IN-DEPTH ANALYSIS

Requested by the ECON committee

European Parliament

Competition issues in the Area of Financial Technology (FinTech)

Study presentation

Policy Department for Economic, Scientific and Quality of Life Policies
Directorate-General for Internal Policies
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PE 631.061 – April 2019

EN

Competition issues in the Area of Financial Technology (FinTech)

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Abstract

The study presented in this event deals with the new competition challenges brought about by the increasing number of FinTech services, which are provided by newcomer start-ups, traditional financial institutions and big tech companies. Namely, network effects derived from the use of online-platforms, the use of customer data, algorithms, standardisation and interoperability can result in anticompetitive behaviour. The analysis takes a service-by-service approach to provide both, a descriptive breakdown and normative tools to anticipate and manage anticompetitive behaviours as they occur.

This presentation was prepared by Policy Department A at the request of the ECON Committee.

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

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LINGUISTIC VERSIONS
Original: EN

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Manuscript completed: September 2018
Date of publication: April 2019

This document is available on the internet at:
http://www.europarl.europa.eu/supporting-analyses

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LIST OF ABBREVIATIONS

AI	Artificial intelligence
DLT	Distributed ledger technology
ECON	Committee on Economic and Monetary Affaris in the European Parliament
FinTech	Finanical technology
GDP	Gross domestic product
M&A	Mergers and Acquisitions
NFC	Near field communication
PFM	Personal Finance Management
PSD2	Directive 2015/2366/EU 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
SME	Small and medium-sized entreprise
UK	United Kingdom
US	United States of America
USD	United States Dollar

INTRODUCTION

The present research was provided to support the work of the Competition Working Group within the ECON committee. The aim was to have a closer look into financial technology (FinTech) which is still a rather young phenomenon that came up with the digitisation of the business world.

FinTech is used to support or enable banking and financial services. It includes innovations how business transactions take place and the automation of certain processes; it implies the potential to disrupt markets and modify existing structures. FinTech services are offered by newcomer start-ups, traditional financial institutions and big tech companies. However, compared to traditional providers of financial services, many of the FinTech providers are scarcely or not at all regulated. Both, regulation and supervision policy in this field are under discussion. Given the fast growing investment in the market, questions arise how effective and fair this market works. Namely, network effects derived from the use of online platforms, access to customer data, standardisation, interoperability and the use of algorithms can bear significant risks to competition. With view to the European Parliament's acknowledgement of the importance of a level playing field and easy market access for newcomers, but also to a potential negative impact of network effects, the Committee wished for an overview of where competition issues in Financial Technology sector could arise.

The final study was published in July and presented to the Members in the European Parliament on 27 September 2018. Since a webstream of the event is not available, the present publication includes the unabridged executive summary of the study as well as the slides prepared by the authors for the presentation to ease access to the research.

The full study can be found under the following link:
http://www.europarl.europa.eu/RegData/etudes/STUD/2018/619027/IPOL_STU(2018)619027_EN.pdf.

EXECUTIVE SUMMARY

This study analyses competition issues in the FinTech ecosystem. After describing the current situation of this ecosystem, the services, the market, the users' perception and the providers of FinTech services, the study focuses on analysing potential anticompetitive factors and their impact both in the FinTech ecosystem as a whole and in concrete services categories. The area of FinTech is still very young and constantly evolving. This is why an established case practice of how to deal with competition concerns has not yet been developed and official decisions by competition authorities have still to emerge.

The FinTech services

FinTech services offer significant potential benefits to European consumers, such as cost reduction, improvements in efficiency, greater transparency and a contribution to the goal of financial inclusion. **FinTech has come to revolutionise the way in which traditional financial services providers work and interact with their customers.** It is changing the dominant paradigms by which traditional financial services are provided, resulting in a significant disruption.

Given the rapid evolution of FinTech services, **there is no consensus on a standard classification**. In this study the following categories are proposed, which encompass the FinTech services currently provided:

(1) Banking —deposits and lending—,

(2) Payments, Transfers and Forex,

(3) Digital currencies,

(4) Wealth and Asset Management,

(5) Personal Finance,

(6) InsurTech, and

(7) Enabling technologies and infrastructures.

The FinTech market

The difficulties defining the exact scope of FinTech services make it challenging to quantify the size of the current and potential market. An additional difficulty is the complexity of differentiating FinTech services provided by traditional firms in the financial sector from other services. As a result, **there are no estimates of turnover for FinTech services** (considering all the services analysed in this study) **as a whole in Europe at the moment**.

