

DOI: [10.55643/fcapter.6.53.2023.4216](https://doi.org/10.55643/fcapter.6.53.2023.4216)
Ihor Ivasiv

D.Sc. in Economics, Professor of the Department of Banking and Insurance, Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine;

ORCID: [0000-0003-3108-9338](https://orcid.org/0000-0003-3108-9338)

Inna Zelisko

D.Sc. in Economics, Professor of the Department of Management, State University of Information and Communication Technologies, Kyiv, Ukraine;

ORCID: [0000-0002-0803-2598](https://orcid.org/0000-0002-0803-2598)

Serhii Melnyk

PhD in Economics, Doctoral Student, State University of Infrastructure and Technologies, Kyiv, Ukraine;

ORCID: [0009-0004-5812-0758](https://orcid.org/0009-0004-5812-0758)

Alua Yesmakanova

PhD in Economics, Associate Professor of the Department of Marketing, State University of Information and Communication Technologies, Kyiv, Ukraine;

ORCID: [0009-0002-6069-9020](https://orcid.org/0009-0002-6069-9020)

Liudmyla Vasylenko

Candidate of Economy Sciences, Lecturer, National Scientific Center Institute of Agrarian Economy, Kyiv, Ukraine;

e-mail: l.vasylenko43@gmail.com

ORCID: [0009-0005-7634-0532](https://orcid.org/0009-0005-7634-0532)

(Corresponding author)

Yuriy Safonov

D.Sc. in Economics, Professor, Deputy Director, Scientific Institute for Modernization of Educational Content, Kyiv, Ukraine;

ORCID: [0000-0001-5623-1965](https://orcid.org/0000-0001-5623-1965)

Received: 06/10/2023

Accepted: 17/12/2023

Published: 31/12/2023

© Copyright

2023 by the author(s)



This is an Open Access article distributed under the terms of the [Creative Commons CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/)

FINANCIAL STATE AND DEVELOPMENT PROSPECTS OF THE OPERATORS IN THE MOBILE MARKET

ABSTRACT

The article provides an in-depth investigation of the financial and economic state of the operators in the mobile market and a determination of the prospects for their further functioning.

To achieve this goal, a wide range of general scientific and special methods were used, the main ones being: methods of generalization and synthesis, scientific abstraction, analytical diagnostics, induction and deduction method, statistical method of standard deviation (absolute and relative) based on the use of representative sample observation.

The conducted analysis of the financial and economic status of the target market participants showed that the mobile market operators demonstrated a relative increase in revenues during the research period, where the largest share of profitability remains with the market leader - PJSC Kyivstar.

In the course of identifying the potential financial and economic opportunities for the companies in the mobile communications market, it was found that it is extremely important for the operators to address the issue of building capacity for the development of new communications standards, where mobile Internet, mobile advertising, and the creation of new tariffs and services remain among the promising areas.

On the basis of the conducted research, it is identified the key directions of the target market development, which consists of the improvement and diversification of mobile communication services through the transformation and reorientation of business processes, the formation of "smart" infrastructure and increasing the level of economic efficiency of market operators. It is proved that only if strategic priorities are implemented in the direction of creating an attractive investment climate in the mobile market, there are prospects for sustainable business development and continuity of mobile communication services to meet the needs of consumers and maximize profits for enterprises in the industry.

Keywords: mobile operators, mobile market, mobile communication services, digitalization of society, level of profitability, financial state, competitiveness

JEL Classification: D89, F65, L86, L96, O14

INTRODUCTION

Telecommunications are very important for the national economy, as their main task is to provide for the demand of citizens for information transmission. The development of telecommunications is a prerequisite for building a business infrastructure, creating favourable conditions for attracting investments into the country, solving employment problems, and introducing the most advanced information technologies. In order to maintain communication between consumers who, under the current conditions of accelerating information development, use mobile means of communication, it is confirmed the importance and relevance of the research on the national mobile market in terms of its financial condition and development prospects.

Given the rapid development of Internet services using wireless networks, the major market operators are intensively expanding the range of services provided, focusing on new favourable tariff plans in terms of data transmission for mobile devices. In turn,

the successful development of the mobile communications market requires the implementation of high-speed Internet and mobile communications technologies.

In this era of informatization and intellectualization of society, when the consumption of information services is actively growing, consumers are in great demand for entertainment and educational content available for viewing on both stationary and mobile devices, which, in turn, contributes to the growth of demand among the population, provided that the interests of users are maximized and the profitability of mobile operators is increased.

LITERATURE REVIEW

The issue of research and analysis of the activities of the operators in the mobile market is constantly being studied by well-known domestic and foreign scientists and practitioners. Among the most famous are such domestic scientists as: Boyko A. B. [1], Kulakov, V. O. and Shchebelskaya, V. O. [6], Ladychenko, K. [7], Lyakh, Y.O., Kasyanova, N.V. [9], Usyk S. P., Ponomarenko S. A. [18]. Domestic scientists point out that the mobile communications market is one of the most profitable and rapidly developing industries.

Boyko A. B. emphasized that sustainable development of the information and telecommunication infrastructure is the most important prerequisite for increasing the competitiveness of the economy and integration of Ukraine into the global information society. Kulakov, V. O. and Shchebelskaya, V. O., in the process of analyzing the state of the telecommunications services market, determined the ratio of industry development indicators to general trends development of the economy of Ukraine and it was determined that the main segments in the market of telecommunications services remain mobile, fixed and broadband (computer) communication. Lyakh, Y.O., Kasyanova, N.V. in their research defined the priority directions of the development of the telecommunications market in the conditions of deepening the processes of Ukraine globalization and integration into the global space, such as the provision of services mobile communication and access to the Internet.

Important aspects of the results of the research on the financial condition of mobile market operators and prospects for the development of modern companies in the target market of Ukraine and in the global space are covered in the works of such well-known domestic and foreign scientists as Cecere G., Corrocher N., Battaglia R. [2], Dastidar K. [3], David Bardey, Danilo Aristizábal, José Santiago Gómez, Bibiana Sáenz [4], Lehr W. [8], Nasco, S. A. [10], Ru C., Gupta R. [12], Yatskevych I. V., Zhadanova YU. O. [19], Zubko L. V., Sapega Y. V. [21] and others.

Noting the significant contribution of well-known domestic and foreign scientists, it is considered necessary to devote the research to the analysis of the financial and economic status of operators in the mobile market, identification of the conceptual features of the functioning of the global mobile market in order to determine the further prospects for the successful operation of operators in such key aspects as effective development of business processes, formation of a smart infrastructure of the mobile market and increase of the level of economic efficiency of the functioning of its participants.

