

THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN FINANCING THE EUROPEAN ECONOMIC GROWTH

Oxana SHCUTCO, assoc. prof., PhD

Belarus State Economic University, Belarus

Svetlana BILOOCAIA, assoc. prof., PhD, AESM

e-mail: bilooaiasvetlana@gmail.com

Abstract. Despite significant progress in recent years in attracting investments in European economy, access to finance for young, innovative firms or SMEs is a problem even in countries where access to bank finance has remained stable throughout the crisis. In order to complement bank financing, the European CMU Action Plan strengthens the different sources of alternative finance, including crowdfunding, P2P Business lending etc. and offers various benefits to firms and investors, which are described in this article.

Key words: digital technologies, investments, EU Capital Markets Union, Digital Single Market, alternative finance market, crowdfunding, P2P business lending

JEL: E52, G18, G23, O33

Introduction. At the turn of 2010s, the economy of many European countries have faced such problems as the reduction of GDP, high unemployment, massive migration flows from unstable economies, population aging, etc., which led to a slowdown in economic growth and the emergence of difficulties in ensuring decent living conditions for the population. In order to cope with the challenges caused by the consequences of the recent financial crisis and to follow a path of sustainable development in the EU, the *Europe 2020: Europe's growth strategy*, was approved, which aimed to promote *Sustainable, Inclusive* and *Smart growth*, promoting a more efficient, greener and more competitive economy, based on knowledge and innovation.

The European Commission's Investment Plan for Europe (Investment Plan) was approved to finance the solutions of the tasks set in 2015, which aimed at attracting Euro 315 billion as investments to the EU economy within three years. The results of the first year of implementation of the *Investment Plan* proved to be more successful than planned – in just 12 months, there were invested Euro 116 billion, financed more than 202,000 SMEs and created 100,000 new jobs.

Taking into account that the economies of the Republic of Belarus and the Republic of Moldova, in their evolution, meet the same challenges as many EU countries, and also, taking into account that corresponding Strategies [1, 2] have been developed to overcome them and similar tasks have been set for ensuring sustainable economic development and raising the level and quality of life of the population, an analysis of international experience in overcoming existing problems in attracting investments to stimulate economic growth is an urgent task.

The objective of the present study is to identify, considering the experience of the EU countries, how can the development of information technologies increase the volume of investments attracted to the economy, reduce their volatility and optimize the acquisition of capital by all economic agents, regardless of their size and level of development of individual sectors of the financial markets of individual countries.

The study showed that one of the success determinants of the *Investment Plan* was the creation of an investment friendly environment in EU countries. To improve the business environment and financing conditions, the investment plan includes the progress towards a *Digital Single Market, Energy Union and Capital Markets Union (CMU)*.

The CMU is a plan according to which is intended to help building a true single market of capital across the 28 EU Member States to mobilize capital in Europe. According to the CMU Action Plan, alternative sources of finance, complementary to bank-financing – including capital markets, venture capital, crowdfunding and the asset management industry should play a bigger role in providing financing to EU companies that struggle to get funding, especially SMEs and start-ups. Having more diversified sources of financing is good for investment and business but is also essential to financial stability, mitigating the impact of potential problems in the banking sector on companies and their access to finance.

Digital Single Market Strategy and *CMU Action Plan Strategy* are implemented in close interconnection, positively complementing each other. Implementation of the CMU Action Plan boosts private investment in research and innovation, creating better conditions for the private sector to invest in innovation activities and bringing

together investors throughout Europe, the result of which is the accelerated development of innovations, especially in the field of *Information and Communications Technologies*. On the other hand, the development of *Digital Single Market*, the emergence of ICT innovation, stimulates the modernization of the financial market infrastructure, the emergence of new financial instruments and the improvement of the mechanisms for their attraction, which stimulates the development of capital markets and ensures a more successful implementation of the *CMU Action Plan Strategy*. Its main task is to increase investment in the economy.

Digital technologies, served a dual function for the financial sector: first and foremost, they have enabled existing businesses to service clients much more personally, efficiently and effectively, leading to a vast and important shift in the way money is exchanged and banking services provided. Today, electronic trading is rapidly replacing human trading in global securities markets, while technology based payment systems are taking virtual cash out of real people's wallets, with many payments moving online and onto smartphones.

The new technology has also led to the rise of a new class of financial service providers and the emergence of fascinating new funding vehicles and payment systems, which have brought access to finance to many new customers. Along the way, it has posed new challenges to a regulatory framework, which has not yet properly addressed the development made possible by digitalization.

Crowdfunding, virtually unknown a decade ago, has reached more than Euro 5 billion in Europe in 2015, and "blockchain" technology, the open source algorithm underlying digital currencies like bitcoin, is threatening to overturn traditional concepts of how monetary value is counted and held. Swift and seamless cross-border electronic payments in Europe through various channels would be immensely beneficial for a wide range of businesses. The blockchain protocol itself could effectively and efficiently help connect fragmented national capital markets in Europe, if it were properly understood, regulated and accepted. On top of that, extending the already wide-scale use of *digital technologies in the financial sector could improve transparency and monitoring*, which, in turn, would lead to less systemic risk in the financial system – a key objective of any capital markets reform.

Financial services provided using *digital technologies* for different types of consumers are presented in table 1.

Table 1.

