

ISSN 2312-5330



:

,

2023 3 (64)



2023

:
 (5.2.4; 08.00.10), -
 ,
 « () .
 :
 (5.2.4; 08.00.10), -
 ,
 «
 » () .
 :
 , . . . (5.2.3;
 08.00.05), (.) .
 , . . . (5.2.1;
 08.00.01), (.) .
 , . . . (5.2.3;
 08.00.05), (.) .
 , . . . (5.2.3;
 08.00.05), (.) .
 , . . . (5.2.4;
 08.00.10), (.) .
 , . . . (5.2.4; 08.00.10),
 « ()
 » (.) .
 , . . . (5.2.4;
 08.00.10), «
 »
 (.) .
 , . . . (5.2.5;
 08.00.14), (.) .
 , . . . (5.2.3;
 08.00.12), «
 »
 (.) .
 , . . . (5.2.3; 08.00.05),
 (.) .
 , . . . (5.2.3;
 08.00.12), «
 »
 (.) .
 :
 , . . . (5.2.3; 08.00.05),
 (.)

:
 , ,
3(64) 2023
 -
 2008
 :
 «
 »
 (77-61834 18 2015 ,
 ,)
 ,
 ,
 , 23 2017
 — 5.2
 (5.2.4)
 :
 295007, , , ,4,
 « . . ».
 (+7-978-828-56-19)
 (+7-978-907-73-88)
 e-mail : nvfbi2015@mail.ru
 :
 «
 »
 (12 22.12.2023 .)
ISSN 2312-5330
 © « : , , », 2023

• • ,	• •	-	
.....			5
• • ,	• •	-	
.....			22
• • ,	• •	-	
.....			33
• •		-	
.....			48
• •		-	
.....			56
• •		-	
.....			69
• • ,	• • ,	• •	-
:		
			82
• •	:	
			98
• •		-
			110
• • ,	• • ,	• •	-
.....			121
• • ,	• • ,	• •	-
.....			131
• • ,	• •		-
.....			144
• •		
			159
• • ,	• • ,	• •	-
.....			169

CONTENTS

FINANCE

Vorobyova E.I., Blazhevich O.G. Theoretical and practical aspects of asset management of an organization.....	5
--	---

MONEY, CREDIT, BANKS

Boychenko O.V., Polskaya S.I. Analytics of cybersecurity problems of banks' critical information infrastructure.....	22
Vysochina M.V., Vakhovskaya M.Yu. Using ratings to assess the image of a commercial bank...	33

ECONOMICS AND MANAGEMENT OF BUSINESS ENTITIES

Norets N.K. Determination of economically sounded area of farming on the basis of regression analysis.....	48
---	----

ECONOMICS AND MANAGEMENT OF NATIONAL ECONOMY

Gorda A.S. Implementation of the ecosystem approach in models of global development of the smart economy.....	56
Gorda A.S. Implementation of the ecosystem approach in models of global development of the smart economy.....	69
Kravchenko L.A., Abibullaev M.S., Toropova I.S. Priority directions of the Russia economy: problems and prospects for development in conditions of digitization.....	82
Osmanova Z.O. Russian business: bankruptcy results of the crisis period.....	98
Fokina N.A. Digitization as a way to improve business processes.....	110

ECONOMICS AND MANAGEMENT OF REGIONAL ECONOMY

Vernikov V.A., Vysotskaya N.V., Konovalenko I.E. Assessment of business activity of entrepreneurial organizations of the industrial and production sector in the Russian economy.....	121
Vetrova N.M., Shtofer G.A., Gaysarova A.A. Region business activity level in the assessment system of regional socio-economic processes.....	131
Smetanko A.V., Natarova E.V. Optimization of the structure of the executive authorities of the Republic of Crimea.....	144
Glushko Yu.V. Development of innovative technologies in the Republic of Crimea.....	159
Erimizina M.I., Voloshina E.I., Erimizina E.N. Economic assessment of indicators of development of the agrarian sphere of Crimea, efficiency of implementation of state measures to support agriculture and regulation of agricultural markets in the region.....	169