The FinTech users

Some sources estimate that the average percentage of digitally active consumers using FinTech services in 2017 was 33 %. In Europe, the **UK and Spain** are the countries with the highest share of FinTech users, with 41 % and 37 % respectively. Germany, with 35 %, is the third European country above the global average. Globally, FinTech **services related to payments and transfers** showed the highest penetration among users (50 %), followed by insurance (24 %), savings and investments (20 %), financial planning (10 %) and borrowing (10 %).

FinTech is considered to have an enormous potential in improving **financial inclusion**. FinTech services have the capacity of providing more easily accessible and affordable financial services to large masses of the population and small and medium-sized enterprises (SMEs), especially in the area of credits and payments.

Besides financial inclusion, it is no surprise that **improving user experience** is at the heart of the conceptual design of FinTech services. In fact, in 2016, 37 % of Europeans expressed their willingness to switch their financial services provider if it does not offer advanced technology services or products. Unlike what happens with other digitalised services, digital skills and access to technology are not the only factors influencing the penetration of FinTech services. **Trust** is a key element of all financial services and is equally in FinTech.

The FinTech providers

According to the *Crunchbase* database, there are more than 3 850 FinTech service providers in the world. The EU ranks 2nd in number of services providers after the US, with more than 1 000 FinTech companies. Enabler companies are the most frequent, followed by providers of banking services.

The level of investments in the sector provides a good overview of the relevance of FinTech services in different regions. The **US leads** the ranking accounting for some USD 29 billion of total investments, followed by far by China, the UK and India as shown in Figure 14. The EU (excluding the UK) ranks 5th, accounting for USD 3.6 billion.

European companies (including the UK) **are smaller**, with a larger number of micro-enterprises with less than 10 employees. **European FinTech companies** (excluding the UK) **are also younger** with an average age of 6.5 years compared to 9.8 in the US and 8.5 in India.

In the EU and the US, the percentage of FinTech companies that have been acquired is much higher than in other markets. It suggests that **currently market exit of start-up FinTech companies in the EU mainly happens through acquisitions**. Companies in Europe are likely to be acquired by larger firms to complement their current offering. This fact leads to the need for a close monitoring on the acquiring of firms to avoid anticompetitive behaviours.

We have also analysed the relationship between the acquiring companies and the acquired companies and concluded there is a strong geographical endogamy. European companies are acquired by European companies and US companies are mainly acquired by US companies.

Competition issues in the FinTech sector

Most of the potential competition issues in the FinTech sector described throughout the study have not occurred —or have not been detected by competition authorities— so far. Thus, the discussion about the competition problems is still **hypothetical**; however, it is necessary to analyse where competition concerns may arise and how they should be addressed, as they may materialise in the future.

The application of competition instruments to analyse potential anticompetitive behaviours in the FinTech sector faces several challenges, the most relevant being the **difficulty in applying these traditional instruments to the new market phenomena** such as market definition and assessment of market power. Traditional indicators such as market shares, prices or profit margins fail to explain the economic relationships between offer and demand in the provision of FinTech services. Missing a stable market, any analysis of competition is bound to be tentative, since competition challenges could unfold in different directions, depending on what turns out to be the decisive factor that provides a competitive advantage.

Commonalities in FinTech competition challenges

A **service-by-service approach** based on the business model of each service category has been used to explain the competition issues. This should not obscure the fact, however, that there are **strong commonalities**[1] **in FinTech competition challenges** that go beyond a particular service, or operator.

Common competition challenges have been analysed taking into account two perspectives:

- The **supply-side perspective**, with two categories of technology that have great influence in explaining competition challenges: **online platforms** and the intensive use of **data**.
- The **demand-side perspective**, which refers to the way users **access and operate** FinTech technologies and their **behaviour and perception** of FinTech technologies as a means to deliver financial services.

The use of **multi-sided online platforms** to provide FinTech services implies that the definition of the **relevant market** cannot be undertaken following traditional models built on the premises of *pipeline* businesses where value is generated by the supplier of a product or a service. In the case of platforms, the value or a large part of it, is generated by the users on the other side. The second competition challenge resulting from the combination of platform dynamics and users' perception and behaviour is the generation of **network effects**. FinTech platforms are not as regulated as financial trading platforms, and therefore the challenges arising from network effects need to be assessed as a competition challenge. These challenges include the risk that multi-sided network effects enable a large platform to be **insulated** from competition from smaller platforms with fewer participants and can create **barriers of entry**. Other factors may be at play that modulate the intensity and features of the network effects, and their influence on the potential competition issues. It is particularly relevant whether users tend to choose only one provider ('*single homing*') or several providers ('*multi-homing*'). Network effects increase with the **intensity of use** and the **single-homing** nature of the platforms.

