

The Impact of Fintech on Financial Institutions: The Case of Georgia

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Abstract: Using Georgia as an example, this article analyses the fintech ecosystem and the impact of fintech companies on traditional financial institutions. Both qualitative and quantitative research has been carried out for this research. Based on the analysis of Georgian and international financial markets, as well as the qualitative and regressive analysis used in the study, assumptions were made about the impact of fintech companies on traditional financial institutions. Moreover, the study identifies the

challenges that hinder the development of the fintech ecosystem in Georgia regarding infrastructure, finance, regulation, and education. This article also reveals several aspects that positively affect the outcome of fintech and the diversification of the Georgian financial market. At the end of the article, the relevant conclusions and applicable recommendations are given.

Keywords: *banking, finances, fintech, Georgia, technologies*

1. Introduction

Technological innovations are the main drivers of comprehensive human progress (Žofčinová *et al.*, 2022). It is an example of an area where legislation and regulation are playing a catch-up role rather than dictating the ways of advancement (Kelichavvi & Metcalf, 2019). Innovative technologies have dramatically shaped traditional financial services, too. Advances in financial technologies in the most widespread way made customers rely more on current banking products (usually in developing countries), as well as on fintech companies (so far, predominantly in developed countries) and their innovative solutions (Charaia *et al.*, 2021). Digital transactions and digital banking services pushed customers away from physical bank branches, which were previously the primary connectors of retail bank services and customer transactions (Gomber *et al.*, 2018). Fintech has become a part of our daily lives for private and business activities.

As the world becomes more digitalized, fintech firms are becoming significant players and competitors in the financial industry (Chang *et al.*, 2020). Moreover, they set benchmarks for financial services, and their impact is visible on a daily basis. The variety of improved automatized financial activities that fintech companies provide using new technologies are more cost-effective and makes them competitive compared to incumbent financial institutions.

Hence, on the one hand, traditional financial institutions are pressed by innovative fintech competitors, which provide revolutionizing financial products and disrupt banks. On the other hand, however, the challenges that traditional banks face can be used as an opportunity to improve their financial service, in order to keep existing customers and market share, in order not to disappear.

Studies show that bank loans are still the dominant source of financial resources (Schweitzer & Barkley, 2017). At the same time, the literature on digital financing mechanisms is still incomplete (Hua *et al.*, 2019). Other studies declare that the awareness and popularity of digital financing, especially after the 2008–2009 crisis, has significantly advanced in the last few years (Jakšič & Marinč, 2019; Global Innovation Index, 2020).

Fintech's rapid and global popularity can be explained by the following factors (Odinet, 2018): faster loan processing speed (Sangwan *et al.*, 2019); lower operating costs (Ozili, 2018); convenience of credit obtaining procedures, especially in remote areas; less bureaucracy; lower interest rate, etc.; the ease for fintech companies to attract investors (Anagnostopoulos, 2018); diminishing credit provides risks through innovative technologies of big data analysis (Lu, 2018; Tropp *et al.*, 2022). However, there are also several risk factors: data protection, traditional lenders' resistance, financial illiteracy, internet connectivity and accessibility.

2. Literature review

According to Zavolokina (2016), fintech represents the “marriage of technologies and finances” with its integration of information technologies with finances, which has been driven by digitalization in the past decades. Moreover, fintech can be reported as “a wide variety of technological interventions into personal and commercial finance,” in addition to the upgraded and automated delivery and usage of financial services outlined by new technological approaches (Kagan, 2020).

Arner *et al.* (2015, p. 4) describe fintech as “the application of technology to finance.” More precisely, it can be interpreted as implementation of a modern and innovative technological approach in financial services, which can attract local and foreign investments in the economy (Charaia *et al.*, 2020; 2022; Charaia & Lashkhi, 2018; Nováčková & Peráček, 2021).

Fintech is usually related to the digitalization of the financial ecosystem. It is based on the latest technology, which provides internet-based financial services in areas such as fundraising, trading, and mobile payments (Dapp, 2014). Advanced technologies benefit fintech companies to attract customers with automated, transparent, and user-friendly internet or/application-based financial products and services (Dorfleitner *et al.*, 2017). Furthermore,

fintech is outlined as a set of activities that have the capacity to run and deliver the business in a revolutionary way. It has influenced and reshaped the business models of traditional banks (Yang *et al.*, 2017).

