. 18-13 (2018), 5, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3208559.

¹⁰ M. Carney, 'Building the Infrastructure to Realise FinTech's Promise', speech at the International FinTech Conference (2017), <https://www.bankofengland.co.uk/-/media/boe/files/speech/2017/building-the-infrastructure-to-realise-fintechs-promise.pdf>.

¹¹ Canadian Competition Bureau, 'Technology-led innovation and emerging services in the Canadian financial services sector', (2017), <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04315.html>.

possible that such a market development would trigger financial vulnerabilities and cause a slump in investor confidence, thus generating substantial risks for industry welfare and stability as whole.¹² At the same time, traditional banking and financial firms are set to bear several risks, in terms of reduced customer loyalty, eroded market power and disintermediation of direct consumer relationships.¹³

One of the most compelling developments emanating from this phenomenon is represented by the innovative uses of data in the financial sector.¹⁴ Even though financial players have always used data to make business choices, the sources and complexity of data which are now available are much greater than in the past. The potential applications of big data analytics, together with new business models, can improve the competitiveness of both traditional banking institutions and newcomers.¹⁵ Big data analytics make it possible to link data (even anonymized data) back to an individual and to enable the commercial exploitation of customers' data.

Nowadays there are several challenges brought by big data analytics to consumer protections and competition. The retail financial services sector is one of the areas where the present clash is more evident and troublesome. Financial players can collect extensive information about each consumer's willingness to pay for a product, as well as their risk

¹² Financial Stability Board and Committee on the Global Financial System, 'Fintech credit: Market structure: business models and financial stability implications', (2017) <http://www.fsb.org/2017/05/fintech-credit-market-structure-business-models-and-financial-stability-implications/>.

¹³ O. Borgogno and C. Poncibò, 'The Day After Tomorrow of Banking - On FinTech, Data Control and Consumer Empowerment', Oxford Business Law Blog - Law and Autonomous Systems Series (2018), <https://www.law.ox.ac.uk/business-law-blog/blog/2018/04/law-and-autonomous-systems-series-day-after-tomorrow-banking-fintech>.

¹⁴ European Parliament, *supra* note 7.

¹⁵ European Banking Authority, Discussion Paper on innovative uses of consumer data by financial institutions, (2016), <http://www.eba.europa.eu/documents/10180/1455508/EBA-DP-2016-01+DP+on+innovative+uses+of+consumer+data+by+financial+institutions.pdf>; P. Valcke, N. Vandezande, and N. Van de Velde, 'The evolution of third payment providers and cryptocurrencies under the EU's upcoming PSD2 and AMLD4', SWIFT Institute Working Papers No. 2015-001 (2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2665973.

profiles, in order to develop behavioral-based services.¹⁶ In the insurance and banking sectors, the ability to better assess the risk of granting credit to a consumer may be better understood and, accordingly, priced more accurately, leading to better credit conditions for certain customers. Due to the increasing availability of detailed data on consumers and their behavior, firms now have the possibility of refining their prices more accurately.¹⁷ Thus, such a development will drive innovation and competition in the banking and financial landscape.

From an antitrust perspective, the FinTech revolution holds the key to unlocking competition within the retail banking sector.¹⁸ This industry has been affected worldwide by lock-in problems, low elasticity of demand, abuse of market power by incumbents and high barriers to entry. By promoting interoperability and enabling consumers to manage their finances, the traditional incumbency advantages based on access to consumer transaction history for customers' loans and consumer "stickiness" are likely to be removed.¹⁹ In the traditional model, large, well-established players have been able to not only maintain high and stable market shares, but also engage in product-tying practices to the detriment of new market entrants and consumer welfare as a whole. Now, financial incumbents have the chance to compete throughout new FinTech markets, gaining new market shares. At the same time, they are called to take new responsibilities and behave

¹⁶ European Supervisory Authorities, *supra* note 4, 22-24.

¹⁷ D. Milanesi, 'A New Banking Paradigm: The State of Open Banking in Europe, the United Kingdom and the United States', TTLF Working Papers n. 29 (2017), <https://law.stanford.edu/publications/a-new-banking-paradigm-the-state-of-open-banking-in-europe-the-united-kingdom-and-the-united-states/>.

¹⁸ UK Competition and Markets Authority, 'Retail Banking Markets Investigation', (2016) <https://www.gov.uk/cma-cases/review-of-banking-for-small-and-medium-sized-businesses-smes-in-the-uk>.

¹⁹ European Commission, Summary of contributions to the 'Public Consultation on FinTech: a more competitive and innovative European financial sector', (2017) 9 https://ec.europa.eu/info/sites/info/files/2017-fintech-summary-of-responses_en.pdf.

in a non-discriminatory manner. Indeed, as keepers of customers' finances, banks play a "gateway role" that is crucial to the viability of many FinTech business models.²⁰

Since FinTech is re-shaping the competitive environment of old-fashioned retail banking, it is worth shedding new light on the interplay between market regulation and antitrust with regards to this new sector.

2.1. FinTech and the retail payment system

Payment services are at the forefront of the competitive issues arising from FinTech and big data exploitation. It is thus worth focusing attention on the features that this industry possesses in order to assess the ability of new regulatory schemes to nurture innovation and foster workable competition within disrupted markets.²¹ As is known, retail payment allows agents, such as merchants, consumers, companies and public bodies, to handle money in exchange for goods or services. For the sake of simplicity, we are going to focus on electronic and non-cash-based payments.

New enterprises are entering the arena by providing innovative services both at the so-called front-end and end-to-end levels.²² Front-end providers can offer payment initiation services ("PISs") and account information services ("AISs"). They allow customers to initiate payment orders through an interface that interacts with the

²⁰ European Commission, Green Paper on 'Towards an integrated European market for card, internet and mobile payments', COM(2011) 941 final, 11.

