ЦИФРОВЫЕ ТЕХНОЛОГИИ В ЭКОНОМИКЕ И МЕНЕДЖМЕНТЕ

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FINTECH AND KAZAKHSTAN'S FINANCIAL MARKET

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Abstract: Financial technology is rapidly developing area in the world. Developed countries are aware of its potential trying their best to catch the pace of changes in this area. Country governments are trying to support their domestic developers. Regulators are trying to adapt to the rapid character of the industry. Kazakhstan's government is also investing time and resources to catch the wave. Unfortunately, Kazakhstan is losing its domestic, fintech developers. Part of the developers seeks better conditions for product development and other part better markets to monetise technologies. Research focuses on main problems developers and specialists in finance area encounter and count as impediments in developing financial technologies development. Survey was made to define most critical problems and analysed along with current financial market condition.

Keywords: Fintech, Banking, Financial Market, Kazakhstan, Critical factors

ҚАЗАҚСТАННЫҢ ҚАРЖЫ ТЕХНОЛОГИЯЛАРЫ ЖӘНЕ ҚАРЖЫ НАРЫҒЫ

Аңдатпа: Қаржылық технологиялар — әлемдегі ең қарышты қадаммен дамудағы сала. Бұл технологиялардың әлеуетінен хабардар дамыған елдер, осы саладағы өзгерістерге қол жеткізу үшін бар күштерімен еңбек етуде. Ұкімет өздерінің аталмыш саладағы жергілікті мамандарын қолдауға тырысып бағуда. Реттеуіштер саланың жылдам сипатына бейімделу үстінде. Қазақстан үкіметі осы толқынды өткізіп алмау үшін уақыт пен ресурстарын инвестициялауға әрекет жасап жатыр. Өкінішке орай, Қазақстан отандық қаржы технологиялар бағдарламашыларын жоғалтуда. Кейбірі өнімнің дамуына тиімді жағдайларды іздесе, басқалары технологияны монетизациялау үшін ең қолайлы нарықты іздейді. Зерттеу қаржы технологиялары саласының даму үрдісіндегі кедергілер мен қаржы технологиялар саласының мамандарының осы салада кезіктірген проблемаларды сараптауға бағытталған. Осыған орай автор ең маңызды мәселелерді анықтай отырып, қаржы нарығының ағымдағы жағдайымен ұштастыра талдады.

Түйінді сөздер: қаржылық технология, банк, қаржы нарығы, Қазақстан, критикалық факторлар

ФИНТЕХ И ФИНАНСОВЫЙ РЫНОК КАЗАХСТАНА

Аннотация: Финансовые технологии являются быстро развивающейся областью в мире. Развитые страны осознают его потенциал, стараясь изо всех сил уловить изменения в этой области. Правительства стран пытаются поддержать своих отечественных разработчиков. Регуляторы пытаются адаптироваться к быстрому характеру отрасли. Правительство Казахстана также вкладывает время и ресурсы, чтобы поймать волну. К сожалению, Казахстан теряет своих отечественных, финтех разработчиков. Часть разработчиков ищет лучшие условия для разработки продукта, а другая часть — лучшие рынки для монетизации технологий. Исследование фокусировано на основных проблемах, с которыми сталкиваются разработчики и специалисты в области финансов

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и которые препятствуют развитию финансовых технологий. Опрос был сделан для определения наиболее критических проблем и проанализирован наряду с текущим состоянием финансового рынка.

Ключевые слова: финтех, банки, финансовый рынок, Казахстан, критические факторы

INTRODUCTION

Just couple of decades ago financial sector lacked of opportunities which it has now. Clients were desperate to wait in queues in order to pay their utilities, get assurance letters from banks, get reports on their accounts. Today technology made these problems disappear. Using Technology today, one can access bank from suburb areas and make bank transaction on his account and even get loan. Pioneers in technology like Japan implementing the technologies based on artificial intelligence for excluding the risks related to human factor. Economists understand the importance of developing financial technologies and countries actively participating in a race for intellectual findings in this field. [8] Can Kazakhstan maintain same pace? Kazakhstan made some steps to pursue trend in fintech, but is it enough? Can Kazakhstan's market offer all conditions to support the domestic developers to succeed in this race?

