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FinTechs, BigTechs and Banks— When Cooperation and When Competition?

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Agenda

- Motivation
- Methodology
- Definitions
- Results
- Conclusion

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Rationale for research

1. The emergence of Fintech has been one of the most relevant drivers of change in the financial services industry in recent years.
2. The literature on FinTech distinguishes three main streams of research:
 - **attempting to define the phenomenon known as FinTech** (Arner et al. 2015; Jun and Yeo 2016; Zavolokina et al. 2016; Schueffel 2016; FSB 2017a; Harasim and Mitreğa-Niestrój 2018)
 - **discussing the strengths and weaknesses of FinTechs and BigTechs and their most visible expansion areas** (Dorfleitner et al. 2017; Claessens et al. 2018; Jagtiani and Lemieux 2018; Hau et al. 2019; BIS 2019; FSB 2019b; OECD 2020; Harasim 2021)
 - **addressing the regulatory arbitrage between incumbents and technology companies, as well as various risks posed by their expansion** (Arner et al. 2015; Philippon 2016; Buchak et al. 2017; FSB 2017a, Braggion et al. 2018; BIS 2018; Padilla 2020).
3. Relationships between technology companies and banks have received only limited attention in the research literature so far (Corea 2015; Buchak et al. 2017; Bodek and Matinjan 2017; Maxin 2018; Bömer and Maxin 2018; Brummer and Yadaw (2019) Hornuf et al. (2018) EBA (2018).



Methodology

1. Research objectives:

- The main purpose of the paper is to create a conceptual framework that helps to explain which factors affect the type of interactions between technology companies and banks.
- The ultimate objective is to propose a tool that may be helpful in choosing a specific form of interaction.

2. An in-depth review of the literature has been allowed to assume that **both external and internal factors influence the choice of a specific form of interaction**. As a consequence, two following research questions enhancing the understanding of interactions between FinTechs, BigTechs, and banks were posed:

- Which external factors impact the FinTech and BigTech adoption level across markets and how does it affect technology companies-banks collaborative space? ➡ *(market-based approach to gaining competitive advantage)*
- How do complementarity and substitutability of assets, skills, and features of large banks, FinTechs, and BigTechs affect the forms of interactions between them? ➡ *(resource-based approach to gaining competitive advantage + Industrial Organization theory)*



Definitions and assumptions

1. In contrast to most of the previous studies **in this paper FinTechs and BigTechs has been considered separately:**
 - both FinTechs and BigTechs rely heavily on digital technology and represent technology-enabled innovation business model (but in fact very different) however
 - they substantively differ in terms of their size, scale of activity, specific features and the extent to which their assets, skills, and features complement those of banks.
2. Definitions:
 - *FinTech - a separate sector of the financial services industry consisting of entities other than traditional financial service providers, which use cutting-edge technology to provide existing financial services more effectively and create new ones, that enables new value to be delivered to customers.*
 - *BigTechs - large technology companies with high market capitalization, well-recognized brands and established market position, usually operating on a global or international scale, which offer mainly non-financial goods and services (both digital and traditional) via digital platforms.*



Results



External factors affecting the form of interactions

Why have FinTechs and BigTechs grown more in some countries and regions?



In-depth analysis of the existing studies



Identification of demand-side and supply-side drivers of FinTech adoption



Drivers of FinTech adoption

1. Demand-side drivers:

- Unmet customer demand (Bech et al. 2018 ;Hau et al. 2019; Jagtiani and Lemieux 2018; Tang 2019; Frost et al. 2019).
- Customer preferences as well as changing demographics (EY, 2017 and 2019)
- Trust in technology (Bain and Company and Research Now 2017; Nair 2019)
- Changes in customer value (He et al. 2017; EY 2017; FSB 2019b).

2. Supply-side drivers

- Technological advantage (Saal et al. 2017;OECD 2020)
- High cost of traditional finance (Bazot 2018; Frost 2020).
- Existing banking infrastructure (EY 2019; Frost 2020)
- Level of competition in the financial sector (Claessens et al. 2018)
- Regulatory environment (Navaretti et al. 2017; Claessens et al. 2018; Cambridge Centre for Alternative Finance—CCAF 2019).



External factors and forms of interactions - results

EMDEs

Strong demand for financial services
Low level of financial inclusion
Weak banking infrastructure
Low regulatory constraints

