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PHILOSOPHY OF MONETARY POLICY AND FINTECH IN BELARUS: MAIN TRENDS AND INTERCONNECTION THROUGH THE PRISM OF A NARRATIVE APPROACH

In the first part of the work, through the philosophical approach, the development of the monetary policy of the National Bank of the Republic of Belarus is considered, including the analysis of the possibilities of transition to the inflation targeting regime, taking into account the study of the narrative approach. In the second part of the study, the authors consider the fintech market of the country, the formation of which was made possible largely due to the developed IT sector. Based on the conducted analysis, the importance of monetary policy for building an effective fintech market is stated, which in turn can also have a beneficial effect on the effectiveness of decisions made by the regulator. In conclusion, it is inferred that it is important to build a monetary policy taking into account the digital transformation of the financial sector, including the development of the fintech market.

Key words: monetary policy, targeting regime, fintech market, narrative approach.

ФИЛОСОФИЯ ДЕНЕЖНО-КРЕДИТНОЙ ПОЛИТИКИ И ФИНТЕХА В БЕЛАРУСИ: ОСНОВНЫЕ ТЕНДЕНЦИИ И ВЗАИМОСВЯЗЬ ЧЕРЕЗ ПРИЗМУ ПОВЕСТВОВАТЕЛЬНОГО ПОДХОДА

В первой части работы через приму философского подхода рассматривается развитие монетарной политики Национального банка Республики Беларусь, включая анализ возможностей перехода к режиму инфляционного таргетирования с учетом изучения повествовательного подхода (narrative approach). Во второй части исследования авторами рассматривается финтех-рынок страны, становление которого стало возможным во многом благодаря развитому ИТ-сектору. На основе проведенного анализа констатируется важность монетарной политики для построения эффективного финтех-рынка, который в свою очередь может благотворно воздействовать на результативность принимаемых регулятором решений. В заключении делается вывод о важности построения монетарной политики с учетом цифровой трансформации финансового сектора включая развитие финтех-рынка.

Ключевые слова: денежно-кредитная политика, таргетирование, финтех-рынок, повествовательный подход.

Introduction

Belarus has an open economy based on particularly dynamic exporting and importing firms. There is a dependence on the Federation of Russia for the supply of natural resources and raw materials, and also for export markets of high added value products. At the same time export and import of services are more diversified by countries. IT products are becoming increasingly important for foreign trade due to

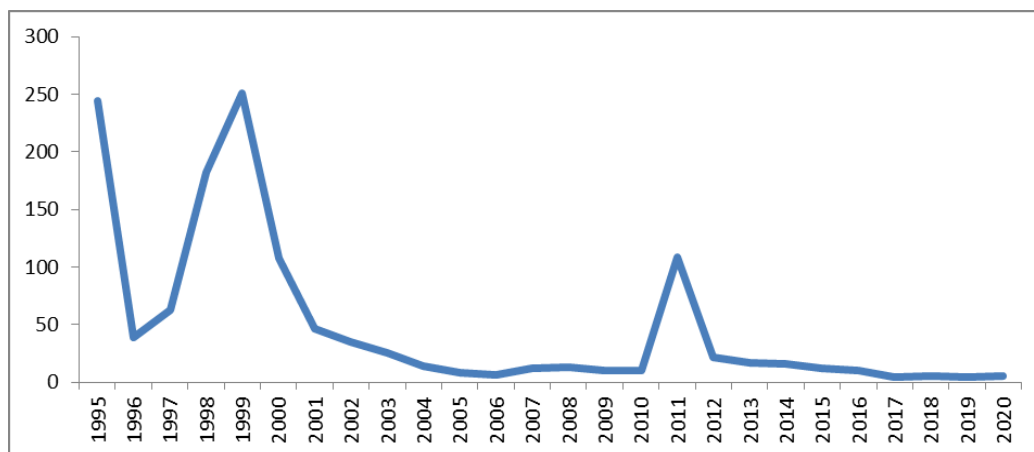
the large share of computer services in total export volume of services. In January – October 2020 the value of this indicator was 28.4%. At the same time, situation in IT sector has an impact on the national economy and the monetary sphere as well [1; 2].