LITERATURE REVIEW

Fintech development and global experience

Fintech is defined as "Computer programs and other technology used to support or enable banking and financial services". Origin-Early 21st century: abbreviation of financial technology. [10] Fintech after its long evolution starting from 1987 till today become unavoidable phenomenon in financial world. From its early start fintech used to be supporting tool for banking operations. Initially as separate programs, and after, used for communicating suppliers and users of financial services worldwide. But, with reveal of blockchain technology fintech entered the "democratization of access to finances" phase. [6] Today, fintech is able to form financial infrastructure, which is able to both compete and cooperate with conventional financial institutions. As trend in fintech supported and pursued globally, fintech nowadays, not only the emerging technology, but also potential competitive advantage, prize that is daring national economy and waiting for its owner. [3]

Fintech found its application in areas like digital and mobile payments, cryptocurrency, tokens, capital and investing markets, banking and enterprise financial management, big data analysis and use, crowdfunding, P2P lending, private finance and blockchain. [5] Furthermore, besides developers, regulators also trying to hedge the risks associated with new technology by providing regulations like "European commission action plan" [7]

Kazakhstan's financial market

Kazakhstan's financial market consist of submarkets like -money market, deposit market, credit market, currency market, securities market, pension market, insurance market. Kazakhstan's economy till 2007-2009 experienced decade of rapid growth based on export of natural resources which resulted in high returns to consolidated state budget, increase in gold reserves, and increase of National fund accumulation. Reflexions in economy were - decrease in unemployment level, rapid increase in average salary despite comparatively low efficiency in labour markets. Second wave of positive changes in finance sector was banking sector, which gained access to cheap international financial markets and as a result by 2009 increased total value of loans 50 times comparing to 1999 figures. But surplus of funds caused unappropriated evaluation of quality of loans that made Kazakhstan's economy sensible to changes in global financial markets. Global financial crisis started to be felt in 2007 and fortunately accumulated funds from exports worked as safety bags at that time.

Next decade starting from 2009, resulted in turbulence in banking sector, which were on the contrary adjusted by government interventions-like guaranteeing the certain amount of deposit levels to customers and additional investments to rescue banks with weak and faulty financial position.

Government showed active support not only in supply of financing, but also organized anti-crisis and post-crisis activities to support real estate sector. Aims of those programs were to provide citizens with new accommodation at low rates and prices. Thus, government forced the demand for houses and consequently it lead to increase in demand for loans. Government also established funds which were targeting agriculture sector and start-ups with innovative type of business and also firms in other industries. On the contrary, devaluation of currency in 2015 dramatically decreased purchasing power of citizens and Governments new programs offering accommodation by 7.5 percent instead of previous 12.5 percent are not giving expected results. During last decade government stayed exceptionally active in intervening in both currency support and organizing big projects which intended to pour finance to Kazakhstan's financial market, but unfortunately financial system is not achieving multiplicative effect because of lack in work of legislative regulators and also control over full route of flow of finances. Finance hardly reaches its initially intended targets and hardly passes through intermediaries. [4]

Kazakhstan's fund market consists of officially registered 2347 corporations. Among them, only 85 listed and only 4 percent private companies. According to the sectoral structure, the stock market is predominantly represented by energy companies from the quasi-state sector and financial organizations. At the same time, in Kazakhstan there are 2981 registered companies in the "industry" sector, including from the mining and processing sector, of which only 63 exist in the form of joint-stock companies [1], [4] [9]

Government initiated projects in Digitalizing program

Government stays active and signs contracts to get information technologies and experience of regulation of fintech from countries like Korea, Japan, Singapore, Belarus and UK. [18] Kazakhstan's government signed cooperation memorandum with "Belarus Association of blockchain" at TIBO-2018 International Telecommunication conference with the perspective to get experience in regulation and technology development. [17]

However, Kazakhstan is left behind in regulating Cryptocurrency market and cryptocurrency tools comparing to Belarus and therefore loses fintech startup which continuously immigrate to Innovative Technologies Park in Belarus. [19] In addition, National Bank developed and started online platform for investors who wish to buy notes of National Bank with 8.2 percent return. The application named "Invest online", which is totally based on blockchain technology is available on Google play and offers also its own e- currency. Moreover, National Bank initiated a project named Open API, where Banks give access to fintech companies in order to develop new banking products and services. Project-law is aimed to give banks opportunity to open access of their database, but not obligation. In turn, Minister of Finance of Kazakhstan, Bakhyt Sultanov announced a project which enables Administration of VAT based on blockchain technologies. He estimates 1.5 trillion extra additions to budget on behalf of this project. [20]

RESEARCH METHODOLOGY

Analysing financial market of the Kazakhstan and adopting fintech. Give recommendations to problems of the fintech industry. Financial system of Kazakhstan, fintech industry. In this research paper author references to domestic and foreign publications, statistical data, survey among specialists in finance area. Synthesis was made using induction and deduction theory of research methodology.