Interoperability is another potential anticompetitive factor related to platforms. An active pursuit of non-interoperability can act as a deterrence with anticompetitive effects if access to the market is difficult or costly.

Standardisation also plays a relevant role in the field of competition between FinTech providers. If standardisation lowers entry costs, and prices, and/or allows firms to compete on more *core* parts of the service, then it has a positive effect. However, standardisation may also result in an oligopoly where providers may take the opportunity to agree on features of the service to split the market between them.

Access to data may become another competition issue in the FinTech ecosystem. Therefore, the role of data to establish a competitive advantage needs to be borne in mind as one of the elements involved in assessing the competitive position of the company resulting from a merger. Control over unique data troves, resulting from the combination of datasets from multiple sources, should also be one of the main factors considered when assessing potentially anticompetitive behaviours. They can result in, for example, **exclusionary conduct** when not allowing competitors to access data, the conclusion of **exclusive contracts**, if the incumbent uses its control over a particularly valuable dataset to create a network of contracts that forecloses competition, or **tying and bundling** of services, leveraging the firm's position and imposing the use of other services.

[1] Explained in section 3.1. of the study.

Computer algorithms themselves may also result in anticompetitive practices. They may do so in a way that promotes express and **tacit collusion** because they can learn by themselves and conclude that the best way to maximise profits is to develop collusive practices.

Specific competition issues of each FinTech category

Banking

The main obstacle for the development of a competitive market is not due to existing anticompetitive behaviours in the market, but a **lack of clear regulatory standards**. Banking platform markets are primarily multi-home and do not have a high intensity of use, so potential anticompetitive factors might not have a real impact on competition at this stage.

Payments, transfers and Forex

Payments are the FinTech services that competition authorities are paying the most attention to. Relevant concerns that could lead to diminishing competition in the provision of payment services include **access to critical assets** such as data and mobile near field communication (NFC) chips, and the **use of an incumbency position gained offline** to engage in exclusionary conduct towards competitors.

Digital currencies

The market for digital currencies is characterised by **competition between currencies** (inter-cryptocurrency market) and **competition between exchanges** (intra-cryptocurrency market). While each sub-market, namely mining, exchanges, wallets and payments, is subject to diverse dynamics which may result in different competition issues, there are also common factors among them. One of the most relevant is the presence of **network effects**. Another potential anticompetitive factor is the **standardisation of distributed ledger technology (DLT)** and other technical protocols. Private or public consortia agreements in relation to technical standards may affect the market entry or have an impact on current costs.

Denial of access to the gateways of traditional banking activities, such as payment systems for bank account transfers or card processor schemes, is also a potential anticompetitive behaviour.

The arrival of permissioned cryptocurrencies promoted by banks, even by central banks, will reshape the current competition level in the cryptocurrency market, broadening the number of competitors. However, the **market power of banks in traditional banking services might be used to limit competition in the cryptocurrency market** through pre-emptive acquisitions or predatory pricing schemes.

Wealth and Asset management

The potential competition challenges in this area involve the **fee policies** of different service providers, the **blurring of boundaries** between different types of services (information, advisory, management) and the implications of the **use of algorithms**. The last one is an issue that looks more promising from a competition policy perspective. The effects of the use of algorithms in the provision of FinTech wealth management services is mixed. On the one hand, there are pro-competitive effects, such as increased transparency on both price and quality variables as well as a more efficient development of products and services. On the other hand, there are also risks for competition, such as the **potential role of algorithms** to be facilitating factors for co-ordination and **collusion** (algorithmic collusion).

Personal Finance management

Competition issues regarding digital Personal Finance management (PFM) services arise mainly in the field of **customer data access**.

Insurance

Access to customers' data and the impact of algorithms on pricing strategies are the main factors that can lead to anticompetitive practices. The standardisation of private blockchains might also create barriers of entry if the standardisation process lacks the required transparency.

Enabling technologies and infrastructures

There are no specific competition concerns in technologies such as DLTs, Artificial Intelligence (AI) and Data Analytics, apart from the common ones (standardisation, network effects, access data).

There are some specific niches of cybersecurity technologies where market concentration and potential competition concerns might occur.

The advanced cloud services market is dominated by a small number of big tech companies and, furthermore, the barriers for new actors to access this market are huge.

Conclusions

The current state of the markets for FinTech services is generally **too fluid** to reach firm **conclusions on the existence of competition challenges that need the deployment of competition tools on a large-scale basis**. The special role of regulation in the field of financial services sends a message of caution about the appropriateness of competition policy tools as the preferred means to address every challenge.