²¹ C. Hijmans van den Bergh, 'ACM's view on innovation in the payments sector. How do we get the best deal?', speech at ESB's Conversation with Regulators on Innovation in Payment Services, (2018) 2, <https://www.acm.nl/sites/default/files/documents/2018-01/speech-hijmans-van-den-bergh-at-esb-conversation-with-regulators-2018-01-19.pdf>.

²² European Central Bank, 'The payment system', (2010) 33, <https://www.ecb.europa.eu/pub/pdf/other/paymentsystem201009en.pdf>. As far as the competitive angle is concerned, there is no need to focus on the back-end providers, a category which comprehends a wide variety of providers operating as out-sourcing providers, such as data center services, compliance, anti-money laundering and so on.

customers' account providers (payment initiation services providers, "PISPs") or to gain an overview of their financial situation (account information service providers, "AISPs"). These types of providers are spreading throughout the market and include internet payment gateway providers, mobile wallets and credit card acquirers. By being involved in pre-transaction, initiation and after-transaction processes, they position themselves as interfaces between the customers (either payees or payers) and the account-servicing payment service provider ("ASPSP"), such as the banks. Apart from initiating payments on behalf of the customer, front-end providers can provide consolidated information about one or more payment accounts owned by the user. Therefore, they can supply financial management programs, creditworthiness assessments, and comparison tools; they can also analyze multiple transactions carried out on the user's accounts. It is clear, therefore, that all those activities need continuous and direct access both to accounts information as well as to the certainty that the accounts providers will carry out their payment orders.

End-to-end providers are closed platforms that interact both with the payer and the payee arranging transactions within their system. Since payments are arranged by the provider itself, there is no need to interact with a third party account provider except for the deposits within the platform, which take the form of an ordinary money transfer. Examples of end-to-end providers are three-party payment card schemes or e-money schemes (such as PayPal, Satispay, AfterPay and Klarna), virtual currencies, electronic money providers, and telecom providers with a payment service. These types of operators do not depend on other firms, as is the case with front-end providers, and it is therefore unlikely that they will be subject to foreclosure practices able to exclude them from the market.²³ It is nonetheless worth pointing out that end-to-end providers are set to increase

²³ Canadian Competition Bureau, *supra* note 11.

the level of competition throughout the payment industry, creating a strong incentive for competitors (such as payment card scheme providers) to innovate and reduce costs.²⁴

In the light of their inherent dependence on account-servicing payment service providers, front-end providers are more prone to be victims of anti-competitive practices carried out by banks and other incumbents than end-to-end providers.²⁵ First of all, since front-end firms need to have access to customers' accounts, any refusal by the bank would make it impossible to provide their core service, whether it be a payment order or an information analysis. Moreover, banks and incumbents have a strong incentive to foreclose front-end providers as they take the role of directly interfacing with customers, thereby gaining a privileged position in the relationship with them. Accordingly, account providers would risk becoming a mere money depository (so-called "dumb pipes"), losing any front-end interaction and consequently being precluded from exploiting the consumer lock-in effect. Such a disintermediation would make it more difficult for them to sell other financial products and banking services (such as mortgages, loans, and insurance) to their customers. Moreover, traditional banks and new FinTech firms would compete fiercely with regards to the provision of PISs and AISs. Conversely, end-to-end providers do not seem to be as dependent on banks. By being a closed platform, they only need to interact with the interbank systems in order to run clearing and settlement activities (for which a special license is required).²⁶ However, such a risk seems less significant as it would mean that all banks should agree not to provide any payment accounts to end-to-end firms. This

²⁴ The Netherlands Authority for Consumers & Markets, 'Fintechs in the payment system. The risk of foreclosure', (2017) 21, <https://www.acm.nl/sites/default/files/documents/2018-02/acm-study-fintechs-in-the-payment-market-the-risk-of-foreclosure.pdf>.

²⁵ European Commission, Commission staff working document Impact Assessment accompanying the Proposal for a directive on payment service in the internal market, SWD(2013) 288 final.

²⁶ See Article 10(1) of the Directive 2009/44/EC (2009) OJ L 146/37.

explains why it is more pressing to create effective mechanisms capable of ensuring that traditional players do not hamper competition by excluding front-end providers.

3. Promoting competition through regulation: the evolution of EU payments law

The EU approach towards the payment industry has changed considerably over the years. Between the entry into force of the Rome Treaty and the 1990s, EU payments law dealt mainly with cross-border payments through soft law and negative integration.²⁷ It was not until the introduction of the Euro that the EU experienced a shift to public-private hybridization, federalization and ultimately maximum harmonization. Retail payment was affected by the mingling of EU legislation and private regulation led by the European Payments Council. This shaped the Single Euro Payments Area (“SEPA”). In the final part of this evolution, a new approach, known as regulation for competition, aimed at ensuring a sound competitive environment within retail payments markets, which became the new driving goal of the EU policy maker.

A complete and coherent governance of payment transactions was therefore conceived as the synergy between the SEPA payment system and EU legislation. The former secured, on a private ordering basis, interoperability and a clear framework of rights and obligations in the inter-bank sphere. The latter provided an early harmonization of national rules covering the bank-to-customer relationships. It does not come as a surprise, then, that the negotiations for the SEPA Rulebooks and the preparation of the so-called “New Legislative Framework” for payments were aligned.²⁸ The single

²⁷ A. Janczuk-Gorywoda, ‘Evolution of EU Retail Payments Law’, 40 *European Law Review* 858 (2015).

²⁸ European Commission, Communication on ‘A New Legal Framework for Payments in the Internal Market’, COM(2003) 718 final (2003), 8.