AIMS AND OBJECTIVES

The purpose of the research is to conduct an in-depth investigation of the financial and economic state of the operators in the mobile market and determination of the prospects for their further functioning on the basis of the formal logical method and using the method of system and statistical analysis (standard deviation method (absolute and relative)).

METHODS

The object of the research is the process of analysing the financial and economic condition of the operators in the mobile market and determining the prospects for their further functioning. While solving this scientific problem, there were used general scientific and special research methods, the main of which were the methods of generalization and synthesis, scientific abstraction, analytical diagnostics, induction-deduction method, and regulatory and statistical methods. The dialectical method of cognition of the social and economic processes, the formal logical method and the method of system analysis were used to comprehensively analyse the structure of the national mobile market and the structure of revenues from the provision of mobile services.

The use of the statistical method of standard deviation (absolute and relative) based on the application of representative sampling made it possible to synthesize a reliable information database for the research and analytical calculations on the dynamics of key financial and economic indicators of the operators in the mobile market. The method of generalization

and synthesis enabled the accumulation of the entire range of scientific results into a single concept that reflects the relevance of the subject, identifying key areas of development, goals, objectives and features of adaptation of tools and methods used by mobile market participants. The method of analytical diagnostics made it possible to study the main trends that characterize the development prospects of the industry and mobile market participants, in particular.

RESULTS

The mobile communications market is currently considered one of the most successful business areas, as this type of communication is in high demand around the world. Under such conditions, mobile operators do not face any problems with the lack of subscribers.

The analysis of revenues from communications services shows that mobile communications is a fast-growing segment of the telecommunications market. In 2022, the global mobile market amounted to USD 982 billion, or 82.5% of the global telecommunications market (Figure 1).

The mobile communications market is growing rapidly due to an increase in the subscriber base, the launch of new devices, and the development of mobile Internet services, including mobile broadband. Typically, additional operator services are divided into three main groups: mobile Internet, SMS and content. With the introduction of, for example, mobile commerce as a new technology, a fourth group was added - VAS services (Value Added Services are services that bring additional value) [4].

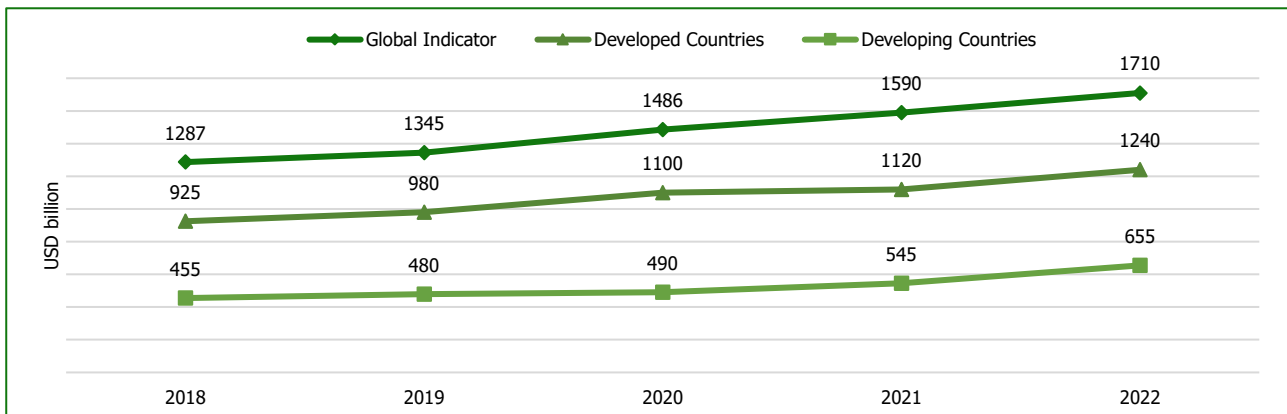


Figure 1. Dynamics of profitability of the global mobile market, USD billion. (Source: compiled by the author based on the source [19])

To compensate for the slowdown in the growth of the basic services market, the operators are implementing plans to actively promote various additional services, such as mobile TV and mobile Internet access, while providing new services for customers (video portal, subscriptions, chatbots, social media, etc.). The national market shows positive dynamics of these trends, where the share of data transmission revenue in total revenue has more than doubled over the past 5 years (Figure 2).

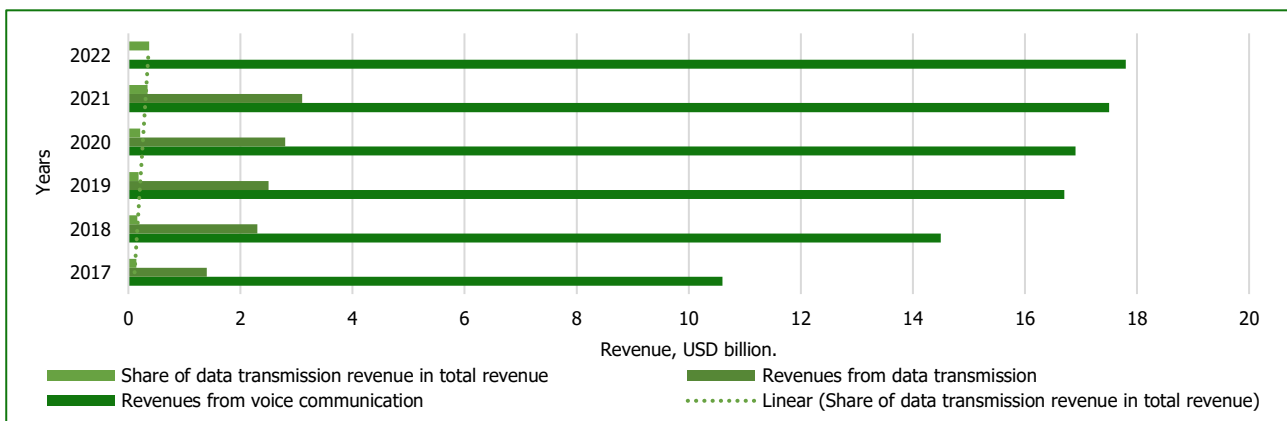


Figure 2. Total revenue from the provision of mobile services in the target market of Ukraine for the period from 2017 to 2022, USD billion. (Source: compiled by the author based on the source [19; 22])

As of today, there are three main operators in the mobile market: PJSC Kyivstar, PJSC VF Ukraine, and LLC Lifecell (Figure 3).