Vorobyova Elena Ivanovna,

Doctor of Economic Sciences, Professor,
Professor of the Department of Finance and Credit,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Blazhevich Oleg Georgievich,

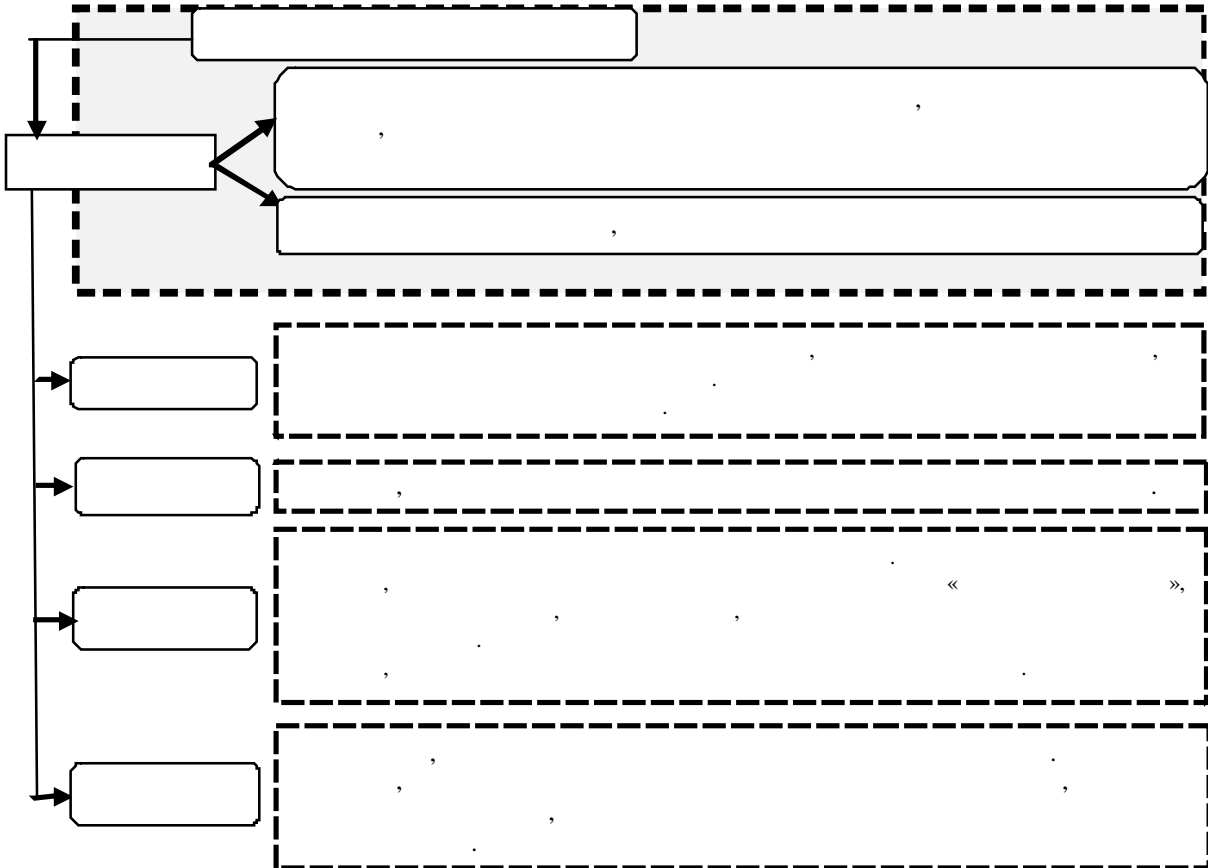
Ph.D. in Economics, Associate Professor,
Associate Professor of the Department of Business Finance and Credit,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

**THEORETICAL AND PRACTICAL ASPECTS OF ASSET MANAGEMENT
OF AN ORGANIZATION**

The article conducts a study of the essence of the organization's assets, reveals the patterns of formation of the optimal asset structure, shows the importance of effective asset management for increasing the level of financial stability of a business entity, presents a comparative description of current and non-current assets, which highlights the features of asset types and shows their importance in the activity management system enterprises. The authors studied the processes of circulation of current and non-current assets, and proposed an asset management algorithm. Using the example of JSC «Plant "Fiolent"», an analysis of the efficiency of using current assets was carried out, and shortcomings in asset management were identified. A high share of work in

[10,14].