European payment system was developed, since its very beginning, as a hybrid public-private regulatory model.²⁹ On the legislative side, the Directive 2007/64/EC (Payment Service Directive–“PSD”)³⁰ represented the first comprehensive attempt to establish both a clear legal framework specifying the allocation of risks among payment service providers and customers as well as the limits of transaction reversibility. In addition to the ambitious goal of regulating a vast array of payment instruments through one horizontal legal act, it is worth noting that the PSD was truly conceived as a tool to strengthen competition in the retail payment market.³¹ This objective was pursued by providing harmonized market access requirements,³² a specific single license for payment operators,³³ and a first mechanism of access to the technical infrastructures of payment systems for payment service providers.³⁴

Since the entry into force of the PSD, the retail payments industry has witnessed a substantial technical innovation led by the FinTech evolution, with an exponential growth of new payment services that challenged the 2007 regulatory framework.³⁵ First of all, a great percentage of the new payment front-end services or products that surfaced in recent years are not covered by the scope of PSD, making it extremely difficult to assess their

²⁹ Janczuk-Gorywoda, *supra* note 27.

³⁰ Directive 2007/64/EC on payment services in the internal market (2007) OJ L319/1.

³¹ D. Mavromati, *The Law of Payment Services in the EU: The EC Directive on Payment Services in the Internal Market*, Kluwer Law International, Alphen aan den Rijn (2008), 199-200 and 213-214.

³² PSD, Recitals 10, 17, and 42.

³³ PSD, Article 10(9).

³⁴ PSD, Recital 16 and Article 28(1).

³⁵ European Commission, *supra* note 20, 7. See also PSD2, Recital 4: “Significant areas of the payments market, in particular card, internet and mobile payments, remain fragmented along national borders. Many innovative payment products or services do not fall, entirely or in large part, within the scope of [PSD]. Furthermore, the scope of [PSD] and, in particular, the elements excluded from its scope, such as certain payment-related activities, has proved in some cases to be too ambiguous, too general or simply outdated, taking into account market developments. This has resulted in legal uncertainty, potential security risks in the payment chain and a lack of consumer protection in certain areas. It has proven difficult for payment service providers to launch innovative, safe and easy-to-use digital payment services and to provide consumers and retailers with effective, convenient and secure payment methods in the Union.”

rights and obligations towards both banks and customers. In particular, PISs, enabling payers to file payment orders through the online banking platform of their banks, have proved to be tremendously efficient and pro-competitive, reducing transaction costs for consumers. Similarly, account information providers started to provide customer services based on the aggregated analysis of their account information.³⁶ Moreover, market fragmentation along Member States borders remained a serious hindrance to the Internal Market, even in the card, mobile and internet payments sectors.

Against this background, the European legislature deemed it appropriate to address all those concerns by providing a new and harmonized regulatory framework through the PSD2, which replaced the PSD and came into force on January 13, 2018. Many key changes have thereby been enacted, from the enlargement of the original scope of the PSD to the security requirements placed on undertakings with regards to risk management and reporting duties.³⁷ From a general perspective, the PSD2 addresses many of the regulatory and supervisory gaps of its predecessor, such as the legal uncertainty arising from the interaction between incumbents and new players, the lack of consumer protection, and the allocation of liabilities and risks throughout the payment chain.³⁸ The new Directive acknowledges the presence of third party (payment service) providers (“TPPs”) offering PISs and AISs by bringing them (“regardless of the business model applied by them”)³⁹ under a comprehensive legal framework made of homogeneous standards of security, authorization and supervision requirements on an equal footing with the other payment service providers.⁴⁰

³⁶ European Commission, *supra* note 25, 25-26.

³⁷ PSD2, Articles 85 and 86.

³⁸ European Commission, *supra* note 25, 16.

³⁹ PSD2, Recital 33.

⁴⁰ PSD2, Recitals 27-33.

However, for the purposes of the present article, the whole array of changes introduced by the PSD2 will be set aside in order to focus attention on the impact of its provision dealing predominantly with access and interoperability.

3.1. The PSD2 access to account rule

By acting as account servicing payment service providers, banks have assumed a crucial function in the new FinTech ecosystem. Indeed, the viability of a broad range of new services is utterly dependent on the accessibility of the banking platform holding the customers' accounts. It is worth highlighting that not only the possibility of transmitting payment orders or gathering in-depth account information, but even the prior information on the availability of funds on the customer's payment account are often vital for the business model of many FinTech players.

Under the PSD, banks could legitimately refuse to grant any access or to share sensitive information with TPPs due to intellectual property and security issues. Their refusal was also motivated by reputation risks and liability reasons.⁴¹ In the light of the potential conflict of interests among TPPs and banks, however, it would not be reasonable to give banks the power of denying access to third parties. Indeed, banks have a commercial incentive to refuse any form of cooperation with third party providers, despite the wishes of their customers and even if no justified reason could be established.⁴² It goes without saying that the very existence of new integrated markets based on banking accounts services would have been seriously endangered if no clear legal frameworks were enacted. Therefore, several options had been considered by the European

⁴¹ European Commission, *supra* note 25, 137.

⁴² European Commission, *supra* note 20, 11.

Commission during the early stage of the PSD2 preparatory works in order to effectively tackle potential foreclosure effects which could stifle FinTech innovation in the payments sector. A brief look at them helps in understanding the complementary relationship between regulation and antitrust enforcement.

Intervening with the previous legal framework had been the only choice the EU could make. Acting otherwise would have meant giving banks excessive bargaining power with regards to new FinTech entrants. Additionally, Member States would have been free to decide whether to implement national regulation (such as in Spain and Sweden), jeopardizing the free movement of payment services.⁴³ Thus, to the European Commission, the so-called “no policy change” did not seem to be a viable route. According to another policy option widely supported by the banking industry, access to consumers’ accounts should have been granted only with the explicit consent of the account’s owner and the prior conclusion of a specific agreement between the bank and the TPP.⁴⁴ On the upside, such an option was likely to ensure a smooth integration between the service provider and the banking infrastructure, delivering a more comfortable consumer experience as well as a significantly lower litigation risk between banks and TPPs. On the downside, however, this approach raises serious competition concerns since it would have ultimately left the banks free to make unfair demands to the detriment of TPPs or, in other words, to engage in discriminatory practices. This last option, thus, has finally been set aside, as the disadvantages stemming from the commercial incentives of incumbents not to cooperate with new entrants outweighed the potential benefits of the act.