The paper focuses on the formation of new directions in the financial market as a result of technological transformation, which primarily involves the formation of a FinTech

market and the evolution of monetary policy. The rapid development of the IT sector and its influence on the financial sector, including the impact on the evolutionary development of monetary policy forms the two-part plan of our survey. First, we analyse the transition of monetary policy to an inflation targeting regime with optimal rules for monetary policy taking into account the standards of contemporary monetary regimes and the particular characteristics of the Belarusian economy; among the key elements of this successful transition, there is the issue of enhanced communication by the central bank. In this regards narrative approach and its influence on monetary policy was over-viewed. Second, we analyse development of FinTech market in Belarus and its links with monetary policy. Undoubtedly, the formation of new FinTech trends has a certain impact on the monetary sphere. At the same time, we are at the beginning of this process. This sphere certainly requires additional research that can be able to take more attention on the possible

monetary policy and financial market transformation as well as risks related to the process.

I. The analysis of the long-term evolution of inflation shows a structural downward trend with the victory over three painful hyperinflationary episodes for the economy (a major one between 1992–1995, a second episode from 1998 to 2000, and finally a third one which coincided with the global sovereign debt crisis in 2011). The last episode was influenced by excessive monetary emission and partly linked to the global financial crisis in 2008–2009 [3]. Indeed, the structural problems of the economy worsened as a result of this crisis, the growing current account deficit, macroeconomic dependence on the sectors keys to the economy, high dollarization, low capitalization and poor capital market development. Since then, inflation has been well under control, and on a declining trend (picture).



Picture. – Inflation in Belarus (end of a year consumer prices).

Resource – Authors' development based on [4]

Due to transition to monetary targeting, gradual liberalization of currency regulation and other affective changes of monetary policy from 2015 it became possible to achieve stabilization on the monetary and currency markets [5]. Since April 2016, Central Bank decreased refinancing rate gradually in line with declining inflation. In 2019, Belarus's inflation rate was under 5% (4,7% exactly). The central bank lowered its benchmark interest rate three times in 2020 (February, May and June) claiming that domestic inflation was slowing faster than expected in the first half of 2020, while infla-

tion among its trading partners was also slowing faster, which led other central banks to lower their interest rates [6]. The coronavirus pandemic also influenced the Central bank decisions in 2020. Additional measures for increasing banks' possibilities to support the economy were adopted in March. Nevertheless, in August monetary policy was tightened. Central bank suspended short-term liquidity operations. It was done for decreasing high demand on foreign currency in the conditions of pandemic enforcing and political tension [7].

Chairman of the Board of the National Bank, Pavel Kallaur stated on August 7, 2019 that they were officially planning a transition to an inflation-targeting regime already in place in numerous countries around the world [8]. In 2020, following a visit of experts, the IMF made two priority recommendations for the short and medium run. One is for the National Bank to replace the current year-end inflation target with a medium-term continuous inflation target. In the short term, the aim is to increase the quality of external communication documents, especially in English [9]. The monetary policy framework had already come close to *de facto* inflation targeting, or what is referred to as «IT Lite». This framework yet suffers from three drawbacks: (i) the inflation target is revised annually; (ii) the target is not continuous, except for the end-of-year inflation rate; and (iii) the target is set as a ceiling (5 % in 2019) while being punctual, which leaves the central bank with no room for manoeuvre against random inflationary shocks that might require an overly aggressive adjustment. Replacing the current year-end inflation cap with a medium-term continuous inflation target is expected to improve internal and external communication, stabilize expectations, and provide flexibility to respond to temporary and non-random shocks. Increased central bank credibility and better anchored expectations shall ultimately lead to a reduction in the non-inflationary equilibrium real interest [10, p. 8]. But in November 2020, the National bank announced that the shift to inflation targeting in 2021 was premature due to need to improve legislation [11]. From our point of view, the unpreparedness to inflation targeting transition in 2021 is affected also by the complexity of economic forecasting in the current period and some acceleration of inflation.

In addition, the International Monetary Fund advocates a storytelling approach to monetary policy: «Further improve the Near Term Forecasting tools and introduce structural models that facilitate more of a narrative approach» [10, p. 7]. This emphasis on communication is one of the main thrusts of the new monetary consensus that took shape in many countries from the 1990s onwards, and has become dominant in advanced economies. It is linked to the narrative vision of the economy. Here we define a narrative as a vehicle for the tasks of creating, storing and using

knowledge by linguistic means. The need to frame reality in narrative structures is a human predisposition because we impose such a structure on reality in order to make sense thereof. The performative role of narratives has often been overlooked in the theory of central banks; there really is no such thing as controlled experimentation to prove the importance of changing narratives in order to generate economic fluctuations. Shiller (2020) has thus defined a new field of study called narrative economics which consists of the study of the diffusion and the dynamics of popular narratives, of stories, in particular those of human interest and human emotion, and how the latter change over time, to understand economic fluctuations [12]. Yet, the shift toward inflation-targeting in the unfolding narrative spelled out by Belarusian monetary authorities would be incomplete if we failed to mention the emergence of the Fintech sector, which propels technological innovation at the heart of monetary policy design.