2.



.2.
[7, 11, 12])

2,

3.

«

» [20].

•
•

.3. ([8])

- -
- ; -

. -

, -

— , -

(,) -

1. (. . . , . . . , . . .), -

2. (. . . , . . .): — « -

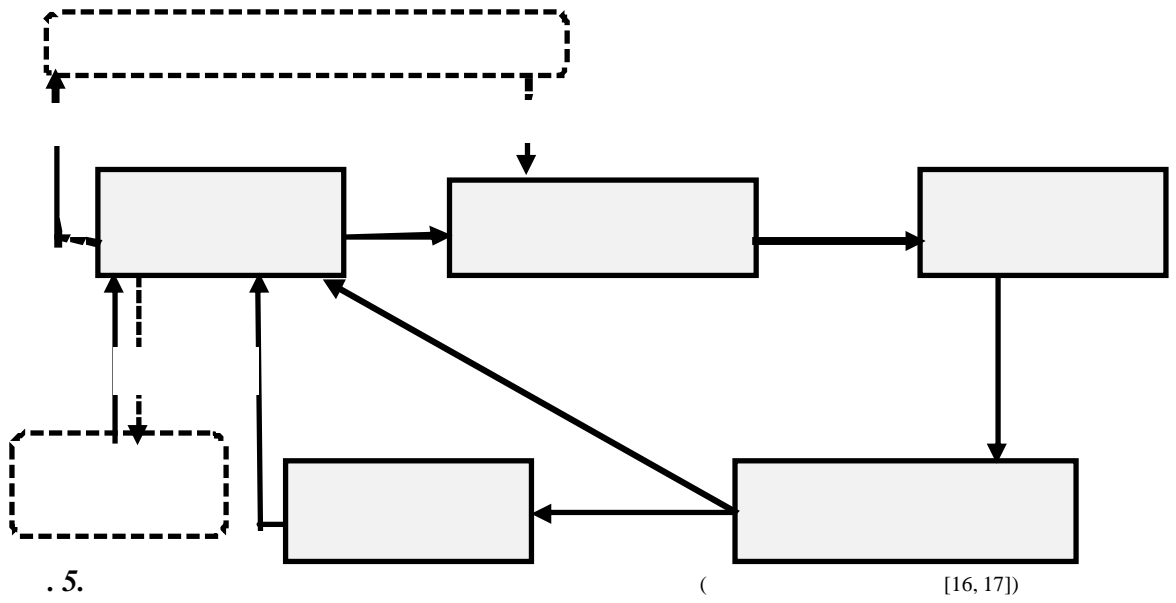
3. »[15]. (. . . , . . .) -

4. (. . . , . . .) —

5. (. . . , . . .) -

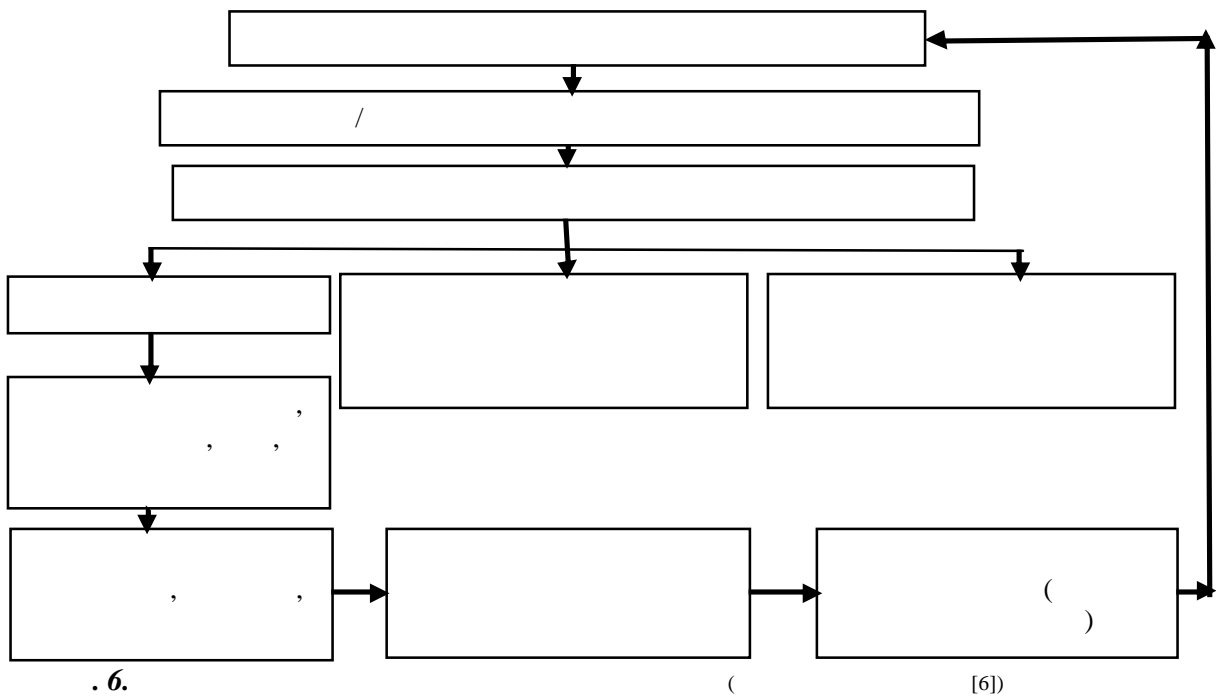
«

, . . . , »[19].

