FinTech Revolution of Non-banks and Future Survival of Banks: A Systematic Review

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Abstract

The aim of the paper is to review academic papers on financial technology (FinTech) to identify how banks are going to survive in future against FinTech revolution of non-banks. Therefore, the paper summarizes the findings of existing literatures in this emerging sector and highlights the lessons for the FinTech firms, banks, regulators, and other stakeholders of FinTech across the world. The systematic literature consists of 13 closely relevant studies on FinTech. The paper suggests that introducing own online platform, acquisition of non-bank fintech competitors or partnership with these firms can protect banks from future survival against FinTech challenges. The paper demonstrates that academic papers are rare in the field of non-bank's FinTech revolution and bank's future survival that indicates huge potential for further research to be conducted by several stakeholders in FinTech industry specially academia, practitioners, and regulators. The paper is expected to add value demonstrating the key findings of existing literatures and summarizing significant lessons for the banks, non-bank FinTech firms, investors, policy makers and regulators.

Keywords: Financial technology, disruptive financial technology, financial inclusion

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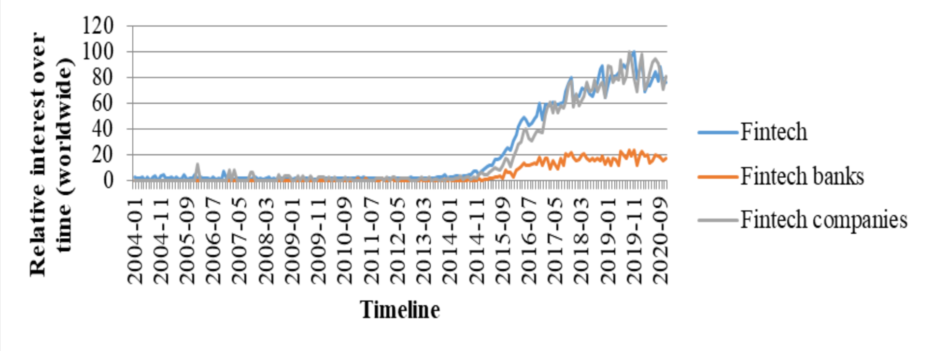
1. Introduction

Fintech is the application of digital technologies in financial services that are significantly changing the working of both fintech banks and fintech non-banks influencing changing our lives (Sangwan, et al., 2019). Fintech company can be defined as the organization that enables, enhances and disrupts financial services through innovative business models and technology (Global FinTech Adoption Index 2019). Three phases of fintech represent how fintech revolution of non-banks emerged. First phase of fintech (1866-1967) evidenced fast transmission of financial and payment information through transatlantic cable and telegraph (Consumers International, 2017, as cited in Thakor, 2020). Second phase (1967-2008) was characterized by enhancement of financial products and services through automated teller machines, clearing systems, electronic payments and online banking using information technology in traditional financial institutions (Consumers International, 2017, as cited in Thakor, 2020). New competitiveness for financial institutions has been resulted from direct non-intermediated financial services to customers by new entrants using technology in third phase of fintech (2008-present) (Consumers International, 2017, as cited in Thakor, 2020). Banks are working under strict regulations but facing threat by emergence and growth of new fintech competitors that are bringing significant portion of unbanked people under banking services through financial inclusion providing financial services especially deposit, loan and money transfer in remote rural areas using mobile devices.

Although, fintech is shaping the future of banking as sustaining financial technology or disruptive financial technology but fintech revolution of non-bank fintech companies that provide single product or service superbly with clear customer orientation and advanced competitive technology (Noya, 2019) is bringing more attention of the stakeholders compared to fintech of banks. Figure-01 demonstrates google trend of three terms “Fintech”, “Fintech banks” and “Fintech companies” where the interest in all the terms is growing significantly from 2015 as the figure represents search interest relative to highest point 100 where the value close to 100 shows more popularity and close to zero shows less popularity. Interest in both fintech and fintech companies are growing alike but interest in fintech banks is well below the other two terms comparatively.