FinTech services, as part of the digital economy, share potential competition challenges with other digital businesses, mainly those derived from the provision of services through digital platforms and the access to customer data. Thus, the remarks regarding competition in the digital environment remain valid in the FinTech ecosystem.

1. PROGRAMME

Европейски парламент Parlamento Europeo Evropský parlament Europa-Parlamentet Europäisches Parlament
Euroopa Parlament Ευρωπαϊκό Κοινοβούλιο European Parliament Parlement européen Parlaimint na hEorpa
Europski parlament Parlamento europeo Eiropas Parlaments Europos Parlamentas Európai Parlament
Parlament Ewropew Europees Parlement Parlament Europejski Parlamento Europeu Parlamentul European
Európsky parlament Evropski parlament Euroopan parlamentti Europaparlamentet

DIRECTORATE GENERAL FOR INTERNAL POLICIES

POLICY THE ECONOMIC AND SCIENTIFIC POLICIES

STUDY PRESENTATION:

Competition issues in the Area of Financial Technology (Fin Tech)

Programme

Thursday, 27 September 2018, 11.30 to 13.00 hrs, European Parliament, Brussels
Room ASP 3 E3; no interpretation/EN only; the event will NOT be web-streamed

11.30 – 11.35 hrs	**Welcome and Introduction: Markus FERBER, Chair of the ECON Working Group on Competition Policy**
11.35 – 11.55 hrs	**Presentation of the annual study on competition policy on *'Competition issues in the Area of Financial Technology (Fin Tech)'* provided by Iclaves**
David RAMOS MUNOZ	Lecturer at Universidad Carlos III, Madrid and the University of Bologna
Juan Pablo VILLAR GARCÍA	Partner and senior researcher at Quanticae (formerly Iclaves) analytics and artificial intelligence, Madrid
11.55 – 12.55 hrs.	**Discussion on the findings of the study** Questions to be discussed could include: • Challenges in describing the Fin Tech market and defining the services provided • Allocating potential competition issues in multisided markets to the supply or demand perspective • Relevance of algorithmic collusion • Necessity to adapt regulation or enforcement tools
12.55 – 13.00 hrs	**Closing remarks by Markus FERBER, Chair of the ECON Working Group on Competition Policy**

2. CURRICULA VITAE OF THE SPEAKERS

David RAMOS MUNOZ

Dr David Ramos teaches Commercial Law at Universidad Carlos III de Madrid and University of Bologna. He has published extensively on topics of the Law of Financial Markets (including his *Law of Transnational Securitization*, and EU Financial Law), and International Contracts and Arbitration (he is also the deputy director of Moot Madrid (http://www.mootmadrid.es/). He has participated in reports for the European Commission, acted as an independent expert for the Spanish government, and in the private sector acts as an arbitrator and consultant. He is a member of the European Banking Institute (ad personam) and European law Institute, and has been a fellow at the London School of Economics (2010). His research has benefited from grants, such as the Real Colegio de España grant (2007) or José Castillejo program (2010), or the European Central Bank Legal Research Program (2015, 2016).

Juan Pablo VILLAR GARCÍA

Partner and senior researcher at Quanticae, Spanish company focused on data analytics and Artificial Intelligence. Juan Pablo holds a Bsc and Msc in Telecommunication Engineering (Universidad Politécnica de Madrid). He counts with an experience of more than 15 years in the delivery of research projects, including data analysis, desk research, technological assessment, evaluation of public policies, etc. He has participated in the elaboration of several reports in the field of ICT sector and digital economy for both public and private institutions, covering topics such as cybersecurity, language technologies, telecommunication regulation, digital rights or technologies for education.

3. PRESENTATIONS DURING THE WORKSHOP

COMPETITION ISSUES IN THE AREA OF FINANCIAL TECHNOLOGY (FINTECH)

The FinTech Market

The European financial context
FinTech services
The European FinTech market
The European FinTech providers

The European financial context

FinTech disruptive and innovative services

FinTech adoption provides major impacts on the financial industry: **lowering barriers to entry** by eliminating physical branches and large organisational structures; **disintermediating** the current value chains; introducing **new business models** based on **platforms** and **sharing economies**; and providing a more efficient provision of services.

These technologies are being developed or used in the financial sector by **three types of stakeholders**: (1) **newcomers,** i.e. start-ups offering products/services with both a financial and a technological background; (2) **traditional financial services providers**, or incumbents, such as banks, insurers or brokers expanding into FinTech services; and (3) (Big) **technological companies** that lever their competitive (technological) advantages to enter financial services.

The traditional financial sector is restructuring itself after the financial crisis and ripe for disruption

The financial sector faces two simultaneous changes for incumbents: (1) **changes caused by the financial crisis** such as balance sheet and business restructuring, bank consolidation, and new exacting rules; and (2) **the need to adapt business models** to the digital transformation of the traditional business models.