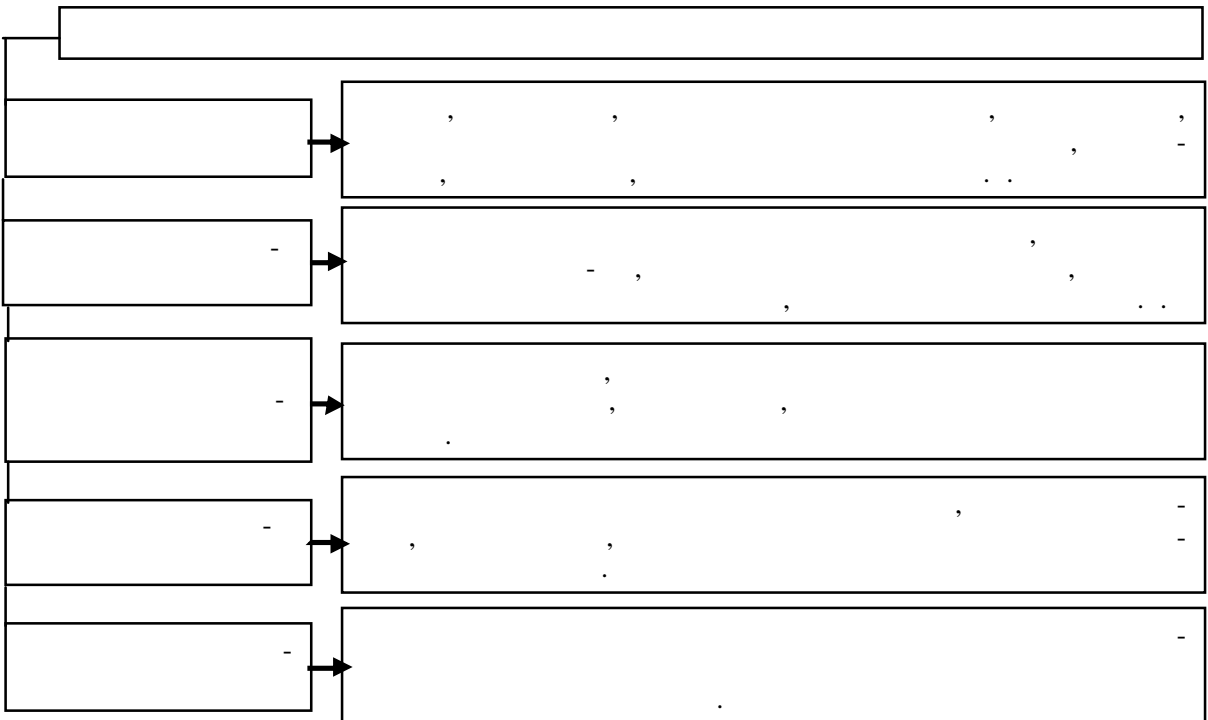


. [5].

6.



(.7).

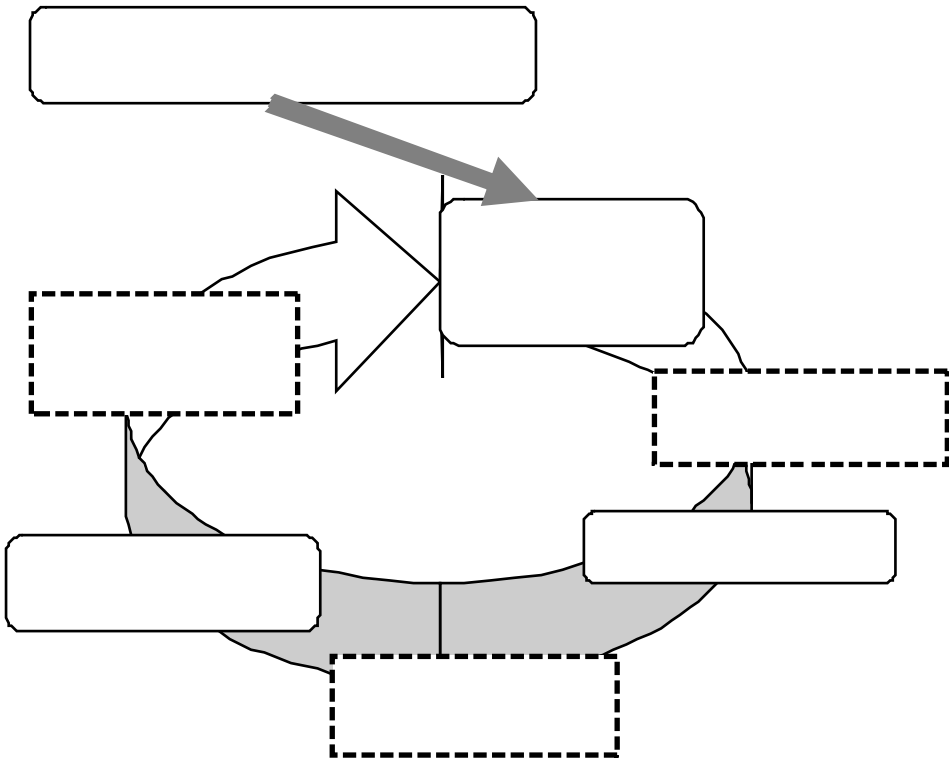


.7.

()

- — ;
- , -
- ;
- — ;
- — [2].

8. (.8).



. 8.