PJSC Kyivstar holds leading positions in the mobile communications market. The company is part of Veon, an international holding company owned by the Norwegian telecommunications group Telenor. As of April 2022, the operator provided communication and data services to more than 33.8 million subscribers. Over the past period of its operation, the company has provided prepaid services under the ACE&BASE brand, youth offer under the Dj Juice brand, an economy package under the Mobilich brand, and universal tariff offers under the main Kyivstar brand [14].

In 2010, Kyivstar and Beeline-Ukraine merged into a single legal entity, adding Beeline to the brand portfolio of the operator. The company has now abandoned its brand diversification policy and provides all services under the unified Kyivstar brand.

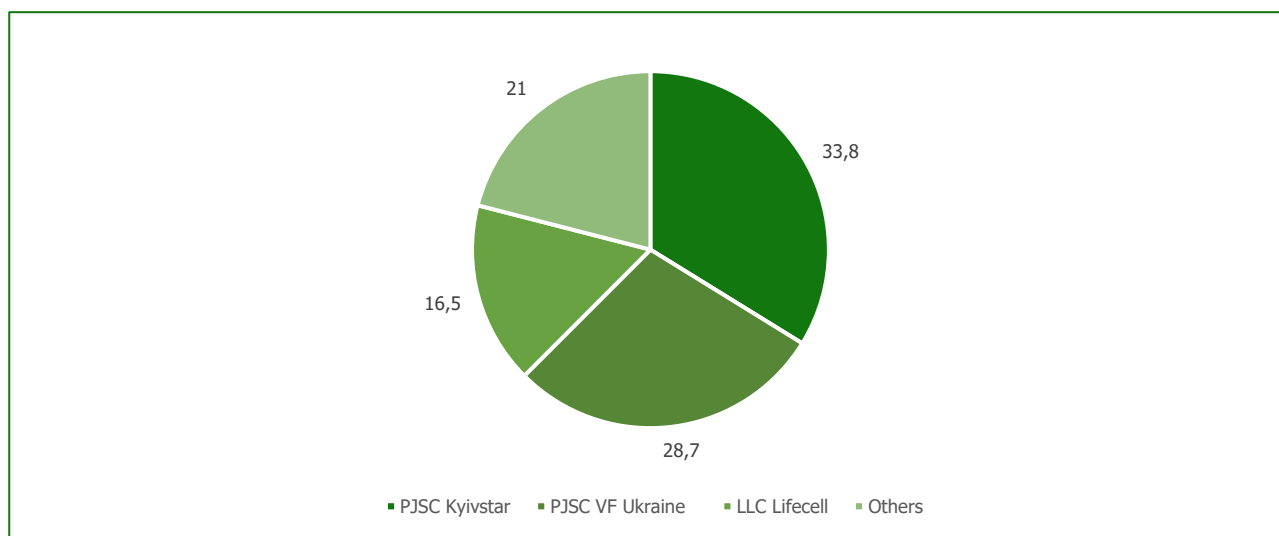


Figure 3. Structure of the mobile market as of the end of 2022, %. (Source: compiled by the author based on the source [14])

PJSC VF Ukraine (until April 26, 2010 - CJSC Ukrainian Mobile Communications, until May 27, 2017 - MTS Ukraine) is the second among the top three mobile operators in Ukraine with 28.7 million subscribers as of April 2022. Over the years, the company has provided services under the following brands: UMC, SIM-SIM, Jeans, Ecotel and MTS. In October 2015, the company signed a cooperation agreement with Vodafone Group Plc, gaining the right to use the Vodafone brand in Ukraine and launching a rebranding campaign. In November 2015, in cooperation with Fozzy Group (Kyivstar network and Silpo supermarkets), the company introduced a promotional tariff under the separate brand Yezzz! [14].

The third largest mobile operator in Ukraine in terms of mobile services is Lifecell LLC, owned by the Turkish operator Turkcell. As of April 2022, the subscriber base of the operator amounted to 16.5 million customers. Until 2016, the services of the operator were provided under the life:) brand, when the company positioned itself as a youth telecom operator and a second SIM card operator. It was only after the rebranding campaign that the mobile operator began to offer services for the whole family (Smart Family tariff plan), focusing on a wider range of target audiences [20].

At the same time, the Ukrainian mobile market is characterized by a significant predominance of foreign capital in the industry, which in turn is due to the growing need for significant amounts of investment capital, as the domestic operators are not able to ensure the effective development of the industry, unlike large international telecommunications companies.

Analysing the dynamics of revenues from the provision of mobile services (see Figure 4), it should be noted that for the period from 2017 to 2022, there has been a tendency to increase revenues from the provision of these services, in particular, in 2022 by 5.1% compared to 2021, due to an increase in the level of consumption of data services, including Internet access and international roaming [15].

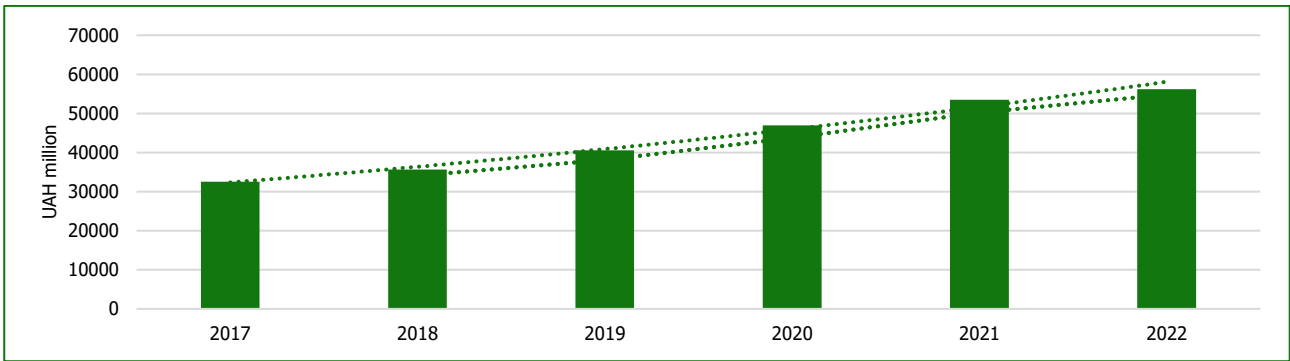


Figure 4. Dynamics of profitability from the provision of mobile services (2017-2022), UAH million. (Source: compiled by the author based on the source [14; 22])

The analysis of data in Figure 4 shows that revenues from the provision of mobile communications services in 2022 amounted to UAH 56,192 million, with their share in the total revenues from the provision of electronic communications services amounting to 67.6%. In the structure of revenues from mobile services, the largest shares are revenues from data transmission services, including Internet access - 62.8% and revenues from voice telephony services - 12.7%, with a total share of 75.5%. At the same time, there is a positive growth trend in the structure of revenues from the provision of international roaming services to users (3 percentage points) and from the provision of services to other network providers (1.7 percentage points) [20]. However, in 2022, revenues from the provision of voice telephony services to users decreased compared to 2021, and their share in the revenue structure decreased by 2.4 percentage points (Figure 5).