Therefore, fintech companies are becoming more popular to stakeholders compared to fintech banks.

Figure-01: World-wide interest in "Fintech", "Fintech banks" and "Fintech companies"



Source: Own elaboration from data of Google Trends (November 29, 2020)

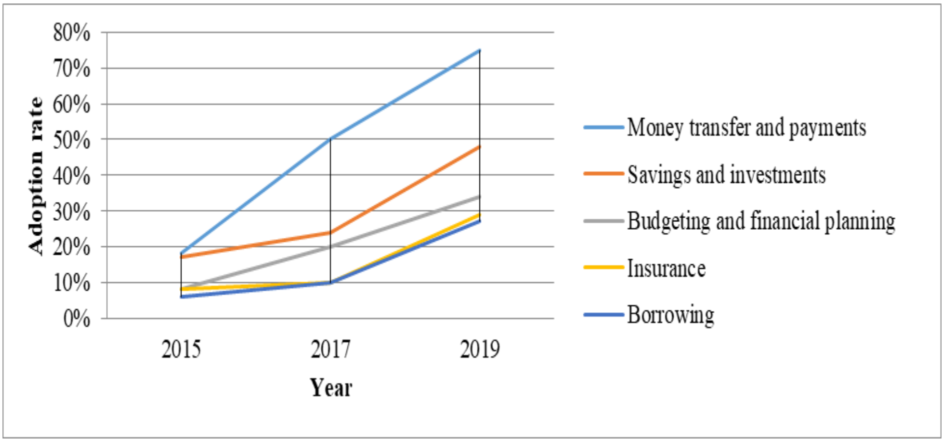
Therefore, the paper aims to understand how fintech revolution of non-banks are resulting future survival of banks. The paper targeted the search phrases "Financial technology" and "Fintech" with variety of combinations at search platforms specially Google and Emerald Insight to get relevant articles for a systematic review. Finally, 13 scholarly articles have been reviewed based on close relevance with the topic of this paper. The review paper is organized as follows. Section 2 consists of findings and discussions from systematic review and section 3 provides the conclusion.

2. Findings and discussion from systematic review

The superiority of the financial services offered by fintech companies compared to financial institutions specially banks resulted from cost reduction using digital technology to match in financial markets, novelty of services and limited regulatory requirement (Navaretti et al., 2018). Among European countries, investment of UK in fintech companies holds the largest portion where most of the fintech companies (31%) in Europe do not have any regulatory regime (Mansilla-Fernández, 2018). IT giants as Amazon, Apple and Google are getting benefit of such economies of scope which cannot be replicated by banks. They are offering consumer credit indirectly evaluating credit risk of customers better than bank through processing information of payments, purchases and internet searches such as consumer credit of amazon named Amazon's store cards are issued and managed by Synchrony, a consumer financial service bank, due to some regulatory restrictions in owning consumer credit banks and offering consumer credit directly by such non-banks (Navaretti et al., 2018).

2.1 Consumers' adoption

Figure-02: Global consumers' adoption rate of fintech services



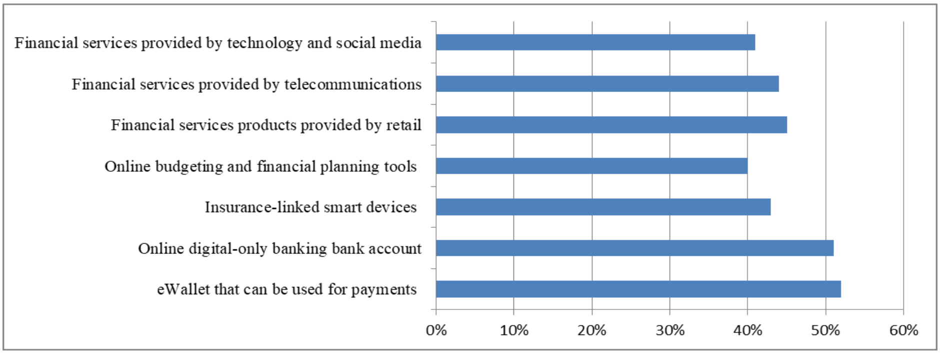
Source: Own elaboration from data of Global FinTech Adoption Index 2019