⁴³ European Commission, *supra* note 25, 220-221.

⁴⁴ European Commission, *supra* note 25, 64 and 226.

The above-mentioned options discarded, the European Commission eventually opted for an approach that would eliminate a key barrier for third parties' market access while addressing the concerns surrounding TPP operations.⁴⁵ Pursuant to the access to account rule ("XS2A"), account servicing payment service providers, such as banks, shall allow third parties to obtain real-time data relating to customers' accounts. Further, banks shall provide access to such accounts by executing payment orders initiated through PISPs interfaces, on condition that the customer gave his explicit consent and that the account is accessible online.⁴⁶ Moreover, they are under an obligation to grant such access on a non-discriminatory basis both to PISPs⁴⁷ and to AISPs⁴⁸. More specifically, any ASPSP shall treat and execute all the payment orders transmitted via a third-party's interface as if they were sent directly by the customer through the banking infrastructure, without any discrimination in terms of charges, timing and priority.⁴⁹ Nevertheless, it is still unclear whether banks can charge a fee in exchange for the access granted to front-end third-party providers. In fact, the direct payment service provided to accounts' users is not free, but, instead, it can be considered as part of the fixed amount regularly charged by the bank.⁵⁰ Therefore, it could theoretically be possible that such compulsory access can be compensated, as it happens, *mutatis mutandis*, with standard essential patents that are licensed under fair, reasonable and non-discriminatory ("FRAND") terms.⁵¹

⁴⁵ European Commission, *supra* note 25, 63-64 and 222-223.

⁴⁶ PSD2, Articles 64-68.

⁴⁷ PSD2, Article 66(4)(c).

⁴⁸ PSD2, Article 67(3)(b).

⁴⁹ PSD2, Articles 66(4)(c) and 67(3)(b).

⁵⁰ The Netherlands Authority for Consumers & Markets, *supra* note 24, 35.

⁵¹ European Commission, *supra* note 3, 7: for standards to be pro-competitive, participation should be unrestricted, the procedure for adopting the standard should be transparent, allowing stakeholders to effectively inform themselves of standardization work, and effective access to the standard should be provided on FRAND terms.

At the same time, AISPs and PISPs need to be registered according to the Member States procedural system in order to carry out their activities, complying with the requirements laid down by the European Banking Authority (“EBA”).⁵² Furthermore, TPPs are expected to ensure high levels of security and full compliance with data protection law.⁵³ Moreover, it has been made clear that AISPs and PISPs are subject to less troublesome prudential requirements than banks because they do not hold client funds.⁵⁴ In addition, PISPs are explicitly precluded from using, storing and accessing any sensitive data which are not relevant to the payment transaction requested by the user.⁵⁵

With regards to security, the PSD2 mandates that users’ credentials must not be shared with any party other than the user himself and the bank.⁵⁶ The only subject allowed to obtain any information about the payment user is the payee, upon the former’s consent.⁵⁷ Lastly and more importantly for the purposes of the following section, TPPs are required to identify themselves every time a payment order is transmitted or access to account data is sought. Accordingly, any form of communication between the bank and

⁵² European Banking Authority, Final Report on Draft Regulatory Technical Standards on Strong Customer Authentication and common and secure communication under Article 98 of Directive 2015/2366 (PSD2), (2017) 5-11, [https://www.eba.europa.eu/documents/10180/1761863/Final+draft+RTS+on+SCA+and+CSC+under+PSD2+\(EBA-RTS-2017-02\).pdf](https://www.eba.europa.eu/documents/10180/1761863/Final+draft+RTS+on+SCA+and+CSC+under+PSD2+(EBA-RTS-2017-02).pdf).

⁵³ PSD2, Article 94. Account data is personal data according to the Article 4 of the General Data Protection Regulation (“GDPR”, Regulation 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (2016) OJ L119/1) broad definition (‘any information relating to an identified or identifiable natural person’), so it is necessary to clarify how the two regimes should be coordinated. Indeed, Article 20 of the GDPR has introduced a new right to data portability, according to which each person has the right to have returned to them personal data they have provided to a company or organization on the basis of consent or contract and has the right to have that data transmitted without hindrance from one controller to another (even directly where technically feasible). Thus, with regards to accounts data, when customers ask for their data to be portable, they will need to make a choice between which regimes they intend to opt for (PSD2 or GDPR). In this respect, as clarified by the Article 29 Working Party [‘Guidelines on the right to data portability’, (2017) 8, footnote 15, http://ec.europa.eu/newsroom/article29/item-detail.cfm?item_id=611233], since the access rule envisaged in the PSD2 is a sector-specific regime, the potential option exercised by the customer overrides the application of the general data portability principle established in the GDPR.

⁵⁴ PSD2, Recitals 34 and 35.

⁵⁵ PSD2, Articles 65(3) and 66(3)(e-f).

⁵⁶ PSD2, Article 66(3)(b).

⁵⁷ PSD2, Articles 63(3)(d) and 98(1)(d).

third party shall take place in a secure way.⁵⁸ As shown in section 4.1, the EBA has been mandated to develop five sets of guidelines and six drafts of Regulatory Technical Standards (RTS) that payment providers need to comply with in order to ensure high levels of security as well as the successful functioning of the access to account rule.⁵⁹ Finally, it is widely believed among scholars and practitioners that APIs are the most reliable technologies for implementing the XS2A rule.⁶⁰ However, there is no consensus regarding who should establish the APIs or, even more importantly, whether to standardize their creation.