([9, 13])

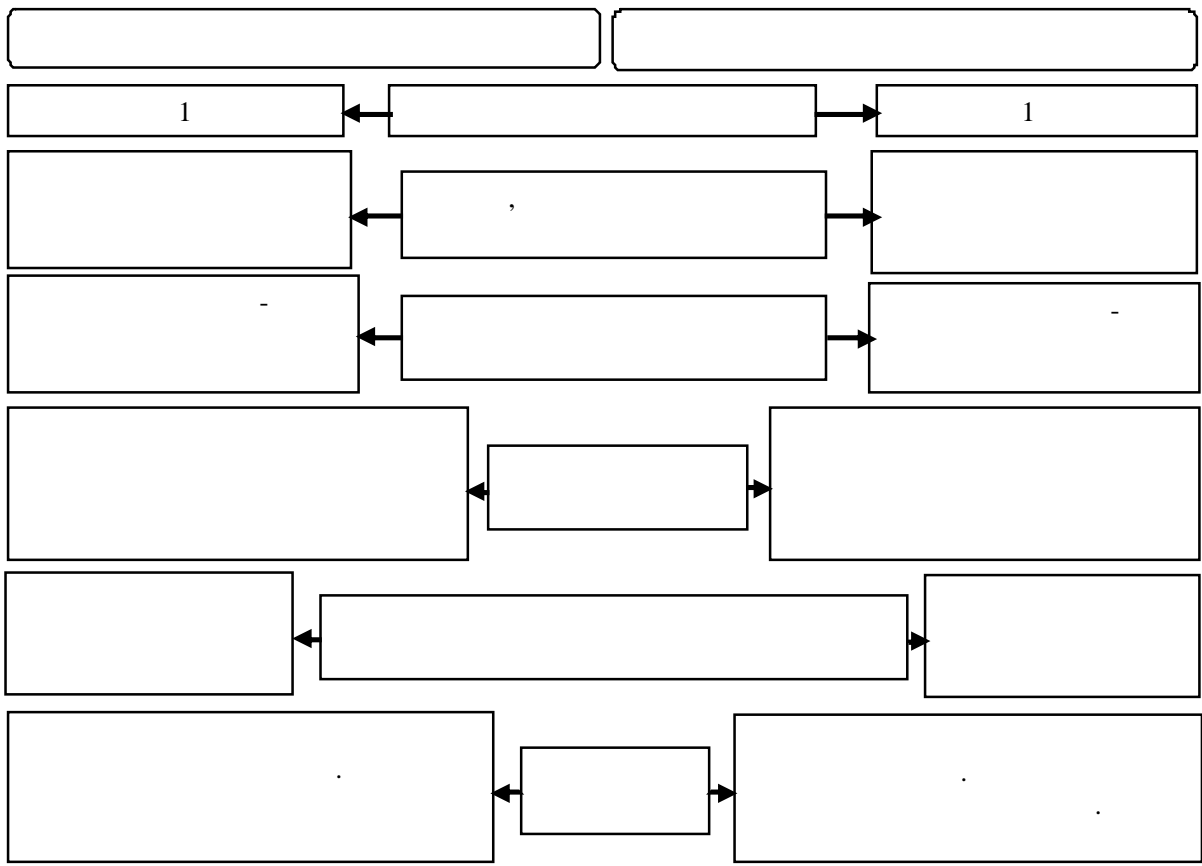
«

» [13].

9.