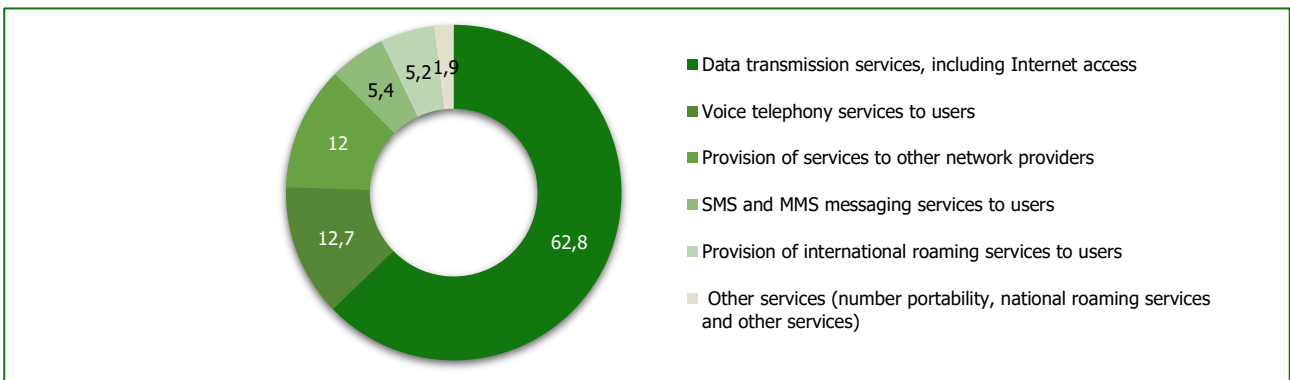


Figure 5. Structure of revenues from mobile services in 2022, UAH million. (Source: compiled by the author based on the source [14])

It should also be noted that the amount of active mobile network identification cards as of 31.12.2022 amounted to 49,304 thousand units, which is almost 12% or 6,622 thousand units less than as of 31.12.2021 (Figure 6). This is due to the full-scale invasion of the Russian Federation, the inaccessibility of mobile networks in the temporarily occupied territories of Ukraine and the reduction in the use of services of national mobile operators due to the migration of the population to seek protection outside the country.

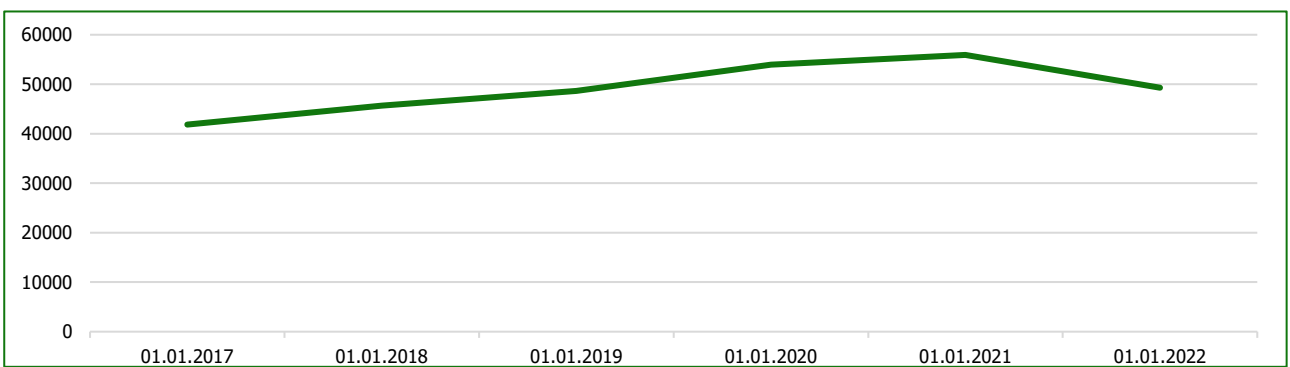


Figure 5. Dynamics of the amount of active mobile network identification cards in 2017-2022, thousand units. (Source: compiled by the author based on [14])

In 2022, the average monthly revenue from the provision of mobile services per active identification card (ARPU) increased by 19.2% compared to 2021 and amounted to UAH 95 (Figure 6).

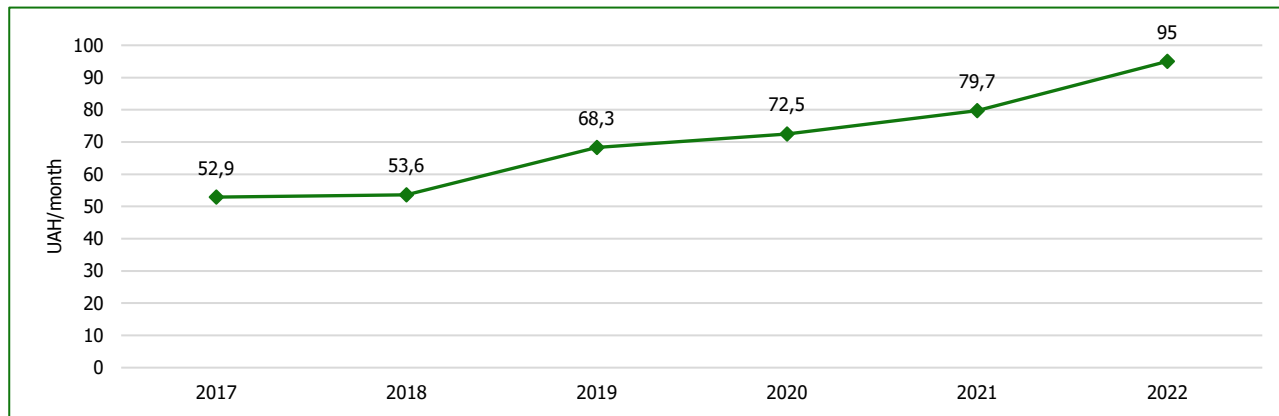


Figure 6. The average monthly revenue from the provision of mobile services per active identification card, UAH per month. (Source: compiled by the author based on the source [14])

The beginning of the full-scale armed aggression of the Russian Federation against Ukraine in 2022 caused significant damage to the networks of mobile service providers. This resulted in a situation where mobile service providers were forced to spend resources, funds and efforts to rebuild their networks, thus slowing down the development of 4G (LTE) networks [22]. At the same time, mobile service providers continue to gradually increase 4G coverage of both Ukrainian settlements and international highways in cooperation with the National Commission for the Regulation of Communications.