Bank adoption of FinTech and digital transformation: 'open innovation' ecosystems

All incumbents have now embarked on **digital transformation** processes and many of them are developing **FinTech ecosystems**, under the paradigm of '*open innovation*' which combines technology, customers and regulatory compliance around innovation and business models.

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FinTech services

Banking

Deposits
- Demand Deposits
- Savings Accounts
- Time Deposits
- Call Deposits

Lending and equity
- P2P Consumer lending
- P2P Business Lending
- Invoice Trading
- Equity-based Crowdfunding
- Reward-based Crowdfunding
- Real State Crowdfunding
- P2P Property Lending
- Balance Sheet Business Lending
- Donation-based Crowdfunding
- Debt-based Securities
- Balance Sheet Consumer Lending
- Mini-Bonds
- Profit Sharing
- Balance Sheet Property Lending

Payments, Transfers and Forex
- Mobile wallets
- P2P mobile payments
- Foreign Exchange and Remittances
- Real-Time payments

Digital currencies
- Cryptocurrency Wallets
- Cryptocurrency Payments
- Cryptocurrency Exchange and Trading
- Mining

Wealth and Assets Management
- Comparison websites
- Financial aggregator platforms
- Robo-Advisors
- Social trading and investing platforms and other innovative business models
- Algorithmic trading

Personal Financial Management
- Budgeting
- Comparison Platforms for Financial Services

InsurTech
- Comparison Platforms for Insurance Products
- P2P Insurance
- Usage-Based Insurance
- On-Demand Insurance
- Robo-advisors

Enabling technologies and infrastructures
- Distributed Ledger Technologies
- Data Analytics
- Artificial Intelligence
- Cybersecurity
- Advanced Services from Cloud Infrastructures

The proposed classification encompasses the **most comprehensive** set of the current FinTech services and those that are expected to be provided in the coming years, as it **combines all the classifications** defined by other sources.

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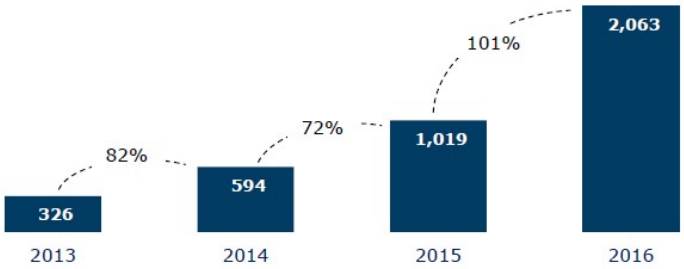
The European FinTech market

It is challenging to quantify the size of the current and potential market. The problem begins with the perception of what is a "Fintech service", which may vary across users, and firms. For instance, traditional firms may see a clear difference between lending, investment, and advice, while this may be less clear for tech firms.

As a result, **there are no estimates of total turnover** for FinTech services as a whole in Europe at the moment. Some research and consulting organisations provide partial estimates of specific services, countries or regions. The figure below shows the evolution of the **European online alternative finance market volume.**



Source: Cambridge Centre for Alternative Finance (2016)

The average percentage of digitally active consumers using FinTech services (**FinTech adoption rate**) was 33 % in 2017. In Europe, the UK and Spain are the countries with the highest adoption rates of FinTech, with 41 % and 37 % respectively.

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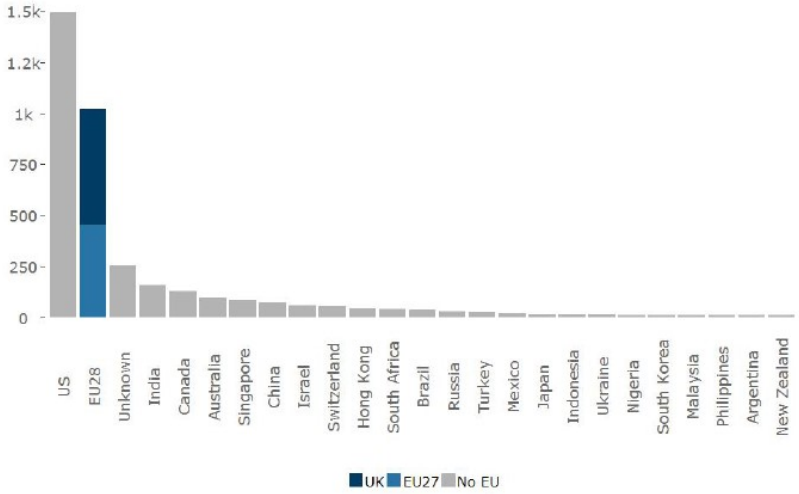
The European FinTech providers