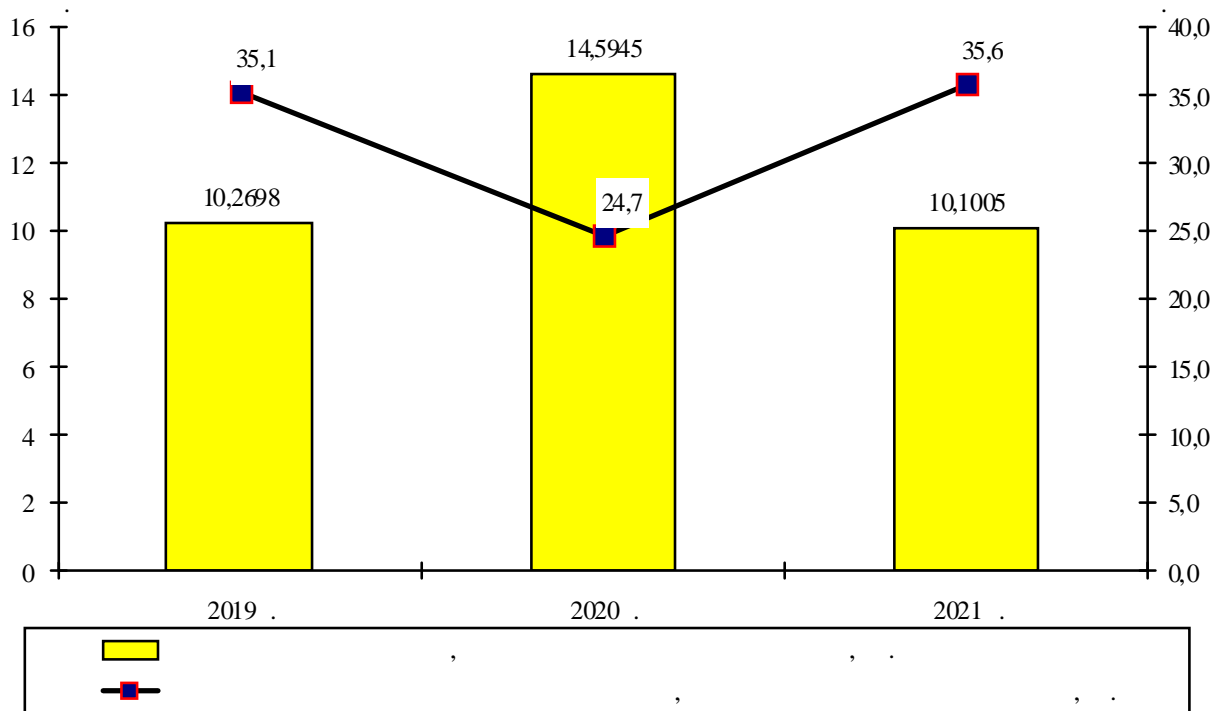
(.10).

10



.10.

()