RESEARCH FINDINGS AND DISCUSSION

Kazakhstan's digitalization of financial market

Main development in fintech area: artificial intelligence, deductive analytics, machine learning, big data. Main products communication between banks and within banks, loans, scoring, marketplace, investing. [5]

Loan to firms and individuals shifts slightly to online loan offering fintech startups, like "Credit 24", "ID Finance", "Silk way venture". Online lenders state dramatic increase in their

portfolio volume, but conversely, share of the online loans is only 4 percent from total volume borrowed in Kazakhstan. [15] [16]

Olzhas Kundykbaev, CEO of online platform that aims to digitalize contracts and filing "Podpishi. Online" states fivefold increase in client base from establishment of his company, and it is just one example of successful starts of fintech startups in Kazakhstan. [11]

In spite of "Cinderella stories" in fintech industry, specialists bothered with unsystematic uncertainty sourced from regulators. For example, although, ID Finance stays one of the leaders in fintech development with projects on biometric service, psychometric scoring in banking, transactional scoring, Open data and Big Data, CEO of ID Finance assures that after successful initiation of online loan offering startup, National Bank tried to aggressively regulate the area and as a result built limitations that turned out serious obstacles for the company. [12], [13], [14]

Survey

Survey consists of questionaries' aimed to identify factors that are critical in developing the fintech area. Specialist that work in financial technologies and finance sphere were asked to choose among possible impediments from their point of view mostly effect negatively and block fintech industry from free development. Total number of respondents is 67, including founders of fintech companies, managers, specialists

from financial institutions, banks and investing companies.

As main problems of financial technologies area were presented following factors:

Unattractive market for foreign direct investment, failures in regulation of industry, and low purchasing power of the market, non-targeted tax system for fintech companies, high geopolitical risks, currency risks and weak cybersecurity, biased approach to bigger players in fintech startups, hard to attract capital for startups, security of intellectual rights, lack of perfectly competitive zone for startups (Figure 1).

As a result of my survey we defined three important critical factors that will be base for developments in fintech industry:

- 1. Insufficient market
- 2. Improper regulation
- 3. Lack of organized and fair competitive market

Kazakhstan gained its independence and couldn't succeed in economic security yet and financial market faults in Kazakhstan are the main obstacles before this goal. [2] Technologic Developments in fintech appear as a long awaited rescuer of the situation. However, fintech industry players waiting for satisfying changes in regulation of industry and look forward to see more economic freedom here like in Dubai, Singapore and South Korea. [5] Result of this research reveals regulation, control, organized, fair competitive market

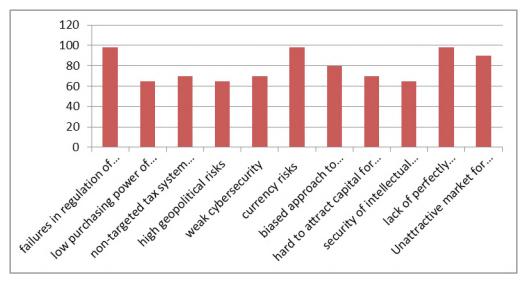


Figure 1- CSF in development of Fintech area

and insufficient market as critical barriers for fintech development in Kazakhstan. Despite Governments tremendous efforts and projects to enhance country's economy, Kazakhstan's market still stays weak and unattractive even for domestic fintech suppliers. [5] Lack of proper regulation, control and organized, fair competitive market led to the fact that Kazakhstan left with self-insufficient market and fintech is just a fresh look that came across and reminded our old problems.

CONCLUSION AND RECOMMENDATIONS

To conclude, economics planners and managers should revise importance of regulating and controlling function of industries. In turn, regulators should maintain Iterative approach in controlling the fintech industry. They should first give freedom to operate and then legalize the

comfortable path pioneers used to gain their niche in a market. Thus you exploit fintechearly comers to show you best possible way to develop the area. On the contrary, while you try to regulate the industry, fintech start-ups just may leave to other places with better conditions Kazakhstan should stay active in opening of digital hubs or zones where potential investors: business angels, venture funds, private and corporate investors will choose attractive projects there. Main branches in fintech will be securities market and technologies in monitoring and controlling from government, payment system, e commerce, online loans. [5] Banks should be first movers after benefits of financial technologies in near perspective. Government and customers can benefit from efficiency and transparency of financial technologies which eventually can be transferred to other branches and industries [8]

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