

The Development of Fintechs as a Part of Digital Economy

E. Saliger

Weihenstephan University of Applied Sciences
Freising, Germany

V. I. Kordovitch

St. Petersburg University of Management and Economics
Technologies
Saint Petersburg, Russia
vkspb2002@mail.ru

O. V. Popova

Peter the Great St. Petersburg Polytechnic University
Saint Petersburg, Russia

M. A. Popov

LLC AVA-PETER
Saint Petersburg, Russia

Abstract—Fintechs are companies that offer digital financial innovations. Fintechs' business models include the areas of investing, paying, managing, financing and insuring. Their success factors are based on customer service orientation and manifest themselves in transparency, efficiency, low costs / favorable conditions as well as speed and accessibility. Fintechs' services have already found widespread use. Around a third of the digitally active people in the world's 20 largest economies are already using them. The frontrunners are China, India and the USA. Within Europe, most of the fintechs are located in the UK. The transaction volume is mainly generated from digital payments, business and consumer finance. Although fintechs represent potential competition, many banks and insurance companies work closely with financial startups. Great potential for fintechs is seen in developing countries. Access to financial services plays an important social and economic role there. A major risk for the industry lies in the areas of data protection and data security.

I. INTRODUCTION

The digital revolution in the financial sector is closely related to the term fintech. The name is made up of the terms financial services and technology. Fintech refers to the industry in which financial services are changed by technological means.

Fintechs are the companies in which these disruptive innovations take place [5, 16]. Fintechs are often start-ups, but not always [13]. They are technology-driven companies that are digitally [11, 32] and dynamically entering the market for easy-to-standard financial products and services to gain customers and market share [17, 20, 22]. Common to all is the dissolution of the physical service provision towards digitization.

II. RESULTS

The business models of FinTechs are established especially in the areas

- Investing [4, 25]
 - Robo-advisory
 - Crowdfunding
 - Social trading
- Paying [21, 23, 24]
 - Online payments
 - Mobile payments
 - P2P payments
- Managing [15, 27]
 - Saving motivators
 - Personal financial management
- Financing [1, 31]
 - Consumer credit
 - Business loans
 - Social lending
- Insuring [2, 18]
 - Health insurance
 - P2P insurance

Fintechs can be classified into the following categories [9, 12]:

1. Focus of activity according to the classic division of the financial area into banks and insurance companies.

2. The second category are the technical scope that a FinTech company can have. These areas of application can be, for example, financial investments, pension provision or consulting. FinTechs that offer mobile payment solutions or social trading solutions for the investment sector are also included.

3. The third area is the customer segment, which includes applications for peer-to-peer loans or lending in retail banking or electronic marketplaces for business finance in corporate banking.

4. The fourth category is primarily about the form of interaction, to which community banking approaches for the C2C area or online portfolio management systems in the B2C area belong.

5. The fifth distinction is based on the positioning vis-à-vis the respective financial service providers. On the one hand there are the solutions offered by banks or insurance companies themselves, which include personal finance management systems and on the other hand the focus on cooperative or competing offers to banks or insurance companies.

Success factors of fintechs are their customer service orientation [4], which is shown by:

- Transparency, efficiency, low costs / favourable conditions, simply structured services
- Digitization and automation as well as
- Speed and accessibility

FinTech customers especially appreciate the ease of access. With just a few clicks, you can send money, buy shares or borrow money. Other reasons include low costs or low fees as well as simultaneous access to several products and services.

According to a study by the management consultancy Ernst & Young, around a third of digitally active people in the world's 20 largest economies are already using fintech services. China and India top the so-called "Fintech Adaption Index". There, more than half of all digitally active people also use digital financial technologies. [10]

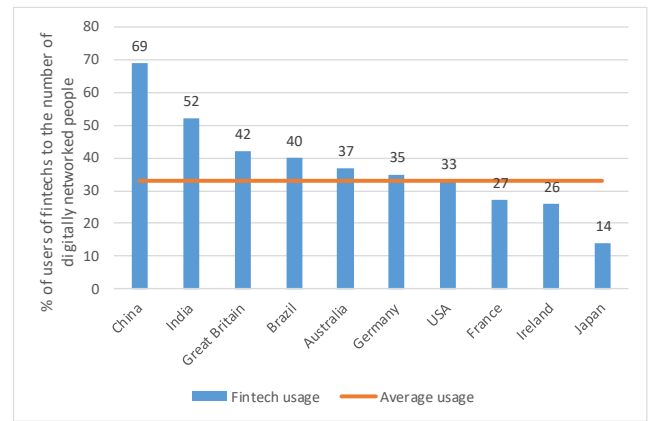


Fig. 1. Percentage of users of fintechs to the number of digitally networked people (Source: created by authors on the basis of [10])