Fintech, as the “fusion of finance and technology,” revolutionizes the financial industry and creates new entrants into the market which do not refer to the traditional sector (Goldstein *et al.*, 2019). Increased competition forces the incumbent financial institutions to adapt to new circumstances and implement advanced financial technology products to maintain the market share. Furthermore, they benefit from the scale of the economy in terms of financial capital, consumer data, and trust among customers to safeguard their data (Feyen *et al.*, 2021). As a result, there are fintech products which are also implemented not only by fintech companies but also by traditional financial institutions.

The fintech trend is rising year after year, and the incumbent financial institutions have been drawing attention to it. The fintech growth story made them invest in this field and implement fintech products in their traditional services (Mention, 2019). Whether the financial transactions are B2B (business to business) or C2C (customer to customer), fintech innovation has made international money transfers simple and uncomplicated (Dasgupta, 2015).

Advances in the field of technology have made changes in the demand for financial products and raised the competition in delivering financial services. Startup companies expand the new areas of the financial industry and are creating more innovative ways of delivering financial products and services; this increases competition in the market (S&P Global, 2016).

As stated by Li *et al.* (2017), in the long term, the impact of fintech companies on financial institutions and funds, such as the pension fund, which has been under reform for the last years (Nutsubidze & Nutsubidze, 2017) in Georgia, can be described according to different scenarios:

- First, fintech firms disrupt the retail banking sector, and eventually, they will replace the incumbents. Innovative technologies like blockchain enforce efficiency and will benefit fintech companies more than banks because the incumbents mostly rely on older and used technologies;
- Second, fintech firms fulfill the financial industry. Moreover, some banks collaborating with fintech firms will benefit more than are harmed. This collaboration enables fintech companies to enter the global payment market with the use of banks' customer base;

- Third, no impact is observed because fintech firms address a new segment of customers not covered by retail banks, such as customers without a credit history and risky small-sized firms. Furthermore, startups are still small compared to traditional banks because of their powerfulness, trustiness among consumers, and a long history.

According to Kolesova and Girzheva (2018), the rapid development of fintech reduces entry barriers in the financial market. It stimulates the disclosure of new business projects by allocating from banks' structure and obtaining independence to deliver narrow services cheaper than the incumbent ones. This reduces the competitiveness of banks and may result in loss of market share.

Furthermore, artificial intelligence and sophisticated algorithms reduce job numbers (Kolesova & Girzheva, 2018). For instance, a bank needs approximately 2–4 weeks to evaluate small and medium-sized businesses and assess their creditworthiness. In contrast, digital lending platforms like Quick Cash can assess creditworthiness by sophisticated algorithms and issue a line of credit in just 15 minutes through an innovative high-tech platform (Quick Cash, 2020). Hence, for example, human resources related to creditworthiness evaluation at traditional banks can be replaced by sophisticated fintech algorithms.

The report of Haddad and Hornuf (2021) detected the positive impact on financial institutions' performance because the establishing of fintech companies improves the performance of financial institutions; banks are forced to rethink and redesign their business model while the competition increases.

3. Methodology

The research method used for this paper is mixed and combines qualitative and quantitative methods, enabling a deeper understanding of fintech in financial institutions in Georgia. The scarcity of academic literature, publications, research, and even statistical data, in the case of Georgia, made this research complex and challenging. Hence, mixed qualitative and quantitative methods were adopted to obtain comprehensive results.

The qualitative research is based on the academic paper 'The impact of fintech companies on the financial institutions in Sweden' (Alterkawi &

Bittar, 2019), since it provides a constructive and deeper understanding of the research method, the research design, data collection guide, and its analyses, too. Furthermore, to get a complete picture of the qualitative research method, PricewaterhouseCooper's Global FinTech Report (PwC, 2017) was chosen, as it delivers the methodology for managing the survey and detecting the influence of fintech on financial institutions. Combining these two research methods contributed to making this paper consistent, deep and complete.

Two types of interviews were conducted using the qualitative method. These two types of interviews were for the representatives of traditional financial institutions and the representatives of fintech companies in Georgia. The complexity of the fintech field justifies the choice of hybrid interview. As mentioned above, in the case of Georgia, there is a lack and rarity of academic literature and publications in this field. The data obtained from the representatives of both sides are more interesting and diverse, and allow for a full understanding of the study, the comparison, a broad analysis, and a deeper result.