II. Belarus has a long tradition in the ICT sector, and has attracted the attention of foreign investors, universities and research centers [13]. In the days of the Soviet Union, Belarus was one of the socialist republics with the most advanced technological level, whether in terms of computers or individual components. The World Bank has described Belarus as the «Silicon Valley of Eastern Europe».

In 2015, the IT sector was valued at \$ 1,12 billion. IT products and services are experiencing an exponential boom, doubling every three or four years, leading the World Bank to identify this sector as one of the principal growth levers of the economy to be promoted by a national strategic plan. Rapid growth of IT sector development started about 15 years ago when High Tech Park (HTP), a Minsk-based free trade zone for foreign and domestic companies, was created. The residents of HTP enjoy special favorable work conditions (tax benefits, simplified procedure for hiring foreign specialists, provision of crypto-asset operations, signing of convertible loan agreements and smart contracts, etc. [14; 15]. Today HTP is a hub in the Belarusian IT sector. More than 900 companies received HTP residency. In 2019 export of HTP residents reached 2,2 bln. USD. The park's share in GDP is approximatively 3,5 % [16].

The IT sector is strongly supported by the State Program for the Development of the

Digital Economy and the Information Society spanning over the period 2016 to 2020. The objective of this ambitious program was to improve conditions and facilitate the transformation of all economic activities influenced by the ICT sector, such as the construction of a digital economy, an information society and e-government [17]. In 2020, Internet penetration stands at 79 %, mobile connections at 126 %, the number of Fintech start-ups was about 70; key subsectors consist in payments, transfers, investment platforms [14]. Finally, the country ranks 64th worldwide for the Global Innovation Index 2020 [18].

The post-2008 crisis situation in the global financial industry was characterized by the emergence of a wide range of technology-driven companies (so called «fintechs»), moving into traditional financial services. While the new players intensified competition, drove digital transformation, and put pressure on the global financial sector, their services were complementary to those provided by traditional banks, also adopting these technologies. The term «fintech» refers to this new financial industry which relies extensively on innovative technologies and business models to provide services outside or within the traditional financial sector. Cross-border loans, payments and transfers, as well as Insurtech and investment exchanges are among the segments most affected by these developments.

The Belarusian FinTech map today encompasses numerous payments services, online investment platforms, personal financial management apps, robo- advising and P2P loans. Presidential Decree №8 adoption stimulated growth of blockchain projects in FinTech sphere. At the same time underdeveloped niches include crowdfunding, RegTech, SupTech, Proptech, and InsureTech. This is influenced by insufficient regulation, a lack of experience, and/or an insufficient level of financial and digital knowledge in these areas [19].

Belarusian IT companies have developed a wide range of Fintech products, software and digital solutions for banks both for domestic and foreign markets. Some companies prefer to externalize, while others internalize by creating their own Fintech services and software for Belarusian banks. There are companies specializing in services mostly for Belarusian customers. For example, the IT company Softclub provides products for banking

digitalization in Belarus. Large IT companies have also developed FinTech projects. At the same time there is no close cooperation between Belarusian commercial banks and IT startups. They make only their first steps in this field. For example, Belgazprombank loaned first FinTech accelerator in 2018 [20]. Priorbank was general partner of Imaguru FinTech Hackathon: Elevator Lab Edition in 2019 [21]. In June 2020, BelVeb Bank announced a venture capital fund, «Vedi Venture» launching, which specializes in Fintech projects [22]. The above mentioned projects are all stand-alone. This is why the goal of the FinTech community is to channel cooperative forces, and create new joint projects between traditional financial institutions and Fintech start-ups.

There are several well – developed segments in the Belarusian FinTech market. Besides payment services and money transfers, the most popular segment consists of online investment platforms, including blockchain-based projects. Several crypto exchanges are registered in the country (ex: currency.com, iexchange). Belarusian companies are now able to issue crypto tokens through specialized investment platforms. Individuals can mine, buy/sell and change cryptocurrencies without any limitation. The Central Bank has already launched an information network based on blockchain technology, and the first blockchain-powered bank guarantee was issued in January 2019 [23].

Several years after the adoption of Decree No. 8 «On the development of the digital economy», a pilot project was launched allowing twelve banks among which Belarusian-Swiss Bank, BTA Bank, Belarusbank, the largest banking entity in the country, to issue digital tokens based on blockchain technology. This innovative project brings together range of key players in the FinTech sector in the country's High Tech Park, where cryptocurrency miners are common place. It will take place from January 1, 2021 to January 1, 2024 after which the initiative may be extended for wider use in the country. The issuance of these digital tokens should allow fund raising by the banks concerned on the ICO model. Banks will not be allowed to invest more than 10 % of their total capital in these token issuance projects. Only companies or physical persons registered as residents of the high-tech park com-

plex will be allowed to transact using the new tokens [24].