The International Monetary Fund (IMF) has estimated that approximately \$ 100 billion has been invested in fintechs since 2010. [28]

Most fintechs are in India, China and the United States. Within Europe, most of the fintechs are located in the UK. [28]

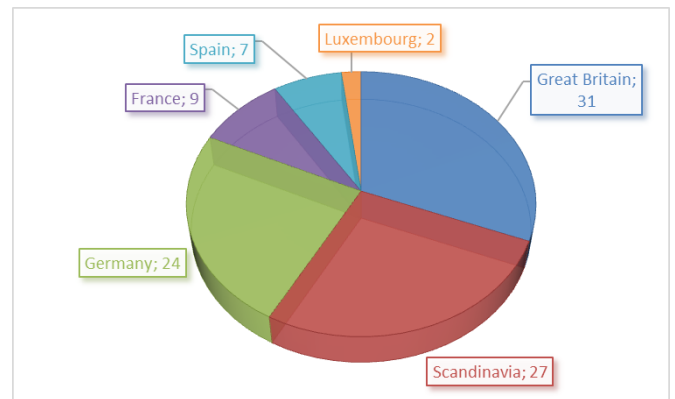


Fig. 2. Fintechs in Europe by the numbers (Source: created by authors on the basis of [28])

The transaction volume is mainly generated from digital payments, business and consumer finance[30]. The following figure shows its (partly forecast) development since 2014:

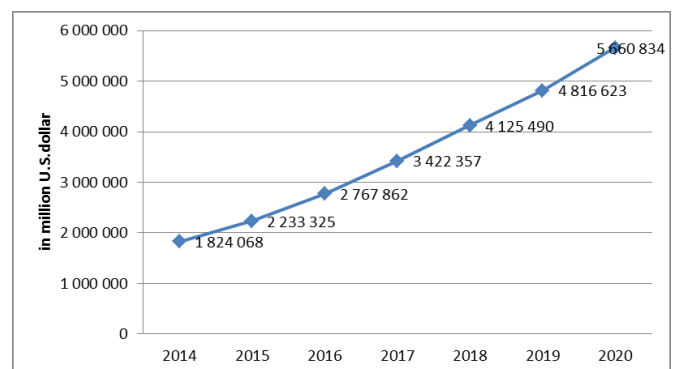


Fig. 3. Transactions of fintechs worldwide in US \$ (Source: created by authors on the basis of [30])

III. DISCUSSION

While the fintechs market segment has grown dynamically in recent years, a phase of consolidation now appears to be beginning. While large fintechs continue to grow, many small companies disappear from the market [26].

Banks and insurers are often portrayed as fierce competitors with the fintech industry. With their innovative technologies, start-ups often endanger the business models of established players [6]. However, many banks and insurers work closely with financial start-ups [2]. For Germany, a study by the management consultancy PwC counts over 850 cooperations. According to the study, the banking sector accounts for around two thirds of the alliances, while insurers account for a third.

The further potential for fintechs is seen above all in developing countries. There are an estimated 1.7 billion people worldwide without access to financial services, for whom fintechs can play an important social and economic role [19]. With the "Bali Fintech Agenda", the IMF wants to provide recommendations for regulating fintechs [3].

According to the World Bank, two thirds of adults without a bank account state that they do not have the necessary money. Other reasons include lack of documents and lack of trust in their banks and financial service providers. In their fintech agenda, the World Bank and IMF see great opportunities for the fintech industry in combating poverty and adding value.

The risks for the industry are also clear. Above all, this includes data protection: the more companies digitize, the higher the risk of cyber-attacks and data theft [29]. Possession of cryptocurrencies is also increasing and presents the financial sector with new challenges. [8, 14]

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