4. The rise of Open Banking

FinTech innovation has led to an evolution of banking which is commonly referred to as Open Banking.⁶¹ This expression denotes a development of a banking business model rooted mainly on interoperability and data-enabled services stemming from the enhanced

⁵⁸ PSD2, Article 66(4)(a), and Article 98(1)(d).

⁵⁹ PSD2, Article 96(3) and (4).

⁶⁰ Portuguese Competition Authority, 'Technological Innovation and Competition in the Financial Sector in Portugal', Issues Paper, (2018) 23, http://www.concorrenca.pt/vEN/Estudos_e_Publicacoes/Estudos_Economicos/Banca_e_Seguros/Documentos/2018%20-%20Issues%20Paper%20Technological%20Innovation%20and%20Competition%20in%20the%20Financial%20Sector%20in%20Portugal.pdf; Financial Conduct Authority and HM Treasury, 'Expectations for the third party access provisions in Payment Services Directive II', (2017) 2, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/630135/Expectations_for_the_third_party_access_provisions_in_PSDII.pdf; M. Zachariadis and P. Ozcan, 'The API Economy and Digital Transformation in Financial Services: the Case of Open Banking', SWIFT Institute Working Paper No. 2016-001 (2016), 6, <https://swiftinstitute.org/wp-content/uploads/2017/07/SIWP-2016-001-Impact-Open-APIs-FINAL.pdf>.

⁶¹ Euro Banking Association, 'Understanding the Business Relevance of Open APIs and Open Banking for Banks', Information Paper (2016), <https://www.abe-eba.eu/media/azure/production/1522/business-relevance-of-open-apis-and-open-banking-for-banks.pdf>; Euro Banking Association, 'Open Banking: Advancing Customer-Centricity. Analysis and Overview', (2017) https://www.abe-eba.eu/media/azure/production/1355/eba_open_banking_advancing_customer-centricity_march_2017.pdf; European Banking Authority, *supra* note 2; UK Open Banking Working Group, 'Unlocking the potential of open banking to improve competition, efficiency and stimulate innovation', (2016) <http://dgen.net/1/The-Open-Banking-Standard.pdf>.

power conferred on customers to exploit their own financial data by allowing third parties to access it.

The EU and the United Kingdom are paving the way towards Open Banking, accelerating its development through regulatory and legislative reforms alongside standardization support measures.⁶² Regulators sought to drive such change by allowing third parties to access users' accounts as well as payment-related data, enabling them to deliver a vast array of new services. Although more slowly, government authorities and policy makers in the U.S. have also shown interest in this area.⁶³ As we have seen, the EU laid the foundation to make Open Banking possible through the adoption of the new regulatory framework established with the PSD2. For its part, the UK decided to build on this foundation, going one step further and enacting additional measures aimed at driving increased levels of competition and taking the lead in the transition towards Open Banking.

From a competition policy perspective, Open Banking poses serious challenges that need to be addressed and fully understood. It is self-evident that such development has the potential to boost competition within banking and financial markets, which have both traditionally been affected by lock-in problems and high barriers to entry. The XS2A rule can contribute to the removal of incumbency advantages related to the exclusive access to customer transaction history for business and private loans. It also can lead to the unbundling of banking products traditionally sold together.⁶⁴ Similarly, consumers as

⁶² Milanesi, *supra* note 17, 50-105.

⁶³ Evaluation and investigations have carried out by the Consumer Financial Protection Bureau, 'Consumer Protection Principles: Consumer-Authorized Financial Data Sharing and Aggregation', (2017) <https://www.consumerfinance.gov/about-us/newsroom/cfpb-outlines-principles-consumer-authorized-financial-data-sharing-and-aggregation/>, in order to chart markets evolution and gather stakeholders' insights.

⁶⁴ Carney, *supra* note 10.

well as businesses will benefit from greater control over their financial resources and data, enabling them to move and manage funds between several accounts held in different banks through a single interface.⁶⁵ Against this background, we deem it useful to carry out an early overview on the new competitive dynamics that are likely to arise in such a new Open Banking environment as well as an assessment of the role that antitrust regulators are called upon to play.

By opening the banking infrastructure to third party service providers, regulators are setting the stage for platform business models to be implemented in the retail market. Instead of being disintermediated by new players, banks have the opportunity to take full advantage of their gatekeeper role and position themselves as new platforms allowing interaction between customers and third-party service providers (such as, primarily, AISs and PISs).⁶⁶ Essentially, Open Banking is laying the foundation for a new multi-sided markets model based on banking platforms acting as intermediaries for both account holders and FinTech companies, while generating potential value for both sides. In such a market structure, a platform facilitates the interactions between two or more groups of economic agents that mutually depend on each other and that, without the platform, could not possibly generate value through their business model. In an Open Banking environment there would be indirect network effects generating externalities which could not be internalized through a bilateral interaction: the platform, thus, is essential in as far as third-party payment providers decide to provide only AISs and PISs. It comes as no surprise, then, that the intermediary role played by banks would be essential to enable

⁶⁵ Canadian Competition Bureau, *supra* note 11.

⁶⁶ L. Brainard, 'Where Do Banks Fit in the FinTech Stack?', speech at Northwestern Kellogg Public-Private Interface Conference on "New Developments in Consumer Finance: Research & Practice" (2017), <https://www.federalreserve.gov/newsevents/speech/files/brainard20170428a.pdf>.

FinTech enterprises to deliver their services, not to mention the potential reduction of transaction costs for consumers. Furthermore, a sufficient number of economic players on each side of the market would need to be gathered in order to reach a critical mass to prompt a network effect, thereby making one platform more attractive than others.