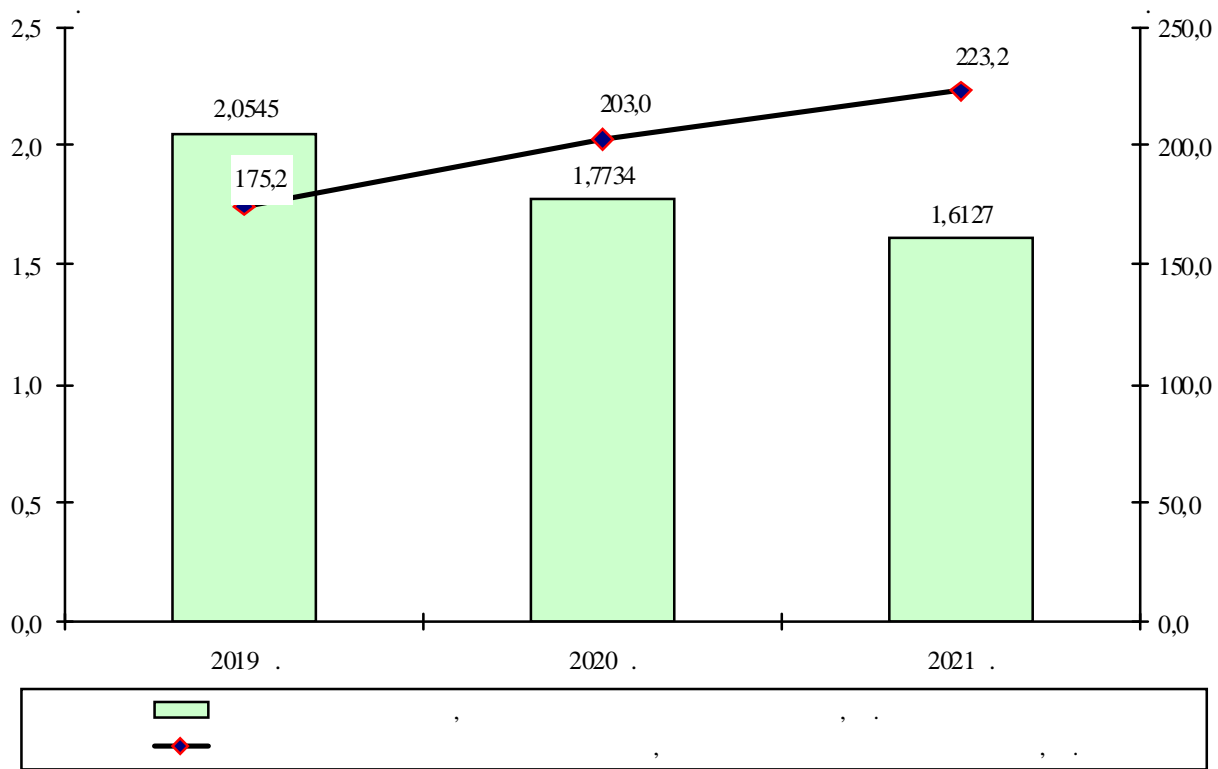


.11.

" "» 2019–2021 ([1)

«

10,1005
 35,6