Structured interview was selected from amongst the different types of interviews, such as non-structured, semi-structured and structured. A structured interview is highly formalized, and a list of questions is made in advance in a standardized way. These questions are asked from all respondents. Meanwhile, questions should not be added or omitted from the interview, as is often the case in semi-structural or unstructured interviews (Saunders *et al.*, 2019). As Collis and Hussey (2013) describe, interview questions can be both open and closed. In this research paper, the interview questions are mixed to obtain both long, detailed and comprehensive answers, as well as simple and specific ones.

The quantitative research methodology for this paper was based on Ahmed and Rahman's research, a case study on the impact of electronic banking in commercial banks (Ahmed & Rahman, 2020). That study was conducted using the Likert scale, and the questionnaire for the research was constructed with independent and dependent variables.

The qualitative research aimed to detect what kind of impact financial technologies have on the simplicity of banking processes. This survey was designed for the consumers who use banking products and services and not for the representatives of banks' top managers in the technical or innovation teams. Because of the scarcity of top managers in the technological field

in the Georgian banking sector and for this reason, the final impact of the influence of fintech is most clearly visible to the end-consumer, who is an acquirer of a financial product and service. It was therefore considered expedient to carry out a descriptive study based on a survey of financial products and services using a consumer questionnaire.

Based on the literature review, three hypotheses for the qualitative research emerged:

Hypothesis 1: Fintech companies have a positive influence on the development of financial products and services of the incumbents;

Hypothesis 2: Financial technologies have a positive impact on the simplicity of banking processes;

Hypothesis 3: In Georgia, traditional financial institutions will be at risk of competition with fintech in the coming years.

The quantitative research was based on a questionnaire. Similar studies on different countries were reviewed, through which this research was conducted. The questionnaire (see Appendix 3) was based on the Likert scale. It is a 5-point scale created by Francis Likert, and one that is most commonly used in contemporary research. It does not require experts in the field or the whole group, and is thus much less time-consuming and less costly. (Jebb *et al.*, 2021)

The sample size was calculated using the Raosoft platform. The population size (number of financial digital service users) is about 2 million, thus 96 people were defined as a sample size considering 10% of margin error and 95% of confidence level. However, a total of 102 respondents filled out the questionnaire. The survey questionnaire was distributed using the internet and Google documents.

4. Qualitative and quantitative findings

4.1 Empirical findings with the financial institutions and regulator

In-depth interviews were carried out with the top management of traditional financial institutions (including systemic banks), investment banks, the central bank of Georgia, prominent fintech companies and the pension fund of Georgia. The results are as follows.

Most respondents define fintech as the delivery of financial services through innovative technologies. Modern solutions (apps, technologies), which are replacing the old ways of providing financial services, enable clients to make financial transactions faster and more efficiently. Fintech's primary objectives are changing how consumers and businesses access their finances and competing with traditional financial services. From the point of view of one interviewee, fintech could be defined as 'techfin' and not 'fintech'. Techfins are created to be modified only for financial services and to provide financial services. Their main aim is to increase the productiveness of financial services.

Some respondents believed that fintech companies will not pose a competition risk for their business within the next five to seven years. The respondents regarded the risk of competition not as big as in the US or the EU because the development of the startup ecosystem is not helping Georgia, with its lack of innovative workforce, venture funds, small market size, etc., hindering its development. Furthermore, most interviewees argued that with the help of fintech companies their customers are already implementing or expecting to implement financial activities, such as payments, as payment services are the most frequent point of contact with customers. Moreover, the representatives of financial institutions expect that with the help of fintech, their customers may soon apply to new products, such as personal financing, personal loans, wealth management, and investing in the stock market.

In competition with fintech companies, the representatives of incumbents expect to strengthen key areas in order to keep customers. The majority of respondents ranked these key areas as follows: retain and strengthen the trust; cost reduction for the financial products; personalized service, oriented to the customer; fast service; ease of use; 24/7 availability; and flexible interface design.

In response to the question 'In which technological areas do you expect to invest in the next 3–5 years, or have already invested?', the results are distributed as follows: 100% of the interviewees believe the importance of investing in data analysis; 50% of the respondents expect and even already have invested in the blockchain technology; 50% of the interviewees invested in the process automatization; 25% have already invested in artificial intelligence; and a very small percent prioritizes investing in cyber security within the next three years.