The armed aggression of the Russian Federation was immediately reflected in the overall financial performance of the mobile sector, including liquidity, profitability and revenue of the main operators in the mobile market (PJSC Kyivstar, PJSC VF Ukraine and LLC Lifecell).

The dynamics of liquidity indicators of PJSC Kyivstar, PJSC VF Ukraine and LLC Lifecell for the period from 2018 to 2022 are shown in Table 1.

Table 1. Dynamics of liquidity indicators of PJSC Kyivstar, PJSC VF Ukraine and LLC Lifecell for the period from 2018 to 2022 years.

Mobile market operators	Current liquidity ratio					Absolute liquidity ratio					Quick liquidity ratio				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
PJSC Kyivstar	0.82	0.23	0.26	0.48	0.89	0.67	0.1	0.14	0.27	0.48	0.81	0.22	0.25	0.47	0.88
PJSC VF Ukraine	0.59	0.42	3.19	3.28	3.77	0.46	0.27	2.98	3.02	3.26	0.58	0.41	3.19	3.27	3.77
LLC Lifecell	0.1	0.11	0.2	0.35	0.6	0.05	0.06	0.14	0.28	0.48	0.1	0.11	0.2	0.3	0.6

As shown by the analysis of Table 1, the current liquidity ratios of mobile operators PJSC Kyivstar and LLC Lifecell, calculated on the basis of 2018-2022 data, are below the normative value during the whole research period, although there is a positive trend. The above indicates that there is a possibility of a high level of financial risk of inability to pay current bills in a stable manner. In turn, PJSC Vodafone (VF) Ukraine for 2020-2022 has demonstrated rapid growth dynamics, which in turn indicates the presence of an irrational capital structure.

As for the absolute liquidity ratio, as of the end of 2022, all three operators had increased the ratio above the normative level, which indicates changes in the strategy of managing financial resources during martial law in the country. The quick liquidity ratio of PJSC Kyivstar and LLC Lifecell has been steadily approaching 1 for 5 years and is within the normative value, which indicates a sufficient level of solvency of the operators (payment of current liabilities provided that settlements with debtors are made in a timely manner).

Starting from 2020, the liquidity indicators of PJSC Vodafone Ukraine significantly exceeded the nominal values, namely due to a significant increase in the volume of current financial investments [22].

The profitability indicators of PJSC Kyivstar, PJSC VF Ukraine and LLC Lifecell for the period from 2018 to 2022 are shown in Table 2.

Table 2. Dynamics of the profitability indicators of PJSC Kyivstar, PJSC VF Ukraine and LLC Lifecell for the period from 2018 to 2022 years.

Mobile market operators	Return on assets of an enterprise					Return on equity					Profitability of services provided					Return on sales					Profitability of activities				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
PJSC Kyivstar	29.22	36.43	40.34	39.65	26.9	40.24	59.06	82.66	94.3	55.59	147.6	187.95	195.23	196.1	155.11	35.67	40.28	41.48	39.45	31.06	52.48	64.98	69.31	63.45	43.73
PJSC VF Ukraine	9.55	8.61	4.28	10.73	2.8	18.34	16.09	8.91	25.18	6.51	82.86	101.59	110.61	128.33	151.56	15.02	13.97	7.6	20.33	5.67	17.27	15.78	8.21	24.91	5.7
LLC Lifecell	-4.68	-8.15	17.17	5.69	5.34	-	-25.08	42.87	7.66	11.09	21.78	28.72	34.65	47.54	49.69	-11.55	-18.95	37.87	7.20	10.33	-9.48	-15.82	27.1	7.7	11.1

It is well known that the level of return on assets of a company characterises the efficiency of its financial assets management. Return on equity (ROE) reflects the upper limit of dividends for shareholders and investors and indicates changes in profitability. At the same time, a stable growth of the return on equity ratio indicates the ability of the company to generate profit for its owners.

It should also be pointed out that the profitability of services characterises the efficiency of the costs of their provision, while the level of profitability of sales is an indicator of the amount of profit per unit of products sold. It is common knowledge that there is no single normative value for this indicator, which is why it is advisable to compare the analysed indicators between competing companies in the industry, which results in an assessment of the level of efficiency of financial and economic activities of mobile market companies [5].

According to the analysis of the ratios characterising return on assets, in 2020, PJSC Kyivstar demonstrated a significant increase in the value of this indicator compared to the value of the return on assets during the pandemic and the period of martial law in the country. Thus, the value of return on equity of PJSC Kyivstar is characterised by stable positive dynamics, while in 2022 it decreased by more than 40%. At the same time, profitability on sales and distribution of goods and services also declined due to a decrease in the active subscriber base. Thus, in 2022, the level of profitability of economic activity decreased by almost 37% compared to 2020.

Similarly, to PJSC Kyivstar, the profitability indicators of PJSC VF Ukraine have significantly decreased, with the exception of the profitability of goods and services sold, which was characterised by positive dynamics during the research period. At the same time, in 2021, a record increase in profitability of almost 550% was declared, while in 2022 there was a sharp decline in profit.

Special emphasis should be placed on the increase in the indicators of LLC Lifecell for the research period (2018-2020) due to the growth of the subscriber base and increased consumption of voice and mobile Internet services. It was in this period of economic activity in the target market that the company received its first net profit, which, in turn, was directly reflected in the change in the level of profitability of LLC Lifecell.

When analysing the financial stability indicators of PJSC Kyivstar, PJSC VF Ukraine and LLC Lifecell for the period from 2018 to 2022, it should be noted that the financial independence ratio of PJSC Kyivstar and PJSC Vodafone Ukraine is within the normative value according to the data of recent years (Figure 7).

Despite the fact that the financial autonomy ratio of PJSC VF Ukraine has been decreasing during 2010-2022, this indicator is not lower than the normative value, and compared to 2020 it is 0.1 points higher. At the same time, the indicators of financial autonomy of LLC Lifecell have increased by 0.32 points for the period from 2019 to 2022 and significantly exceeded the normative value, which indicates an insufficient level of efficiency in the use of the financial and resource potential of the company.