- competition
- aggressive strategies

AEs

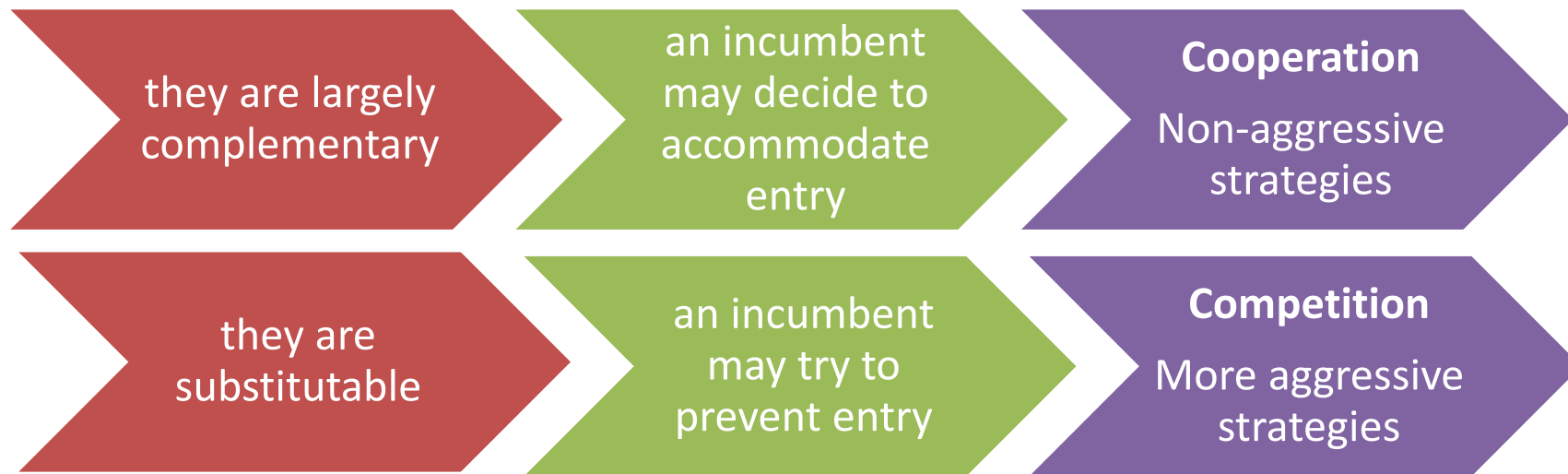
Relatively low demand for financial services
High level of financial inclusion
Extensive banking infrastructure
High cost of financial intermediation

- cooperation or competition
- BigTechs as third-party service providers for banks



Internal factors affecting the form of interaction

General assumption based on the IO theory - **_the general reaction of new entrants (tech companies) and incumbents (banks) will depend on how much the assets/resources, skills and features of both these groups complement or substitute each other.**



Framework of the analysis of internal factors

What are the competitive advantages and disadvantages of technology companies and banks and how to compare them?



The creation of the sophisticated tool which enables such a comparison



Identification of greatest divergence and overlap between assets, skills and features of FinTechs, BigTechs and banks



Description of the proposed tool

- In total, **27 features were identified and grouped into six primary categories**: tangible and intangible assets, marketing assets, organizational skills and structure, others skills as well as experience and efficiency
- **Each feature has been assessed with regard to the strength of its occurrence** using a three-point scale where one plus (+) means low intensity, two pluses (++) medium intensity and three (+++) high intensity of occurrence.
- The greatest complementarity between resources, skills and features exists when one of the entities compared has advantages (+++) in the areas that are weak points of the other (+). Overlap between assets, skills, and features of compared entities means that they are substitutable.



Comparative advantages of large banks, FinTechs and BigTechs

Assets/skills	Features	FinTechs	Banks	BigTechs
Tangible assets	Size (balance sheet) and reach	+	+++	+++
	Cutting-edge technology	+++	++/+	+++
Intangible assets	Customer base/ability to exploit it	+ / ++	+++ / ++	+++ / +++
	Customer trust and loyalty	+	+++	++
	Brand recognition	+	+++	+++
Marketing assets	Price level	++	+++	+
	User experience	+++	+ / ++	+++
Organizational skills and structure	Flexibility and agility	+++	+	++
	Innovativeness	+++	+	+++
Efficiency	Economies of scale and scope	+	++	+++
	Network effects	+	++	+++
Others skills and experience	Risk assesement and manamegent	+	+++	+
	Experience in compliance and regulation	+	+++	+



Comparison of strenghts of FinTechs and banks - results

FinTechs strenghts

(banks weaknesses)

- agile, leaner, flexible businesses
- high-tech capabilities
- ability to attract talented young people
- ability to create innovative solutions
- ability to improve user experience
- transparent pricing

Banks strenghts

(FinTechs weaknesses)

- well-recognized brand,
- established reputation and market position
- extensive customer base
- superior knowledge in risk management
- experience in dealing with regulations
- access to cheap (low-cost) funding

The likelihood of choosing a cooperation strategy is greater than choosing competition



Comparison of strenghts of BigTechs and banks - results

Banks and BigTechs overlapping strenghts

large installed customer base
abundant and superior customer information
powerful brands
established reputation

large capital base
considerable earnings
almost unlimited access to cheap funding
economies of scale and scope

Banks and BigTechs different strenghts

Banks

high expertise in dealing with regulations
greater risk management skills

BigTechs

significant network effects
synergies between their core activity and financial services
strong position in delivering and using cutting-edge technology

The likelihood of choosing a competition strategy is greater than choosing cooperation



Conclusion

1. The main external factor which determine the type of interaction between banks and technology companies is the FinTech adoption level in individual countries/regions. It turned out to be higher in EMDEs (which gives the rationale for competition) and lower in AEs (which gives the rationale for cooperation).
2. When it comes to internal factors - since assets, skills, and features of banks and FinTechs are largely complementary, it would be better for them to collaborate than to compete. Conversely, for large banks and BigTechs having many overlapping strengths, a more likely form of interaction will be competition (in EMDEs) or coopetition (in AEs).
3. However, the extent to which a particular bank can generate value from a strategic interaction with a given FinTech or BigTech firm is an individual case depending on its capacity to create synergies between their specific assets, skills and features.
4. This study contributes to the existing literature by:
 - providing a narrow definition of FinTech representing the subjective/institutional approach,
 - considering separately FinTechs and BigTechs,
 - proposing the strategic tool which helps to assess comparative advantages of banks, FinTechs and BigTechs, and thus makes it easier to choose the most appropriate type of their interaction.





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