Consumers mostly adopt money transfer and payment services as fintech services in which area non-bank fintech companies are dominating with excellence in service quality and huge financial inclusion (Figure-02). Moreover, core services of banks attracted the consumers less as fintech services narrowing the competitive positions of bank against non-banks (Figure-02). Paypal started business as linked service to E-bay but now it is the world's largest supplier of electronic payment services mostly linked to bank or credit card account as bank charter which is an example of linkage between electronic purchase and electronic payment platforms (Navaretti et al., 2018).

In West Africa, fifty percent of the people are not reachable by branch banking as they live in remote areas and two-third of the population have cell phone, but one-third of the population have bank account resulting revolution of mobile payment services in financial industry (Koffi, 2016). Around 60 percent people are unbanked in Asia, Africa, and Latin America but they have mobile devices where non-bank financial giants as WeChat in China and Ant Financial in Asia provide financial services to millions of users to perform all financial transactions with mobile devices only without even opening any bank account (Noya, 2019). Traditional banks are being forced to introduce online loan facilities like P2P lending by fintech companies with ultra-low interest rates to survive in market as investors will choose direct lending through digital platform (Dermine, 2017).

2.2 Consumers' preference

Figure-03: Consumers' preference of financial services of non-financial services company

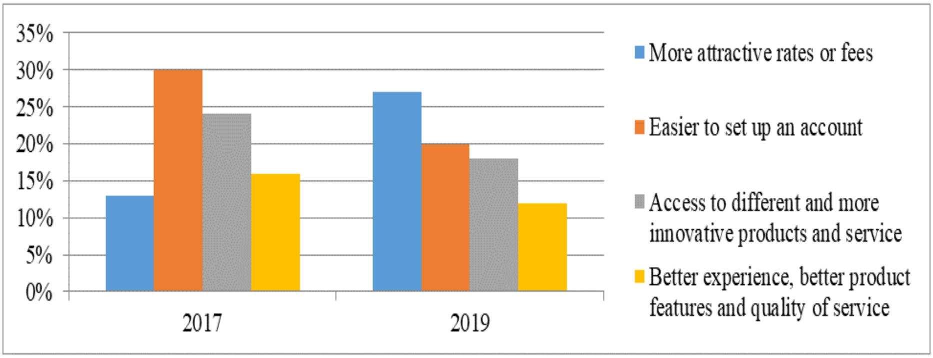


Source: Own elaboration from data of Global FinTech Adoption Index 2019

Consumers prefer to get all the services from a single platform through e-wallet or app especially for payment services which are being offered by non-financial services companies vastly (Figure-03). Neo-banks as N26, one of the biggest European neo-banks, are connecting suppliers of financial products and services for money transfers, savings management, loans and investments etc. and successfully serving customers with all services through one app as mobile only bank with cost advantages and without any branches resulting huge threat for traditional banking operations (Noya, 2019). Telecommunication companies in China are providing payment services through deposit like accounts offering higher interest rate on deposit compared to commercial banks (Navaretti et al., 2018). In Thailand, bank competition is facing challenge in financial services industry due to PromptPay FinTech, an e-wallet system (Wonglimpiyarat, 2017).