The global FinTech sector is made up by more than 3 800 companies. The US is the most relevant player in the sector with some 1 500 FinTech companies, followed by **the EU** as a whole with **1 020 companies**. Within the EU, the UK is by far the largest contributor to the FinTech sector with 454 companies, accounting for 45 % of all EU companies



Source: Compiled by Iclaves based on Crunchbase

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Competition issues in the FinTech sector

Common competition challenges
Specific competition issues of each service category

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Common competition challenges

Most of the potential competition issues in the FinTech sector described throughout the study **have not occurred so far**. Thus the discussion about the competition problems is still **hypothetical**.
The following matrix classifies FinTech's common competition challenges pursuant to two perspectives: the **supply-side**, which is **based on the type of technology** that characterises the services, and the **demand-side**, which focuses on the **perspective of the user when approaching the technology**, and the service rendered by it. The matrix also shows the **categories of problems that fall outside the scope of competition policy** (the grey boxes outside the table) and need to be addressed by other policy tools but are still related to competition.

Regulation & licensing

Investor protection (eg. MiFID)

		Demand-side perspective	
		User access and operation	**User perception and behaviour**
Supply-side perspective	**Platforms dynamics**	Interoperability; Standardisation	Relevant markets (users' distinction of services); Network effects arising from use patterns (single/multi-home use, intensity,...)
	Data	Portability; Interoperability; Data algorithms & exclusion; Price discrimination; Predatory pricing	Portability; Data and market power; Cross-usage of datasets and shadow banking; Data access (competitors' exclusion discrimination); Digital pricing, AI use & collusion (models and data training)

Consumer protection

Data protection

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Specific competition challenges

BANKING

Disparity of the national regulatory approaches may become a barrier of entry for new players.
Incumbents may leverage their market power in the offline lending services market to **create their own digital platform** to sell loans, avoiding investing in other platforms and thus **limiting competition**.
Tech companies may leverage their market power in related services, e.g. e-commerce, which provide them with an advantage, e.g. data, to offer financial services seeking strategies of **predatory pricing**.

PAYMENTS, TRANSFERS AND FOREX

Competition authorities have **cleared** all the cases so far, recognising there are sufficient **alternative** issuers of payment services in the national markets where the new services intend to operate.
A relevant issue for competition in the provision of payment services is the **access to critical assets** such as **data** and mobile NFC **chips** by tech firms (PSD2).
While policymakers' concern are start-ups, **Big Techs** can use PSD2 framework to gain an **unassailable (data) advantage**.

DIGITAL CURRENCIES

Two different markets can be identified: **inter-cryptocurrency** and **intra-cryptocurrency.**
Inter-cryptocurrency market: **Market concentration**, presence of **network effects** that may lead to **collusive agreements**, **vertical integration strategies** may lead to practices to **exclude competitors.**
Intra-cryptocurrency market: market power of incumbent banks might be used to limit the competition through **pre-emptive acquisitions** or **predatory pricing**.
Standardisation of DLT.

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Specific competition challenges

WEALTH & ASSETS MANAGEMENT

Price competition is not working properly, derived from a **price clustering scheme** and high level of profitability of asset management firms.
An additional risk is algorithmic collusion, although distinctions need to be refined (not all algorithms are equal).
PSD2 may grant Big Techs an advantage to be exploited here.

PERSONAL FINANCE MANAGEMENT

Access to customers' data granted by PSD2, but **concerns about Big Tech remain**.
Security and data privacy do not currently present clear threats for competition.

INSURANCE

Insurance Block Exemption Regulation is not longer necessary. Commission's Horizontal Agreements Guidelines allow creating adequate information exchange agreements between insurance companies.
Access to **customers' data** and **impact of algorithms** on pricing strategies can lead to anticompetitive practices.

ENABLING TECHNOLOGIES

Although they are subject to several factors that might result in anticompetitive behaviours (standardisation processes, network effects, M&A) **none of them has materialised so far**.
In the field of **cybersecurity services**, there are some **specific niches** where **market concentration** an **potential competition concerns** can occur.
The market of **advanced cloud services** is dominated by a few number of big tech companies and the **barriers** for new actors to access are huge.