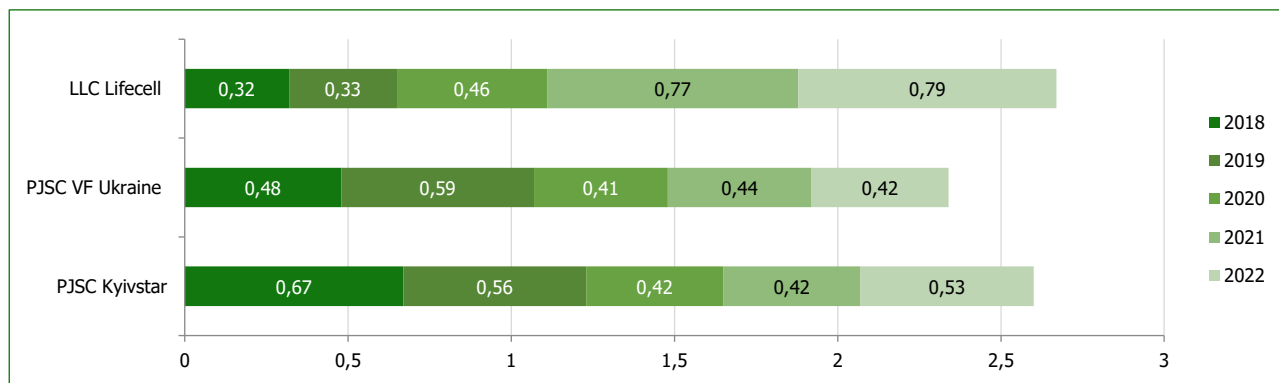


Figure 7. Dynamics of the financial independence ratio of mobile market participants for the period from 2018 to 2022 years.

Regarding the financial stability ratio of PJSC VF Ukraine and PJSC Kyivstar, it should be noted that this indicator meets the normative value, despite a slight decrease during 2021-2022. The financial stability indicator of LLC Lifecell in 2022 decreased by almost 10%, which thereby declares an increase in the level of probability of the risk of the loss of solvency of the company (Figure 8).



Figure 8. Dynamics of the financial independence ratio of mobile market participants for the period from 2018 to 2022 years.

The analysis of the data in Figure 8 shows relatively stable positive dynamics of the financial independence ratio for all mobile market participants for the period from 2018 to 2022. At the same time, it should be mentioned that the value of this indicator for PJSC VF Ukraine, the value of this indicator for the period from 2020 to 2022 indicates that the share of financial assets of the company is financed by debt. As for LLC Lifecell and PJSC Kyivstar, the indicator is characterised by positive dynamics and indicates the ability to repay financial debt obligations during the research period (Figure 9).

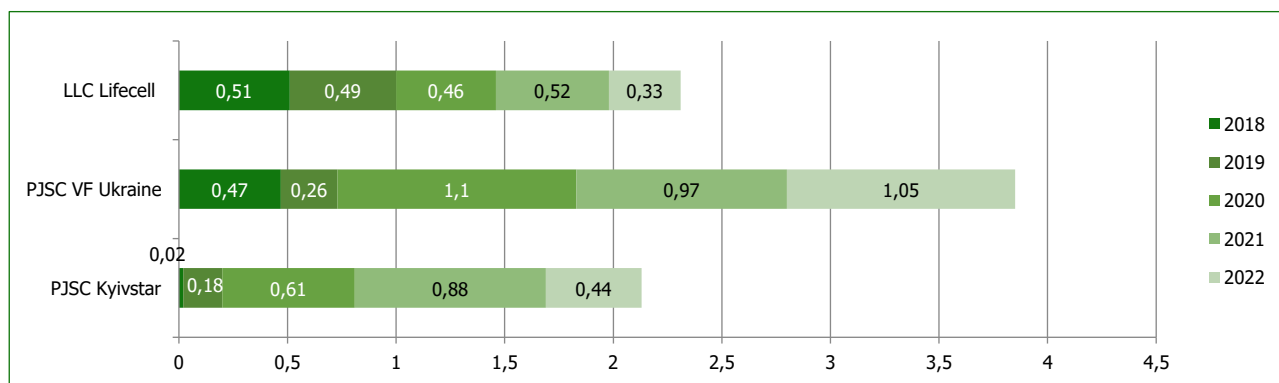


Figure 9. Dynamics of the debt ratio of mobile market participants for the period from 2018 to 2022 years.

It also should be noted that the equity manoeuvrability ratio of PJSC Kyivstar and LLC Lifecell, which characterises the part of equity working capital in the form of possible free manoeuvring of given funds, is below the normative value, while the indicator of PJSC VF Ukraine corresponds to the normative value.

The situation is similar to the working capital ratio. Only the indicator of PJSC FV Ukraine is within the normative value, but the values of PJSC Kyivstar and LLC Lifecell, although relatively lower than the norm, are characterized by positive dynamics. A summary of these financial indicators is presented in Table 3.

Table 3. Dynamics of the analysed indicators of the financial and economic condition of mobile market participants for the period from 2018 to 2022 years.

Name	Financial independence ratio					Financial stability ratio					Debt ratio					Equity to debt ratio					Equity manoeuvrability ratio					Equity to current assets ratio								
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	2018	2019	2020	2021
PJSC Kyivstar	0.67	0.56	0.42	0.42	0.53	0.69	0.66	0.68	0.78	0.77	0.02	0.18	0.61	0.88	0.44	2.05	1.27	0.73	0.72	1.13	-0.08	-0.46	-0.55	-0.27	-0.05	-0.21	-3.3	-2.86	-1.1	-0.13				
PJSC VF Ukraine	0.48	0.59	0.41	0.44	0.42	0.71	0.74	0.87	0.87	0.86	0.47	0.26	1.1	0.97	1.05	0.94	1.41	0.70	0.79	0.73	-0.24	-0.26	0.71	0.68	0.899	-0.69	-1.39	0.69	0.69	0.73				
LLC Lifecell	0.32	0.33	0.46	0.77	0.79	0.49	0.49	0.67	0.72	0.65	0.51	0.49	0.46	0.52	0.33	0.48	0.49	0.85	0.90	0.96	-1.42	-1.39	-0.57	-0.38	-0.29	-9.01	-7.67	-7.05	-1.87	-0.68				

Thus, all mobile market participants have demonstrated an increase in revenues for the period from 2018 to 2022, with the largest share of profitability retained by the market leader, PJSC Kyivstar. With regard to the dynamics of the profitability indicator, in the first quarter of 2022, LLC Lifecell is the leader, followed by PJSC VF Ukraine in 2nd place.

The activities of mobile operators under martial law are aimed at restoring the destroyed infrastructure and improving the network. The consequences of the difficult military and political situation in the country have not significantly affected the profitability of mobile operators.