Owing to the reduction in switching costs generated by the PSD2, banks are likely to compete fiercely to attract as many new customers and third-party providers as possible in order to wholly exploit network effects on both sides.⁶⁷ Larger banks have already started developing interfaces to allow outside developers to access their platforms under controlled conditions. Similar to what Apple did by opening its operating systems, financial companies that want to gain (and maintain) a leading position in such a new ecosystem would need to provide APIs to outside developers, who can then build new products on the banks' platforms.⁶⁸

Admittedly, banks could choose from several business models in order to navigate such a new open environment. One of the most likely to be adopted is the marketplace model, according to which customers can access third parties' products and services alongside the bank's core products.⁶⁹ Alternatively, the bank could decide to operate a so-called plug-and-play business model (akin to the platform developed by Apple). In this scenario, the bank is expected to develop a set of open APIs that any third-party could use to develop complementary services and products. As explored in the following subsection, the strategy that undertaking will adopt is dependent on the implementation process of the XS2A rule. Moreover, the economic theory of multi-sided markets could prove useful to tackle the new challenges brought by Open Banking to competition policy.

⁶⁷ Zachariadis and Ozcan, *supra* note 60, 13.

⁶⁸ Brainard, *supra* note 66, 6.

⁶⁹ Milanesi, *supra* note 17, 158.

Ultimately, the consequences of the banking business model depicted above are part of the general framework conceived by regulators with the PSD2 and the Open Banking initiatives in the UK. Thus, incumbents are increasingly nudged to adopt platforms and marketplace strategies and leave behind the old-fashioned habits of relying on consumer inertia. In the following sub-sections, we explore two of the most immediate concerns related to Open Banking environments from an antitrust perspective.

4.1. The struggle towards interoperability and the role of standardization

As acknowledged by the European Commission, since the production and delivery of financial services requires different operators in the value chain to cooperate and interact, an EU-wide FinTech market will not reach its full potential without the development of open standards that increase competition, enhance interoperability and simplify the exchange of and access to data between market players.⁷⁰ The success or failure of the XS2A rule as a key to unlock competition within retail banking markets is mainly dependent on the way the industry will implement technicalities.⁷¹

Before the changes enacted by the PSD2, TTPs had relied on so-called “screen-scraping” to access customers’ accounts. Such mechanism can be defined as the automated, programmatic use of software through which the customer allows a third party (such as a FinTech company) to extract data or perform actions that users would usually perform manually on the website, by sharing with the latter their security credentials. Several existing AISPs, PISPs and ASPSPs (when providing AIS and/or PIS) were

⁷⁰ European Commission, *supra* note 3, 7. See also Portuguese Competition Authority, *supra* note 60, 23.

⁷¹ S. Vezzoso, ‘Fintech, Access to Data and the Role of Competition Policy’, Working Paper, (2018) 9, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3106594.

accustomed to accessing a large range of data using screen-scraping. For PISPs, this mechanism was particularly important in case the bank executing the payment did not have any real-time booking system (i.e. a booking system immediately reflecting any movements on the account), as they sought confirmation from the ASPSP that the payment they were initiating had been effectively executed.

The PSD2 states that technical implementation of the XS2A rule must be carried out through a commonly known “Level 2 legislative process.” According to this provision, the EBA has been charged with the task of developing five sets of guidelines and six drafts of RTS. Such measures are crucial for ensuring a workable interoperability and implementation of the XS2A rule, as well as the security of account data transfers.

The initial draft of the RTS published in 2017 raised concerns among FinTech players since it established that the only way to access a customer’s data was through a dedicated interface provided by the bank. According to critics, such a system would have allowed banks to interfere surreptitiously in the data transfer process, thus hampering the commercial potential of FinTech companies. As a response, in 2017 the European Commission published an amended version of the EBA’s draft RTS and set up a mechanism of direct access to customers’ accounts in case of deficiencies of the dedicated interfaces provided by the bank.⁷² In this way, a guaranteed form of communication was ensured in order to avoid the risk of foreclosure of FinTech providers. The draft was further amended following comments drawn up by the EBA against the fallback remedy. The amended draft then held that national authorities, upon adequate reassurance with

⁷² European Commission, Communication on the intention to endorse, with amendments, the draft Regulatory Technical Standards submitted by the European Banking Authority for strong customer authentication and common and secure open standards of communication in accordance with Article 98(4) of Directive (EU) 2015/2366, C(2017) 3459 final.

regards to the functioning of the interface, could exempt incumbents from the contingent direct access mechanism. Moreover, representatives of TPPs would have the opportunity to check the reliability of the banking interfaces and review their quality before any exception was granted. At the end of this complex process of intense debate between the European Commission, the European Parliament and the European Council, the final version of the RTS was released by EBA in March 2018.⁷³ These measures will apply with effect from September 2019, leaving the payment industry eighteen months to get ready for the new framework. The drafting process of RTS demonstrated how difficult it had been to strike a balance between different interests and goals: from clarity to technology neutrality and the need to ensure an effective functioning of the XS2A rule.

The next challenge is the definition process of the APIs that will be used by undertakings. There is no agreement among market players whether to create them in a standardized way.⁷⁴ On the one hand, standardized APIs would hinder innovation as firms would be precluded from experimenting with their own interfaces, which could potentially be more effective than the ones chosen for the whole market. On the other hand, it must be acknowledged that if European ASPSPs were to design their own APIs in subtly different ways, it would become tremendously challenging (and far more time-consuming) for TPPs to develop services capable of plugging-in with each of them. This would likely result in a chronic lack of interoperability and would negatively hinder consumer welfare. Furthermore, even the PSD2 objectives of commonality and

⁷³ Commission Implementing Regulation 2018/308 laying down implementing technical standards for Directive 2014/59/EU with regard to formats, templates and definitions for the identification and transmission of information by resolution authorities for the purposes of informing the European Banking Authority of the minimum requirement for own funds and eligible liabilities (2018) OJ L60/7. See also European Banking Authority, Opinion on the implementation of the RTS on SCA and CSC, (2018) <http://www.eba.europa.eu/-/eba-publishes-opinion-on-the-implementation-of-the-rts-on-strong-customer-authentication-and-common-and-secure-communication>.