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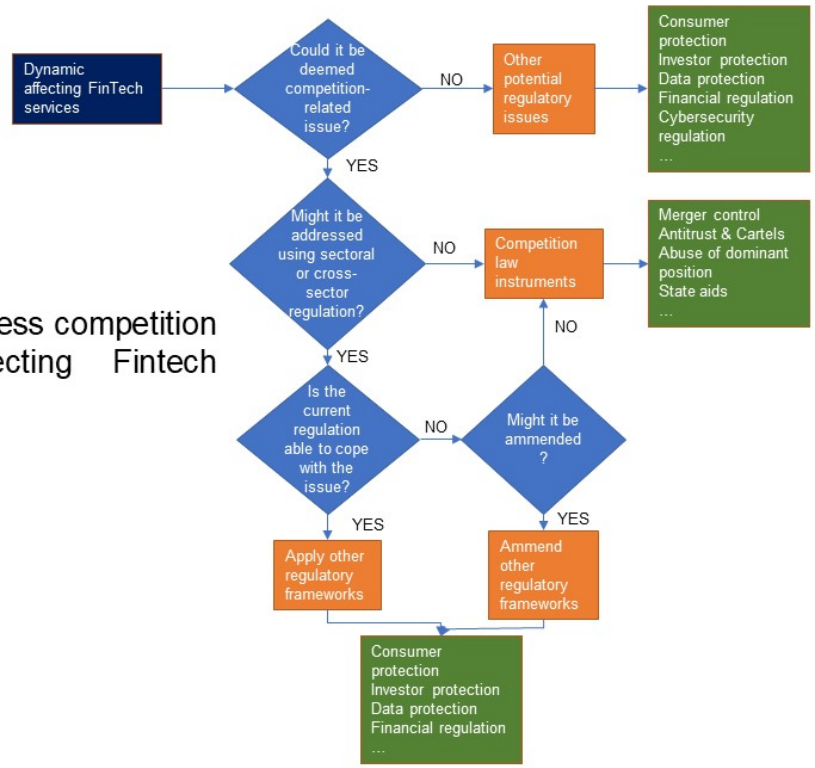
Descriptive analysis

- **Multi-sided markets**, such as FinTech platforms, make it difficult to define the **relevant market** using traditional models built on the premises of '*pipeline*' businesses where value is generated by the supplier of a product or a service.
- Unlike financial trading platforms, the issue of competition-concentration arising from **network effects** is not a regulatory issue, but a competition issue. Network effects can insulate a large platform from competition by platforms with fewer participants and create barriers of entry. Yet, network effects are not indicative *per se* of the existence of competition problems that need to be addressed. Sadly, competition tools are more blunt than regulatory tools.
- An active pursuit of **non-interoperability** in the provision of FinTech services can have a deterrent and anticompetitive effect if access to the market is difficult or costly. **Standardisation**, if it leads to interoperability, is desirable, but may open another (different) opportunity for collusion.
- **Data are the key to understand the source of competitive advantage**: once a firm's data troves provide it with an unassailable position, it matters less which services it expands into: it will be a source of exclusionary conducts such as refusal of access or exclusive contracts. This needs to be borne in mind when assessing mergers, agreements, and dominant positions.
- **Computer algorithms** can promote express and tacit **collusion**: algorithms can be used to find non-competitive price equilibria, implement agreements, detect deviations and implement automatic reactions to market conditions.

Descriptive analysis

How to address competition issues affecting Fintech services?



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Possible courses of action

BANKING

The main obstacles to the development of marketplace lending services are not a result of anticompetitive behaviour but a **lack of clear regulatory standards.**
The use of algorithms can lead to **financial exclusion**. It is unclear, though how competition policy tools, rather than regulatory tools, e.g. fair access to credit rules, or consumer protection tools, may be a suitable instrument to deal with the issue.

PAYMENTS, TRANSFERS AND FOREX

Fostering an **open banking ecosystem** is an initiative undertaken by national regulators. Yet the implications on an EU-wide scale of rules on access, licensing, and data-sharing are unclear. What is sensible for start-ups may backfire if applied to Big Techs.
Competition policy tools seem to be used to enforce minimum standards. It is unclear if they are suitable for more sophisticated problems, e.g. ensuring that not only financial incumbents share data.

DIGITAL CURRENCIES

Careful monitoring of vertical or horizontal integration processes as well as exclusionary conduct towards other cryptocurrencies or players are required for every sub-market (mining, wallet and payment, and exchange).

WEALTH & ASSET MANAGEMENT

The presence of **algorithms** raises genuine competition concerns, but the use of competition tools may still be unwarranted for reasons of sector specificity. Leveraging a "data advantage" into these services would be natural, but has not already happened.

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Possible courses of action

PERSONAL FINANCE MANAGEMENT

Financial incumbents' denial of access, and Big Tech's use of their PSP position to offer other services are important challenges. The former is being addressed by **regulatory initiatives.** The latter is still a **potential**, but not present, threat.
It is unclear how competition policy tools, rather than, for instance, consumer protection, regulation, or data rules, may be the more appropriate instruments to deal with the issue of financial exclusion.