The strategic priorities for creating an attractive investment climate for mobile operators remain business sustainability and continuity of services to meet consumer needs and maximize profits.

DISCUSSION

It should be noted that the development of the mobile market requires infrastructural transformations, given the global digitalization of social development. Improvement of the activities of mobile operators should be based on their involvement in the innovative process of organizational and economic transformations through the construction, maintenance and development of the infrastructure on which the digital world relies.

While protecting their own infrastructure perimeters, a key priority for the mobile market operators should be to contribute to the development of digitalization in Ukraine. At the same time, the digitalization and intellectualization of society lead to an increase in the risk level of cyberattacks, which are quite common, especially in recent years and during the current period of martial law in the country. That is why all leading mobile network participants must ensure the digital security of their consumers and their own security, among other things.

The next priority, in addition to increasing profitability, should be to comprehensively promote the development of digital ecosystems by target market participants. The research has shown that all operators are trying to move in this direction with varying degrees of success: all three mobile operators are trying to develop service ecosystems around their core communication services and around their subscriber base.

The operators participating in the market currently provide free communication services, especially for those consumers who suffered as a result of the armed aggression of the Russian Federation. This is a paradox, which is based on a misunderstanding with the government agencies regarding the amount of taxes that the operators have to pay for providing services free of charge.

At present, the migration of the population and logistics, especially trucking, are the key factors affecting the development of the subscriber base of mobile operators. That is why all three companies are trying to balance a "healthy economy" with a "healthy development of the mobile market" with the maximum possible amount of investments made and realized. It is clear that the economy that the target market company had in 2021 will no longer exist, possibly in the future, as it

is also necessary to take into account the interests of stakeholders, where the country is positioned as a key stakeholder, as it is a matter of survival and safety of people.

Taking into account the cross-section interests of the entrepreneur with public and state interests in the mobile communications market, there is a need for state regulation of this field of activity, the main manifestations of which are carried out in the form of adoption of by-laws normative acts specifying the issue licensing, certification, access to radio frequencies and number capacity, definition of rules construction of networks, features of service provision, formation of tariffs, etc. Not least the role in creating additional problems in the field of development and use of mobile communication is played by a large number of regulatory acts that directly or indirectly regulate the activities of the telecommunications market. To a greater extent, these normative acts contain imperative norms that conflict with some of them alone, which leads to the emergence of a large number of conflicting situations in practice.

That is why today it is absolutely necessary in modern conditions to solve important issues regarding regulation relations in the field of providing mobile services communication in general and the economic and environmental safety of these services in particular, caused by the lack of a single structured legislative act that establishes the main ones provisions and directions of regulation of mobile communications development in Ukraine, as well as ways improving the quality of these services and the mechanism for holding operators accountable in case violation of the standards of their provision.

CONCLUSIONS

The penetration of mobile services has almost reached its highest level, making it almost impossible to attract new customers. As a result, the mobile operators use active sales and try to retain their subscriber base. Loyalty programs and auto-payments are often used as one of the ways to retain subscribers.

In such a competitive environment, only those who provide high-quality services at a low price, while trying to survive in fierce competition by constantly improving, will remain afloat.

Moreover, the negative impact on the telecommunications companies from the external environment, namely the economic and political situation in the country, should not be overlooked. Ongoing hostilities, the economic crisis, and problems with foreign loans all have a direct impact on the operations of domestic telecom operators. As a result, over the past 2 years, the financial results of large companies have shown a moderate increase in financial and economic indicators, with the exception of 2022. However, the need for communication services that subscribers have formed does not allow them to refuse them.

The research findings suggest that the recent years have been challenging for the mobile market, primarily due to the difficult military and political situation in the country, the general economic downturn, and increased competition. So far, the achievement of the minimum cost of mobile services has had a positive impact on business profitability. The mobile market is currently at a crossroads, so there are two ways for the situation to develop: either the market will grow or there will be a prolonged crisis if no changes in the market occur.

Taking into account the latest technological trends, it should be mentioned that it is extremely important for mobile operators to build up their capacity to develop new communication standards. In this case, mobile Internet, mobile advertising, and the creation of new tariffs and services remain among the most promising areas.

Thus, the key mission of the mobile market operators is not only to improve and diversify services, but also to successfully operate in order to develop business processes, build smart infrastructure and increase the level of economic efficiency. Important priority directions are the expansion of the range of services and digital content, improvement of digital communication channels, mobile applications, and audio and video content in order to retain existing and attract new subscribers.

The expansion of mobile and fixed Internet services by offering innovative solutions based on approaching subscribers and their needs, reducing the time to solve issues as much as possible, and ensuring stable, reliable and affordable mobile communications should be key aspects of the successful operation of target market operators.

To summarize, there are sufficient prospects for improving the financial condition of the mobile market operators. The main issue to be taken into account is the maximum efforts of all market participants, including the government and foreign investors. It is only through joint efforts that it is possible to achieve the common goal of successful functioning and development of the mobile market for the long term.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

Conceptualization: Ihor Ivasiv, Yuriy Safonov

Data curation: Inna Zelisko, Alua Yesmakhanova, Yuriy Safonov

Formal Analysis: Inna Zelisko

Methodology: Ihor Ivasiv, Yuriy Safonov

Software: Liudmyla Vasylenko

Resources: Serhii Melnyk, Alua Yesmakhanova

Supervision: Ihor Ivasiv

Validation: Inna Zelisko

Investigation: Ihor Ivasiv, Inna Zelisko

Visualization: Serhii Melnyk, Liudmyla Vasylenko

Project administration: Ihor Ivasiv

Writing – original draft: Ihor Ivasiv, Inna Zelisko, Serhii Melnyk, Alua Yesmakhanova, Liudmyla Vasylenko, Yuriy Safonov