Impact of digital technologies on financial services in different consumer categories

Services	Individuals	Small businesses, start-ups	Large corporations
<i>Electronic trading; Electronic and mobile payments; Cryptocurrencies</i>	Investment opportunities through electronic trading platforms; Faster and convenient payment through mobile channels, payment on the go using apps, 24/7 account statements etc.	Access to capital markets through electronic trading platforms; Faster and convenient payment, cost savings, opportunities for e-commerce, new business opportunities.	Access to capital markets through electronic trading platforms; Real-time movement of funds in a simple, convenient and cost-efficient way; Enhanced transparency.
<i>Data analytics</i>	Profiling (with explicit consent) will offer additional value – tailored financial products and services, better customer experience, quick and easy credit risk assessment.	Better insight into financial performance, data analytics for credit analysis, new business opportunities in the data analytics sector.	Better insight into financial performance, optimisation of internal processes, data analytics for risk management
<i>Technology-driven alternative finance</i>	Access to a wider capital base/alternative sources of capital, as well as investment opportunities.	Access to a wider capital base, access to finance that would not have been possible otherwise.	Investment opportunities, collaborative strategies with crowdfunding platforms.
<i>Trust and cyber security</i>	Underlying issue of trust in a digital environment Cyber security and cyber-risk culture		

Source: www.lisboncouncil.net/component/downloads/?id=1266

According to the *Alternative lending market trends in Continental Europe* [4], the alternative finance market in geographic Europe is covered by 32 countries and 367 online alternative finance intermediaries, 273 of which are operating outside the United Kingdom; this captures an estimated 90% of the visible market. The total online alternative finance market volume in 2015 reached Euro 5.4 billion with a UK share of 81% of the total European marketplace.

Excluding the UK, the European alternative finance market has been showing high growth rates since 2013 and the total financed volume reached Euro 1 billion in 2015 (figure 1).

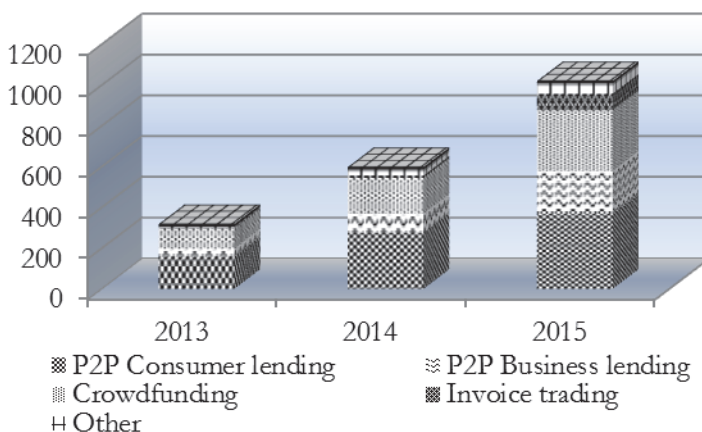


Figure 1. European online alternative finance market volumes 2013-2015 (excluding UK), mln. Euro

Source: elaborated by the author based on KPMG, *Alternative lending market: trends in Continental Europe* in 2016.

During 2013-2015 the largest share of the alternative finance market (excl. UK) was taken by P2P Consumer lending and P2P Business lending, which in 2015 covered 57% of the European market, constituting Euro 366 mln. and Euro 212 mln., respectively. While P2P Consumer lending made up the largest part of the alternative finance market, P2P Business lending grew at higher rates between 2013-2015 (from Euro 40 mln. to Euro 212 mln.), expected to become the largest alternative finance lending segment in Europe.

The third significant alternative finance lending segment is crowdfunding, including both equity- and reward- based crowdfunding, which showed a 74% average growth rate in 2013-2015, from Euro 99 mln. to Euro 298 mln. Invoice trading has developed in 2015 and reached Euro 81 mln., showing the great opportunity for new alternative finance lending segments to develop.

Conclusion. Access to finance for young, innovative firms is a problem even in countries where access to bank finance has remained stable throughout the crisis. Thanks to their strong local networks and relationships, banks will continue to provide the majority of funding to SMEs. However, only 41% of all SMEs in the EU perceive no limitations in their access to future financing. To complement bank financing, the CMU Action Plan strengthens the different sources of alternative finance, including crowdfunding, P2P Business lending etc. In addition to providing an alternative source of financing directly, they can offer other benefits to firms: they can give a proof of concept and idea validation to the project seeker; help attract other sources of funding, such as venture capital and business angels; give access to a large number of people providing the entrepreneur with insights and information; and it can be a marketing tool if a campaign is successful.

Bibliography:

1. *Национальная стратегия развития Молдова-2020: 7 решений для экономического роста и снижения уровня бедности.* Закон Nr. 166 от 11.07.2012 об утверждении Национальной стратегии развития «Молдова–2020». In: Monitorul Oficial от 30.11.2012, nr. 245-247.
2. *Национальная стратегия устойчивого социально-экономического развития Республики Беларусь на период до 2020 г.,* одобрена Национальной комиссией по устойчивому развитию Республики Беларусь (прот. № 11/15 ПР от 06.05.2004 г.) и Президиумом Совета Министров Республики Беларусь (прот. № 25 от 22.06.2004 г.)
3. European digital forum, *From start-up growing to scale-up Europe's digital economy.* 05.2016 [on-line], Disponibil: www.lisboncouncil.net/component/downloads/?id=1266 [citat 15 decembrie 2016].
4. KPMG, *Alternative lending market trends in Continental Europe in 2016,* november 2016. [on-line], Disponibil: <https://home.kpmg.com/gr/en/home/insights/2016> [citat 15 decembrie 2016].
5. <https://ec.europa.eu/info/business-economy-euro/growth-and-investment>