⁷⁴ Milanesi, *supra* note 17, 75-78.

harmonization would be seriously at risk of remaining dead letter. For these reasons, allowing a wide range of API standards to be adopted throughout the Internal Market would pose a serious threat that needs to be duly considered. Conversely, a minimum level of standardization would enable developers to write innovative applications that work efficiently across European ASPSPs and across borders in a harmonized way and would provide some building blocks on which Open Banking could lay its foundation. Against this background, the European Parliament took a strong stance in favor of the creation of a set of standardized APIs that undertakings could use as a shared language and highlighted the importance of interoperability for the rise of FinTech innovation.⁷⁵

For its part, the UK took the lead in the transition towards Open Banking by enacting an array of additional measures aimed at going farther than the PSD2 goals by mandating the development of a single, open standardized API for the whole industry. In 2016, the UK Consumer and Market Authority (“CMA”) found that retail banking markets are affected by a lack of competition since well-established and larger banks do not have enough incentives to compete to attract and retain customers.⁷⁶ Conversely, new entrants have to bear excessively high barriers to entry which stifles innovation. As a consequence, consumer welfare as whole is hampered as users are not taking advantage of a broad range of potential new services and, at the same time, are paying more than

⁷⁵ European Parliament, *supra* note 7, 13. See European Commission, *supra* note 19, 9, highlighting that most respondents to the public consultation underlined that interoperability is a priority for the FinTech market, and that further standardization is needed: standards and technical specifications should be developed by market participants and by the industry, and the use of global standards should be promoted, as opposed to national or regional standards. Furthermore, a majority of respondents promoted the adoption of an open source model where libraries of open source solutions would be made available to developers and innovators. It is also worth mentioning the ‘Berlin Group’ interoperability standards and harmonization initiative, a pan-European standardization body, which involves ASPSPs, banking associations, payment associations, payment schemes, and interbank processors, with the objective of defining open and common scheme- and processor-independent standards in the inter-banking domain. A task force of the group is dedicated to create an open, common and harmonized European API standard to enable third party providers to access banks accounts under the PSD2.

⁷⁶ UK Competition and Markets Authority, *supra* note 18, 3 and 6.

they should. The significance of such findings triggered the prompt regulatory reaction of the CMA, which drew up a far-reaching and integrated package of reforms aimed at strengthening competition and improving consumers' gains. First of all, a full implementation of Open Banking was scheduled and time-tabled so as to align with the implementation of the PSD2 entry into force by early 2018. Secondly, a duty was placed on banks to publish trustworthy and objective information on the quality of services on their website and branches in a form capable of being used by comparison tools. Finally, incumbents were required to send out suitable notices to consumers outlining any increase in charges or closure of local branches so that they could evaluate whether to switch banking providers.

After an open consultation and an in-depth coordination with other government bodies (such as, among others, the Financial Conduct Authority, the Treasury and the Bank of England), the CMA issued the Retail Banking Market Investigation Order on February 2, 2017.⁷⁷ Among the several provisions, the Order covered Open Banking-related measures. More specifically, it charged the nine banks with the largest market share in Great Britain and Northern Ireland with setting an Open Banking Standard together with representatives of stakeholders, consumers and SMEs.

Regulators in other countries have recently expressed interest in developing frameworks that put consumers in control of their account data. The Australian Government Productivity Commission has recommended the adoption of an Open Banking regime that gives consumers perpetual access to their data, with the ability to see

⁷⁷ UK Competition and Markets Authority, 'The Retail Banking Market Investigation Order 2017, (2017) <https://assets.publishing.service.gov.uk/media/5893063bed915d06e1000000/retail-banking-market-investigation-order-2017.pdf>. Even though according to the initial planning the first deliveries of the Order were scheduled by January 2018, the implementation process had proved more challenging than anticipated. Consequently, the ACM approved a postponement to September 2019.

that data safely moved from one provider to another.⁷⁸ In the same vein, the Canadian Competition Bureau has invited policy makers to embrace broader open access to systems and data through APIs;⁷⁹ regulators should encourage the use of technology to facilitate account switching, and the use of APIs to access consumers' portfolio information can help make switching easier. Furthermore, in 2017 Japan amended the Banking Act to promote open innovation enabling FinTechs to access financial institutions' systems via API connection. Moreover, the Monetary Authority of Singapore has set up an APIs register to serve as the initial landing site for Open APIs available in the Singapore financial industry. Finally, like in the EU, Article 76 of the recent Mexican FinTech Law (*Ley de Instituciones de Tecnología Financiera*) requires financial entities and FinTech institutions to establish APIs to allow, with the prior consent of users, connectivity and access to interfaces developed or managed by other financial entities and FinTech institutions.

5. Concluding remarks. The competitive potential of the access to account rule:

Wishful thinking or actual disruption?

Whenever technological innovation generates potential disruptive breakthroughs, regulators are called to quickly assess the effectiveness of their oversight strategies and weigh the advantages and the drawbacks of further interventions. Since the financial services and banking sectors are heavily regulated, the regulatory framework may

⁷⁸ Australian Government Productivity Commission, 'Competition in the Australian Financial System', Report no. 89 (2018), <https://www.pc.gov.au/inquiries/completed/financial-system/report/financial-system.pdf>.