Another relevant intersection between the central bank and the FinTech sector is represented by central bank digital currencies (CBDCs). What is the real game changer in the technology underlying cryptocurrency protocols? Some issues pertain to corporate governance and asset pricing. Others are more economic issues, such as the way a given blockchain is designed in order to ensure the alignment of incentives. How do cryptocurrencies affect the role of a central bank? Cryptocurrencies could form the basis of a new monetary policy regime underpinned by inflation-targeting policies. Given the challenges of the rise of crypto-assets and the decline in the use of cash, we must ask ourselves whether central banks should issue their own digital currency. The starting point is to determine whether central bank money is actually a public good. This idea raises much deeper issues related to the uniqueness of money in each of its functions, and the role that a central bank digital currency could have in relation to cash. Another issue is to understand how a central bank digital currency would affect the rest of the financial system, especially deposit-taking institutions.

On September 18, 2019, the Belarusian economic research and outreach center «BEROC», whose mission is to promote the market economy in Belarus by bringing economic expertise, knowledge and education in public dialogue on economic development, and the Educational Center of the National Bank of the Republic of Belarus organized a seminar titled «Central Bank Digital Currency (CBDC): what, why and how?», animated by Thomas Kudrycki (CTO of eCurrency Mint Ltd) [25].

A seminar was held to present the new digital currency technology of central banks. During the event, participants learned about the pros and cons of digital currencies, understood their distinctive features, and studied various international experiences of CBDC implementation plans.

Despite the fact that national FinTech market develops gradually, Belarus is not a leader in the industry. For example, Belarus took only the 59th place among 65 countries in the Global FinTech Index 2020. We could guess that the level of FinTech market development is determined by the size of country

(bigger is better) and good financial market existing. These factors are important but not necessary conditions. In this Report Lithuania is in 4-th position, Estonia is ranked 10-th and Russia 32-d [26]. Lithuania has positive experience in FinTech stems from the Central bank's openness to innovation and startup creation, adaptive legislation and favorable infrastructure. Since 2016 yearly average FinTech growth has been 30%. This small country has 210 Fintech companies, including 62 electronic money institutions, 35 payment institutions and 6 special purpose banks [27]. At the same time, high level of economic digitalization allowed Estonia to place a high position in FinTech ranking. Global investing and trading platform-Funderbeam and well-known unicorn Transfer Wise were developed in the country [28]. The Central bank of Russia also works a lot on the financial sector digitalization and FinTech initiations. It has realized the roadmap on RegTech and SupTech development as well as a marketplace for financial services creation and Central Bank sandbox introduction [29].

Belarus authorities in general and National Bank in particular are very active in the sphere of financial sector digitalization. At the same time, modern financial market implies the existence of closed cooperation between traditional financial market intermediaries and FinTech startups. Legislative improvement in such spheres like venture investing, payment services, crowdfunding, insurance will support to develop less popular FinTech spheres in Belarus. This process can be sped up by increasing funding channels, including market stimulus creation to raise interest of innovation start-up investing from corporations' side.

Conclusion

What is the convergence between inflation targeting policy, whose implementation is projected in Belarus, and the FinTech revolution boosted by a particularly dynamic ICT sector? The answer is quite intuitive. As the IMF has pointed out, the success of Belarus' monetary transition requires increased efficiency of monetary policy transmission channels and improved communication. The success of monetary policy hinges on a renewed technological symbiosis between the central bank, Fintech-companies and second-tier banks. The FinTech sector is the ideal testing

ground for such renewal based on innovation. The flagship projects can be ideas to introduce a central bank regulation sandbox, legislation adoption on crowd financing, RegTech and SupTech market development planning as well as the discussing the possibility of central bank digital currency adoption. That would enable better transmission of monetary policy decisions, and real-time information receiving as well as will increase the flexibility of the Belarusian financial market. In times of different challenges, these technology-driven breakthroughs would be most welcome. Narrative

approach will be able to support in the process also. It should be noted that financial sector digital transformation including FinTech market development is an integral process of the digital economy. The monetary policy and financial sector technological changes influence each other. The regulator's understanding of the importance of these processes as well as identifying the needs of market participants based on the emerging conditions and challenges will increase the effectiveness of monetary policy and form a developed and competitive modern financial system.

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