Notably, none of the respondents consider fintech companies as rivals. Most interviewees consider themselves contractors or complementors because they believe that in order to be competitive in the digitalized world, it is better to be a partner rather than a rival. Even though some incumbents admit that most of their services are supported or provided by third-party (international) fintech companies. Remarkably, one respondent does not rule out the possibility of considering fintech as an enemy. However, this is not in short term, but it could be 15–20 years from now, when the startup ecosystem may be developed. Hence, for him, in recent times, fintechs are considered contractors or complementors.

According to the respondents, the fintech era will bring challenges in the following areas: IT security, regulatory forces, differences in the business model, and differences in management.

According to the interviewees' answers, the regulatory forces are the most challenging because it is hard for the incumbent to be flexible. Hence, 100% of respondents voted for it. Then comes IT security with 75%, and almost 25% highlight differences in management as a challenge, from the perspective of the features of Georgian business culture.

Furthermore, the results varied on the question 'What challenges do the incumbents face in implementing fintech?' Some representatives highlighted the bureaucratic infrastructure as the biggest challenge in its implementation, while others prioritized security and data-privacy risk, limited regulations, and not enough experienced workforce. Some respondents remarked the challenge in the lack of understanding of what benefits fintech can bring and even the lack of high-quality fintech companies in Georgia. As for the limited regulations challenges, one participant thinks that in some particular directions, it could be a problem, for example, in open banking, because it is not open for non-bank institutions, moreover in crowdfunding, which is prohibited by the law, etc.

As to opportunity, with the rise of fintech in the Georgian financial industry, there may appear different opportunities for the existing incumbents. Most respondents prioritized the opportunities that the growth of fintech may bring: increased customer base, the opportunity of expended products and services, and cost reduction. In contrast, other interviewees prioritized improved IT infrastructure, faster response to the completion, and cost reduction. Additionally, some respondents believed that fintech companies are ready to bring innovative products to the market through open banking in Georgia.

In terms of opportunity, it could not indicate the mutual benefits that the incumbents and fintech companies could have. The results about mutual benefits were diverse. Some respondents agreed that the mutual benefits could be the development of business, increase in competitiveness, triggering of innovations, and cost reduction.

In conclusion, most respondents agreed that the partnership will be beneficial and successful for both sides. It would improve the efficiency of the incumbents on the one hand and, on the other, it would increase the customer base for fintech companies.

Fintech is growing rapidly and, unlike strictly regulated banks, is not yet broadly regulated, which raises the question of whether the incumbents may need protection from the regulations. The respondents believed that regulators should not protect financial institutions against fintech companies; they should protect customers and help financial institutions integrate more fintech solutions in their day-to-day operations. Financial institutions with other fintech companies should be equally treated in terms of regulations to ensure fair competition. However, the regulators must protect deposit holders' interests and try to achieve fair competition between financial product providers.

In conclusion, because of the lack of trust in new fintech companies, the respondents think that certain actions should be taken to improve trust in fintech companies in Georgia. If the fintech ecosystem is developed, if there are many successful Georgian fintech companies, which would export their service abroad and create an international brand, it would increase trust in fintech. It is also vital for the sustainable, profitable business model to attain the society's trust in fintech.

4.2 Empirical findings with the fintech companies

As mentioned above, because of the scarcity of academic literature and research in Georgia in the field of fintech, the qualitative research was conducted from the side of the incumbents and the side of fintechs. The qualitative research results from the second party will make the research paper objective, more comprehensive and consistent. It will reveal insider information, the challenges and opportunities that fintech companies face in Georgia with the competition/partnership with the incumbents, what they need for further development, etc. The results were as follows:

Most of the interviewees (representatives of the fintech companies) define fintech as high-quality financial technologies that are available to deliver any kind of financial service remotely. It provides consumers with a variety of financial products in a more convenient way, faster and even cheaper than the incumbents.

Regarding the impact of fintech companies on financial institutions, all respondents agree that they have an influence. More specifically, some interviewees suppose that the impact is not great, even though it is at a very low level, as it is still in the early stage of development in Georgia. On the contrary, others believe it is already having an impact on Georgian financial institutions, mostly in the banking sector, microfinance companies, payment services, and trade sectors. This could be explained by the flexibility and keenness of fintech companies to adapt easily to new conditions. Thus, these quick adjustments open a window for bigger ideas and create plans and opportunities. It gives birth to new products and services for fintech companies that are later adopted even by the traditional ones.