⁷⁹ Canadian Competition Bureau, *supra* note 11.

represent a significant barrier to market entry and success for FinTech companies.⁸⁰ Indeed, some incumbents are eager to invoke more rules over the use of big data techniques in the financial industry. Notably, they raise concerns for what they perceive as a regulatory arbitrage or an unlevel level playing field between regulated financial institutions and Fintech companies.⁸¹ Thus, in order to maintain fair competition among various players, these operators claim that any potential regulatory or supervisory measures should remain technology-neutral and that respect for the principle of “same business, same rules” should be ensured. However, it is important to note that the European Supervisory Authorities have clearly stated that several existing pieces of legislation in the financial sector, together with the new data protection system, address the concerns raised regarding the lack of a level playing field.⁸² More generally, the European Supervisory Authorities have highlighted that legislative requirements existing in these areas constitute an already quite solid framework to mitigate the aforementioned risks.

In this scenario, the regulatory intervention enacted by the EU through the PSD2 and, more specifically, the introduction of the XS2A rule, represents a compelling attempt made to strengthen competition within retail banking markets. Additionally, it is paving the way for a transition towards an Open Banking environment. From a competition policy angle, this move makes perfect sense, as it provides for a general duty on incumbents to grant access, on a non-discriminatory basis, in favor of new entrants which

⁸⁰ Portuguese Competition Authority, *supra* note 60; Canadian Competition Bureau, *supra* note 11; C. Mariotto and M. Verdier, ‘Innovation and Competition in Internet and Mobile Banking: an Industrial Organization Perspective’, Bank of Finland Research Discussion Papers No. 23 (2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2763701.

⁸¹ European Supervisory Authorities, Joint Committee Final Report on Big Data, (2018) 9-10, <http://www.eba.europa.eu/documents/10180/2157971/Joint+Committee+Final+Report+on+Big+Data+%28JJC-2018-04+%29.pdf>.

⁸² European Supervisory Authorities, *supra* note 81, 7.

would otherwise be precluded from providing their services. Indeed, as acknowledged by the European Commission, in many business models for third parties providing payment services, prior information on the availability of funds on the consumer's payment account is a key element; hence in order to provide AISs and PISs, the third party providers need to access the customers' accounts using the existing account infrastructure put in place by banks and the customers' credentials.⁸³

From this perspective, the introduction of the XS2A rule should be appreciated, since the guarantee of safe and stable access to a newly arising vertically-integrated multitude of players is beyond the scope of the existing antitrust toolbox. Indeed, competition law is inherently based on a discrete assessment of the single case at stake. Thus antitrust enforcement seems unable to target consistently competitive challenges as broad as the needs of the FinTech wave. This does not mean that regulatory intervention alone could prove adequate to make competition and innovation thrive in the retail banking market as well as in the payment system. Rather, antitrust enforcement shall be considered as a complementary tool necessary to address more subtle forms of anti-competitive practices which could not be addressed through regulatory implementation mechanisms.⁸⁴ Competition authorities are called to oversee the transition towards Open Banking, which is driven by the regulatory intervention of EU policymakers. Since incumbents retain strong incentives to foreclose new FinTech entrants and the implementation process of the XS2A rule is inherently complex, traditional banking players can easily engage in subtle forms of anti-competitive practices which risk frustrating the potential of the XS2A rule. It is not surprising, then, that in October 2017 the European Commission carried out

⁸³ European Commission, *supra* note 25, 130 and 137.

⁸⁴ The Netherlands Authority for Consumers & Markets, *supra* note 24, 34.

some inspections in the offices of European banking associations in Poland and the Netherlands looking to find evidence of alleged anti-competitive practices aimed at blocking non-bank-owned providers of financial services from gaining access to the account data of customers who had granted authorization to these providers.⁸⁵

Even though the XS2A rule can be regarded as a sector-specific data portability mechanism with great potential to open up the retail banking market, the implementation process of the mechanisms entrusted with the task of executing the XS2A rule is going to be crucial for its future success. Interoperability is a priority for the FinTech market, and standardization initiatives aimed at defining shared open APIs are encouraged in Europe and in other countries such as Australia, Canada, Mexico, Japan, and Singapore.

Lastly, consumer reaction and feedback will play a major role in determining how pro-competitive the regulatory intervention proves to be. While there are few doubts about the potential disruptive impact Open Banking could have on incumbents' market power, the response from the demand side remains to be seen.⁸⁶ Even though consumer-banking relationships in the EU have been traditionally stable, this situation is likely to change. In the UK, surveys have shown that 63% of retail customers are open to sharing financial data regarding their accounts with a competing FinTech firm, bank or aggregator in pursuit of a more efficient service or product.⁸⁷ On the other hand, it is equally true that, for the time being, Open Banking is not a reality and will take time to be implemented. Furthermore, most UK consumers are still unaware of Open Banking and

⁸⁵ European Commission, Fact Sheet - MEMO/17/3761, (2017) http://europa.eu/rapid/press-release_MEMO-17-3761_en.htm.

⁸⁶ Bain & Company, 'Coping with the Challenge of Open Banking', (2018) <https://www.bain.com/insights/coping-with-the-challenge-of-open-banking>; analysts estimate that 10% to 20% of current UK banking business is at risk of being disintermediated following Open Banking regulatory initiatives.

⁸⁷ Bain & Company, *supra* note 86.

its related benefits, not to mention the potential reluctance to share such highly sensitive data as personal transaction histories and other related information.⁸⁸

It would be premature to draw any conclusion on the success of the XS2A rule, especially in the light of its on-going implementation process. Nevertheless, it is worth paying close attention to the development of Open Banking as an outcome of the sector-specific intervention enacted by the EU. A new role for regulation is being pioneered and is being driven by the ambition to unlock competition and to lay the foundations for the rise of new, integrated markets.

⁸⁸ According to Accenture, ‘Research on Open Banking and UK consumers’, (2017) <https://newsroom.accenture.com/news/accenture-research-finds-lack-of-trust-in-third-party-providers-creates-major-opportunity-for-banks-as-open-banking-set-to-roll-out-across-europe.htm>, 69% of consumers declared they would not share their bank account information with TPPs, and 53% of the customers said they will never change their existing banking habits and adopt open banking.