REFERENCES

- Boyko, A. B. (2015). Otsinka suchasnoho stanu haluzi zv'yazku ta informatyzatsiyi v Ukraini. *Ekonomika. Menedzhment. Innovatsiyi*, 1 (13). http://nbuv.gov.ua/UJRN/eui_2015_1_6
- Cecere, G., Corrocher, N., & Battaglia, R. (2015). Innovation and competition in the smartphone industry: Is there a dominant design? *Telecommunications Policy*, 39(3–4), 162–175. <https://doi.org/10.1016/j.telpol.2014.07.002> URL: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84926277577&doi=10.1016%2fj.telpol.2014.07.002&partnerID=40&md5=30b9f4cd0b6c758bf6f5f45af44b2c5c>
- Dastidar, K. (2015). Nature of competition and new technology adoption. *Pacific Economic Review*, 20(5), 696–732. <https://doi.org/10.1111/1468-0106.12140>
- David Bardey, Danilo Aristizábal, José Santiago Gómez, & Bibiana Sáenz. (2022). Concentration of the mobile telecommunications markets and countries' competitiveness. *Telecommunications Policy*, 46(1), 102230. <https://doi.org/10.1016/j.telpol.2021.102230>
- Dymenko, R. (2019). Vector orientation of reproduction and management of human capital in the telecommunications industry. *Global Academics*, 1(2), 77–92.
- Kulakov, V. O., and Shchebelskaya, V. O. (2013). Main tendencies of telecommunication industry development: problems and perspectives. *Bulletin of the Donetsk University of Economics and Law*, 1. 14–19. http://nbuv.gov.ua/UJRN/vduetp_2013_1_5
- Ladychenko, K. (2015). Suchasni tendentsii rozvytku informatsiino-telekomunikatsiynych poslug. *Efectuvna ekonomika*, 2. <http://www.economy.nayka.com.ua>
- Lehr W. (2014). Benefits of competition in mobile broadband services. *SSRN Electronic Journal*. URL: <https://doi.org/10.2139/ssrn.2420488>
- Lyakh, Y.O., & Kasyanova, N.V. (2017). Priorityetni napryamy rozvytku rynku telekomunikatsiy Ukrainy. http://www.market-infr.od.ua/journals/2017/7_2017_ukr/12.pdf
- Nasco, S. A. (2010). Mobile Communications / Mobile Marketing. In I. Lee (Ed.), *Encyclopedia of E-Business Development and Management in the Global Economy* (pp. 752–758). IGI Global. <https://doi.org/10.4018/978-1-61520-611-7.ch075>
- Platform of LIGA: ZAKON LAW of UKRAINE On telecommunications. <http://search.ligazakon.ua>
- Ru, C., & Gupta, R. (2015). A comparative study of various generations in mobile technology. *International Journal of Engineering Trends and Technology*, 28(7), 328–332. <https://doi.org/10.14445/22315381/ijett-v28p263>
- The official web site of global organization unifying the mobile ecosystem to discover, develop and deliver innovation that helps business and society thrive. (n.d.). <https://www.gsma.com/aboutus/>

14. The official web site of national commission that carries out government control in the field of connection and informatization. (n.d.). <https://nkrzi.gov.ua>
15. The official website of the analytical agency «Advanced Communications & Media». (n.d.). <http://www.acm-consulting.com/>
16. The official website of the International Telecommunication Union. (n.d.). <http://itu.int>
17. The official website of the State Statistics Service of Ukraine. (n.d.). <http://www.ukrstat.gov.ua>
18. Usyk, S. P., & Ponomarenko, S. A. (2013). Analiz posluh mobil'noho zv'yazku na rynku Ukrainy. *Stalyy rozvytok ekonomiky*, 3, 341-346. http://nbuv.gov.ua/UJRN/sre_2013_3_74
19. Yatskevych, I. V., Zhuravlova, T. O., & Zhadanova, YU. O. (2014). Osoblyvosti konkurentospromozhnosti pidpryemstv mobil'noho zv'yazku Ukrainy. *Visnyk Odeskoho natsionalnoho universytetu. Seriya: Ekonomika*, 2(3), 106-110. http://nbuv.gov.ua/UJRN/Vonu_econ_2014_19_2%283%29_26
20. World Telecommunication/ICT Indicators database 2022 (27th Edition). (n.d.). <https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>
21. Zubko, L. V., & Sapega, Y. V. (2015). Analiz konkurenciji na rynku mobil'noho zv'yazku Ukrainy. *Ekonomika. Menedzhment. Biznes*, 3(13), 107-114. http://nbuv.gov.ua/UJRN/ecmebi_2015_3_21
22. Zvit «Pro robotu Natsionalnoi komisii, scho zdiisnye derzhavne rehulunannya u sfiri zvyazku ta informatyzatsii» (2017). <https://nkrzi.gov.ua>

Івасів І., Зеліско І., Мельник С., Єсмаханова А., Василенко Л., Сафонов Ю.

ФІНАНСОВИЙ СТАН І ПЕРСПЕКТИВИ РОЗВИТКУ ОПЕРАТОРІВ НА РИНКУ МОБІЛЬНОГО ЗВ'ЯЗКУ

У представлений статті виконане глибоке дослідження фінансово-економічного стану операторів на ринку мобільного зв'язку та визначення перспектив їхнього подальшого функціонування.

Для досягнення поставленої мети було використано широкий спектр загальнонаукових та спеціальних методів, основними з яких були: методи узагальнення й синтезу, наукової абстракції, аналітичної діагностики, індукційно-дедукційний метод, статистичний метод стандартного відхилення (абсолютного та відносного) на основі застосування репрезентативного вибіркового спостереження.

Здійснений аналіз фінансово-господарського стану учасників цільового ринку показав, що оператори ринку мобільного зв'язку продемонстрували відносно зростання доходів за досліджуваний період, де найбільша частка доходності залишається за лідером ринку – ПрАТ «Київстар». Визначено, що діяльність учасників-операторів ринку мобільного зв'язку в умовах воєнного стану повинна бути спрямована на відновлення зруйнованого та вдосконалення роботи мережі, що є ключовою умовою забезпечення підвищення рівня рентабельності мобільних операторів.

У ході ідентифікації потенційних фінансово-економічних можливостей діяльності підприємств на ринку послуг мобільного зв'язку встановлено, що для операторів украї важливим є розв'язання питання нарощення потенціалу для розвитку нових стандартів зв'язку, де одними з перспективних напрямів є мобільний інтернет, мобільна реклама, а також створення нових тарифів і послуг.

Визначено, що ключова місія операторів ринку мобільного зв'язку – не вдосконалення та диверсифікація послуг, а успішна діяльність, спрямована на розвиток бізнес-процесів, формування «розумної» інфраструктури й підвищення рівня економічної ефективності функціонування. Доведено, що лише за умови реалізації стратегічних пріоритетів у напрямі формування привабливого інвестиційного клімату на ринку мобільного зв'язку існують перспективи стійкого розвитку бізнесу й безперервності надання послуг мобільного зв'язку для задоволення потреб споживачів та отримання максимального прибутку підприємствами галузі.

Ключові слова: оператори мобільного зв'язку, ринок мобільного зв'язку, послуги мобільного зв'язку, цифровізація суспільства, рівень доходності, фінансовий стан, конкурентоспроможність

JEL Класифікація: D89, F65, L86, L96, O14