In the competition part of the questionnaire, the applicants think that fintech companies have a number of strengths that could capture the customers of traditional financial institutions. These strongest features could make them compete with the incumbents. These are process automatization, the high speed of processes, their remoteness, their efficient access to financial services, and considerable flexibility because fintechs are more narrowly focused than traditional institutions.

As fintechs realize their strongest features and opportunities, some respondents believe that fintech companies are considered rivals for the banks in Georgia unless banks start to understand how they can leverage the opportunity. Other applicants think that fintechs are not considered rivals from the incumbents' point of view, and they are no direct competitors at the current stage. Should fintech develop rapidly in Georgia in the upcoming years, they might emerge as rivals.

Thus, in a competitive environment, the question may arise about moving towards cooperating with banks instead of competing. The interviewees admit that some have already cooperated or are planning to cooperate. This is augmented by the mutual benefits that this cooperation can bring and the ability to develop further. One respondent thinks that the payment system, in which most Georgian fintechs are represented, is not developed by fintechs alone. However, it is developed together with banks. So, from the

side of fintech companies, the cooperation environment with the incumbents seems positive.

In the light of the abovementioned, therefore, it is interesting what fintech companies think about banks if incumbents, such as banks, are keen to cooperate with them. The results are as follows: only one respondent thinks that banks would collaborate at some point because of the innovative services provided by fintechs, but others disagree with this positive view.

Other representatives of fintech companies believe that no bank will be interested in developing as fintech companies because they are most keen to develop their fintech department without collaboration. They think that most banks already have their tech units/departments, and if not, they will, otherwise they will soon disappear. So, they believe that there are services that banks will keep in-house, and they should. Hence, most representatives of fintech companies believe banks will develop this business by themselves.

Meanwhile, the increased competition makes fintech companies grow stronger, and in the coming 3 to 5 years they expect to invest in the following technological areas: data analysis—according to 20% of respondents; cyber security—60%; artificial intelligence—40%; blockchain—40%; and process automatization—40% of respondents.

As fintech is still at the stage of development, fintech companies face various challenges. The interviewees highlight the general challenges in Georgia, which are: shortage of capital; lack of qualified workforce; strict legislation; regulatory requirements; market size; low level of education; the lack of internal IT resources; and problems with attracting and maintaining tech talent.

Regarding opportunities, the representatives of the fintech companies think that if they collaborate with banks, the prospects will be different. These may be larger target audiences, leading to an increased customer base. In the collaboration (if they do) with banks, fintechs would also have an opportunity to be the main service provider. Furthermore, there is the prospect of greater integration of electronic money into banking products in Georgia.

As fintech is growing rapidly all around the world, there is doubt about its safety. There are several cases of the collapse of “successful” fintech companies, which financially damaged its consumers and the reputation of the fintech industry. In terms of doubts about its safety, Georgia is not an exemption. Considering there are not many fintech companies in Georgia,

it is interesting how fintech companies believe that their services might be unsafe for the customers. Some respondents think they are safe and mostly depend on what kind of fintech service is provided and from which company. Additionally, they admit that their “fintech company is as secured and safe (if not more) as any leading banks in the region”. Other respondents consider the risk: “There is nothing safe in today’s world”.

According to the analyses mentioned above, the respondents think that actions should be taken to increase trust in fintech. The interviewees emphasize more openness and exchange of information; customer education; and security certifications. The attitude toward fintech is thus generally positive, which instills hope and seems promising for financial market diversification, especially in the long run.

5. Empirical findings for the quantitative research

According to the methodology described previously, the sample size was determined to be 96, but overall, 102 responses were collected from the questionnaire.

The questionnaire was divided into two sections. The first section determined any kind of financial technology product experience of the applicant, after which she/he could continue to fill the form. The second section of the questionnaires distributed variables, independent and dependent. In general, the research model took the following form:

Y – Dependent variable: the simplicity of banking processes in banks;

X1 – Independent variable: Mobile Payment;

X2 – Independent variable: Digital Wallets;

X3 – Independent variable: Online Installment;

X4 – Independent variable: QR Payment;

X5 – Independent variable: Chatbot / Virtual Assistant;