INSURANCE

Competition authorities should be particularly attentive to agreements on **information exchange** that are limited to established companies, or agreements to **standardise technology** (e.g. blockchain standardisation agreements). These concerns, however far away, are probable, and a closer monitoring of the sector is needed.

ENABLING TECHNOLOGIES & INFRASTRUCTURES

Most markets in FinTech services' enabling technologies and infrastructures, e.g. DLTs, AI and Data Analytics, as well as cybersecurity, **pose no competition concerns.** The only cause for concern is the market of advanced cloud services. It is important to closely monitor the services offered, to aid in the effort of defining the relevant market, which so far remains the main challenge.

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Conclusions of the assessment

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Conclusions

- The current state of the markets for FinTech services is generally **too fluid** to reach firm conclusions on the most pressing competition challenges. Generally, financial incumbents pose the more present threats, Big Techs the harder ones. Yet the example of financial services, where regulation is used to address competition concerns sends a **message of caution:** "pure" competition policy tools (inquiries, fines, etc.) tend to be too blunt an instrument to address subtler (yet very serious) challenges.

- The initial response may lie in **regulatory measures**, rather than **competition measures.** This is the conclusion for several services, such as banking/lending, wealth and asset management and insurance. Others, such as services related to digital currencies, or personal finance management, are still in an even **earlier stage** where the need for regulation is being assessed. In some cases, the conclusions may be mixed.

- The current state of the FinTech ecosystem **does not suggest** a need for **urgent changes on** competition policy tools, unless there is a radical switch towards preventive, rather than punitive tools. Yet, we should see the forest for the trees. **FinTech competition challenges arise from technology factors** (platforms, data) **not the services themselves**, and change can happen swiftly. Once a company exploits network effects and data to gain an advantage it may be too late. **Rather than a "FinTech competition policy" a broader, cross-sectoral position on "data and platforms" is needed**.

- The FinTech ecosystem shows the need for a **more symbiotic relation between regulatory and competition frameworks**, which is currently insufficient.

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4. PRESENTATION POSTER

STUDY PRESENTATION

European Parliament

POLICY DEPARTMENT A
ECONOMIC AND SCIENTIFIC POLICY

Competition issues in the Area of Financial Technology (FinTech)

DATE
27 September 2018

TIME
11:30 - 13:00

ROOM
ALTIERO SPINELLI 3E-3

Committee on Economic and Monetary Affairs (ECON)

Competition Working Group

Chair: Markus FERBER, MEP

REFERENCES

Selected documents for further reading:

- European Commission, FinTech Action plan: For a more competitive and innovative European financial sector, March 2018, COM (2018) 109 final, https://eur-lex.europa.eu/resource.html?uri=cellar:6793c578-22e6-11e8-ac73-01aa75ed71a1.0001.02/DOC_1&format=PDF and https://eur-lex.europa.eu/resource.html?uri=cellar:6793c578-22e6-11e8-ac73-01aa75ed71a1.0001.02/DOC_2&format=PDF and Fact Sheet https://ec.europa.eu/info/sites/info/files/180308-action-plan-fintech-factsheet_en.pdf.
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- DTCC, FinTech and Financial Stability, October 2017, http://www.dtcc.com/news/2017/october/16/dtcc-unveils-framework-for-assessing-fintechs-impact-on-financial-stability-in-new-white-paper with further references
- KPMG 2017, Securing the Chain, https://assets.kpmg/content/dam/kpmg/xx/pdf/2017/05/securing-the-chain.pdf.

- Weber, R.; Baisch, R., FinTech-Eligible Safeguards to foster the Regulatory Framework, December 2018, https://www.researchgate.net/publication/329586457_FinTech-Eligible_Safeguards_to_Foster_the_Regulatory_Framework.

The study presented in this event deals with the new competition challenges brought about by the increasing number of FinTech services, which are provided by newcomer start-ups, traditional financial institutions and big tech companies. Namely, network effects derived from the use of online-platforms, the use of customer data, algorithms, standardisation and interoperability can result in anticompetitive behaviour. The analysis takes a service-by-service approach to provide both, a descriptive breakdown and normative tools to anticipate and manage anticompetitive behaviours as they occur.
This presentation was prepared by Policy Department A at the request of the ECON Committee.

PE 631.061
IP/A/ECON/2018-22

Print ISBN 978-92-846-4730-9 | doi:10.2861/021422 | QA-01-19-340-EN-C
PDF ISBN 978-92-846-4729-3 | doi:10.2861/825391 | QA-01-19-340-EN-N