2.3 Reasons for preferring fintech companies

Figure-04: Reasons for using fintech challengers rather than financial services institution

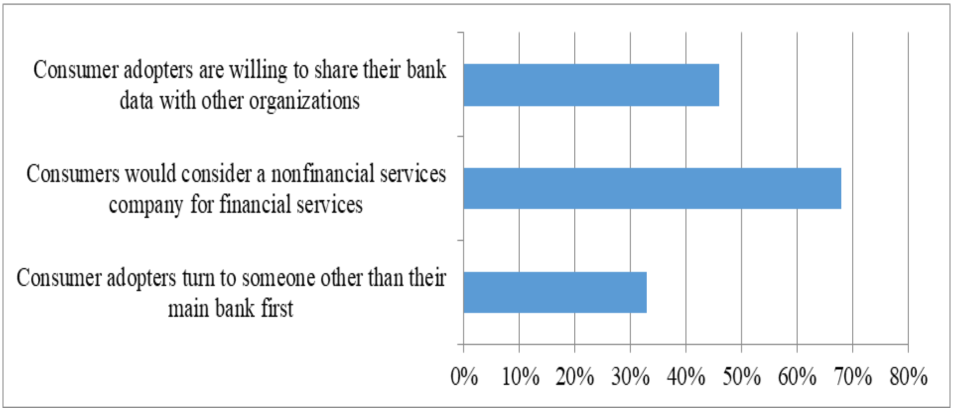


Source: Own elaboration from data of Global FinTech Adoption Index 2019

Fintech challengers are becoming more popular to consumers because they are charging minimum fee for payment services compared to banks even without any requirement to open bank account (Figure-04). Apple Pay transfers money across bank accounts and offers alternative of bank loans as peer-to-peer lending platform through virtual wallet and crypto currencies like Bitcoin and Libra, proposed by Facebook, as alternative to cash (Thakor, 2020). Closed distributed ledger led by Bitcoin that does not go through central bank's surveillance will lead the future finance (Yoo, 2017).

2.4 Consumer adopters' motive

Figure-05: Consumer adopters' motive to fintech companies rather than banks



Source: Own elaboration from data of Global FinTech Adoption Index 2019

Banks took the advantages of keeping the financial data of customer secret and maintaining long term customer relationship satisfying customers' demand with same banking products since long but now customers are sharing their information to non-bank fintech firms and getting more customized, sophisticated, and diversified financial services compared to banks resulting more challenges for banks (Figure-05). Fintech companies are providing same services of banks directly with big data but without intermediation and long-term customer relationship that results difficulty to offer clients diversified investment opportunities but advantageous position for fintech companies to offer payment systems such as, popularity of apple pay instead of credit cards (Navaretti et al., 2018). The real casualties will be faced by small banks and banking jobs that depends on financial intermediation not banking activities that will be efficiently carried out by fintech companies directly due to having much more internet platforms and processing of hard information through big data (Navaretti et al., 2018).

3. Conclusion

It has been evidenced from this study that fintech services of non-bank fintech companies in most of the developing countries are mainly dominated by money transfer and payment services only but in developed countries fintech services of non –bank fintech companies also massively involves deposit and lending services. The facility of getting transfer and payment services from non-bank fintech companies without opening bank account resulting huge customer base for the non-bank fintech companies and huge financial inclusion bringing challenges for traditional banks in terms of their transfer and payment services.

As banks will go through partnership with peer-to-peer lenders and build online lending platforms, peer to peer lending will not diminish the credit market of banks significantly by replacing the bank lending but diminish some market share as fintech companies will accept risky borrowers who do not have collateral and access to capital constrained banks (Thakor, 2020). Banks perform the role as delegated monitors of the customers to evaluate the potential borrowers' information in detail for having the risk of bank run resulting from credit risk and including the risks in the balance sheet but non-bank fintech companies may face moral hazards due to not actively screening borrowers and including risks in balance sheet as banks (Navaretti et al., 2018).

Dominant positions of US retail banks have been weakened due to improvement of quality and efficiency of traditional services of banks offered by successful fintech companies, but banks have responded to overcome these challenges through setting up own fintech affiliates or acquiring fintech companies (Li et al., 2017). Traditional banks should positively take the challenges of reduced role of banks today resulting from technology as essential part of daily life (Gnanmote, 2018) and need to collaborate with fintech companies for innovation, cost advantage, outsourcing technological applications rather than massively spending to create in-house human capital for producing value creating fintech applications (Gomber, et al., 2018) and better customer experience for their survival in future (Noya, 2019).

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