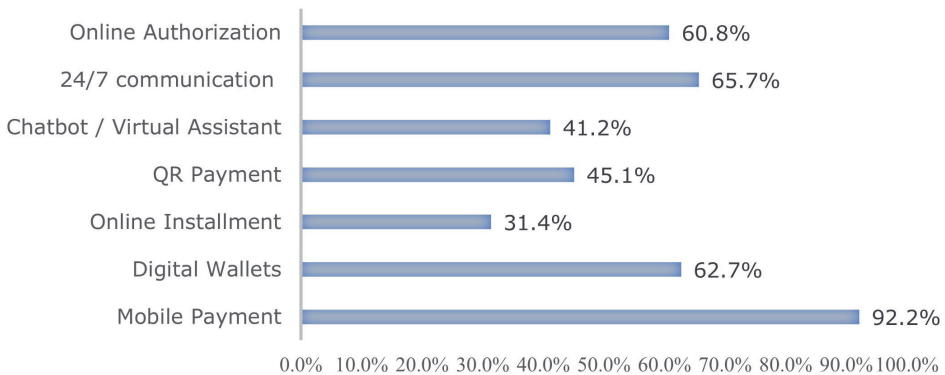
X6 – Independent variable: 24/7 communication with the bank, both verbally by phone and digitally;

X7 – Independent variable: Online Authorization tools.

As mentioned above, to obtain the data needed for the study, the questionnaire model was developed on a Likert scale, which is a 5-point scale (1—do not use; 2—rarely use; 3—more or less; 4—use often; 5—use very often).

For the general overview of the results on the question about which financial technologies did respondents have an experience with see Figure 1.

Figure 1. Consumers' experience with financial technology products



The above chart shows that most of the respondents (92.2%) had experience with mobile payment, followed by experience with communication tools (65.7%). Approximately 63% had experience with digital wallets, and about 61% of respondents with common online authorization tools. Less than 50% of respondents had experience with chatbots, QR payments and online installments.

On the question of how often applicants use mobile payments, approximately 55% responded that they use it very often (scale point 5), 23% mentioned that they use mobile payments often, and just 13% used these “more or less” (scale point 3). In terms of digital wallets, the distribution of results is as follows: 36% use them very often, only 10% voted for the four scales, and approximately 27% do not use them.

The answers about online installments are very interesting. It is evident that most of the respondents are not used to it because 64% answered that they do not use online installments, and only 9% (in total) use it often and very often. The same applies to the QR payments—only 15% marked scale point 3, so more or less 15% use QR payments, and the percentage is the same for the points 1 and 2 on the scales, while 51% of the respondents do not use it at all. Chatbot and virtual assistant tools are not an exception—12% use

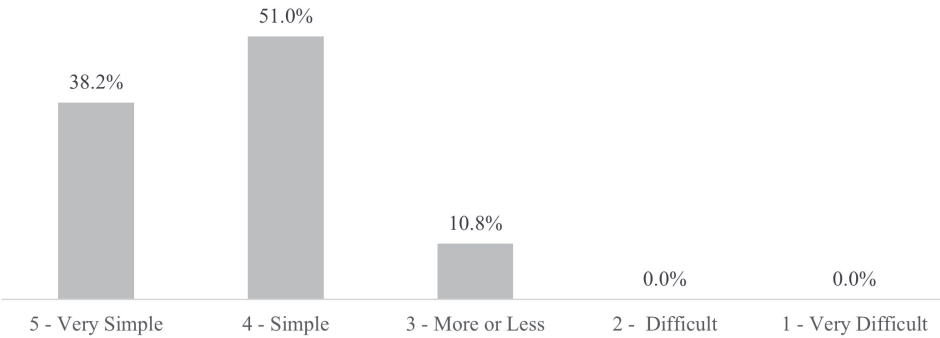
them often and very often, while 14% use them more or less, and 75% do not use them or use them rarely.

On how often respondents use 24/7 communication tools with the bank, in both verbally by phone and digitally, 35% (in total) admitted that they use it often and very often. At the same time, just 29% responded with the third scale point.

Regarding the last independent variable, ‘How often do respondents prefer online authorization tools’, the answers are distributed as follows: 64% use it often and very often, 20% use it more or less, and less than 17% voted for the scale points 1 and 2.

Finally, the respondents’ answers are promising about the dependent variable which determines the simplicity of the banking processes. Figure 2 represents the percentage distribution of results. It is evident that none of the respondents find banking processes in their bank difficult and/or very difficult. Hence approximately 90% believe that the processes are simple and/or very simple, and only 10% think that they are more or less simple.

Figure 2. The simplicity of the banking processes



6. Empirical findings for the econometric research

As for the statistical analysis, the answers obtained through the questionnaire were statistically processed using MS Excel. Statistically, variables were checked for correlation. The correlation matrix showed that the X3 variable is highly correlated with the other variables, so the X3 variable was removed from the model. The correlation matrix is represented in Table 1.

Table 1. Correlation matrix

	X1	X2	X3	X4	X5	X6	X7
X1	1						
X2	0.252781	1					
X3	0.198189	0.381383	1				
X4	0.19444	0.269948	0.52224	1			
X5	0.192714	0.340229	0.583994	0.398695	1		
X6	0.149916	0.070127	0.189662	0.147414	0.321238	1	
X7	0.324534	0.184281	0.308465	0.210098	0.25189	0.352429	1

As the X3 variable was highly correlated with the X4 and X5 variables, and because the X3 variable was removed from the model, a new linear regression was constructed (see Table 2) to determine the effect of pre-selected independent variables on the dependent variable.

Table 2. Results of regression analysis

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.4701							
R Square	0.2210							
Adjusted R Square	0.1718							
Standard Error	0.6132							
Observations	102.0000							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	6.0000	10.1333	1.6889	4.4917	0.0005			
Residual	95.0000	35.7197	0.3760					
Total	101.0000	45.8529						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.0393	0.2881	10.5497	0.0000	2.4674	3,6113	2.4674	3.6113
X1	0.1563	0.0595	2.6281	0.0100	0.0382	0,2743	0.0382	0.2743
X2	-0.0079	0.0400	-0.1971	0.8442	-0.0873	0,0715	-0.0873	0.0715
X4	-0.0824	0.0543	-1.5172	0.1325	-0.1903	0,0254	-0.1903	0.0254
X5	0.0564	0.0616	0.9146	0.3627	-0.0660	0,1788	-0.0660	0.1788
X6	-0.0129	0.0565	-0.2289	0.8194	-0.1252	0,0993	-0.1252	0.0993
X7	0.1797	0.0580	3.0990	0.0026	0.0646	0,2948	0.0646	0.2948

The regression analysis showed that the variables X1 (at the 1% level) and X7 (at the 1% level) have a statistically significant effect on the dependent variable. However, both are positively correlated with the dependent variable, which means the following:

1. Mobile payments simplify the banking processes,
2. Online authorization tools make the banking processes simple.

7. Conclusion

The influence of fintech on the market is growing and has even greater long-term perspectives.

The survey's respondents believe that the risk of competition is not as high as in the US or the EU because the startup ecosystem development is not helping Georgia, as the lack of innovative workforce, venture funds, small market size, etc., hinders its development.

Financial institutions expect that with the help of fintech, their customers may soon apply to new products, such as personal financing, personal loans, wealth management, and investing in the stock market.

In the competition with the fintech companies, the representatives of incumbents expect to strengthen the essential areas in order to keep customers—namely, retain and strengthen the trust; cost reduction for the financial products; personalized service oriented to the customer; fast service; ease of use; 24/7 availability; and flexible interface design.

Security and data-privacy risk, not enough experienced workforce, a lack of understanding of what benefits fintech can bring, and even the lack of high-quality fintech companies were named as the most challenging factors for the development of fintech in Georgia that should be overcome. As for the aspect of opportunity, an increase in customer base, the opportunity of expanded products and services, reduced cost, improved IT infrastructure, and faster response to the completion were named.

A partnership will improve the efficiency of incumbents from one side and another, and it will increase the customer base for fintech companies in Georgia.

Fintech is growing rapidly and is not yet broadly regulated, unlike banks, which are strictly regulated, which raises the question of whether the incumbents may need protection from the regulations. The survey's respondents believe that regulators should not protect financial institutions against fintech companies; instead, they should protect customers and help financial institutions integrate more fintech solutions in their operations.

Fintech companies believe that no bank will be interested in developing them as fintech companies because they are most keen to develop their fintech departments without collaboration. They think that most banks

already have their tech units/departments, and if not, they will, otherwise, they will soon disappear.

Consequently, based on the qualitative research (interviews with representatives of financial institutions), Hypothesis 1 (fintech companies have a positive influence on the development of financial products and services of incumbents) has been accepted as true.

Based on the quantitative research, Hypothesis 2 (Financial technologies have a positive impact on the simplicity of banking processes) has been accepted as true.

Based on the qualitative research, Hypothesis 3 (Traditional financial institutions are at high risk in the competition with the fintech in the following years in Georgia) has been rejected as false.

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