 « «
 »,
 12.

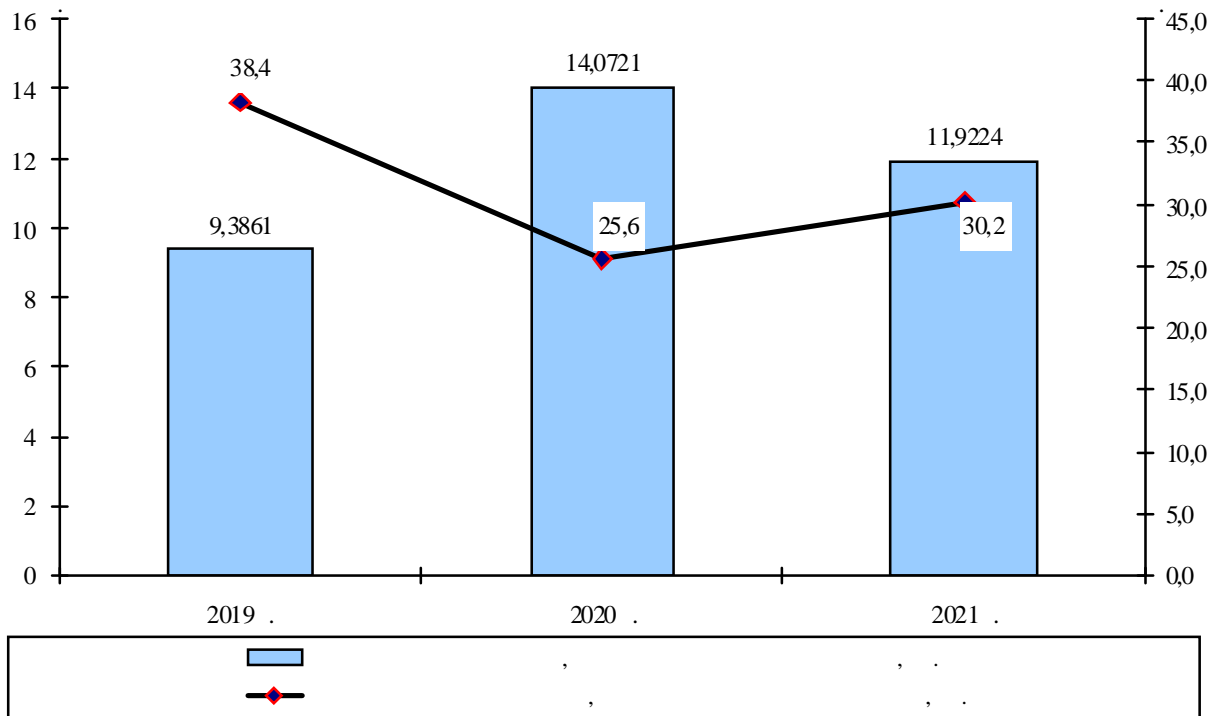


12. « » 2019–2021 ([1])

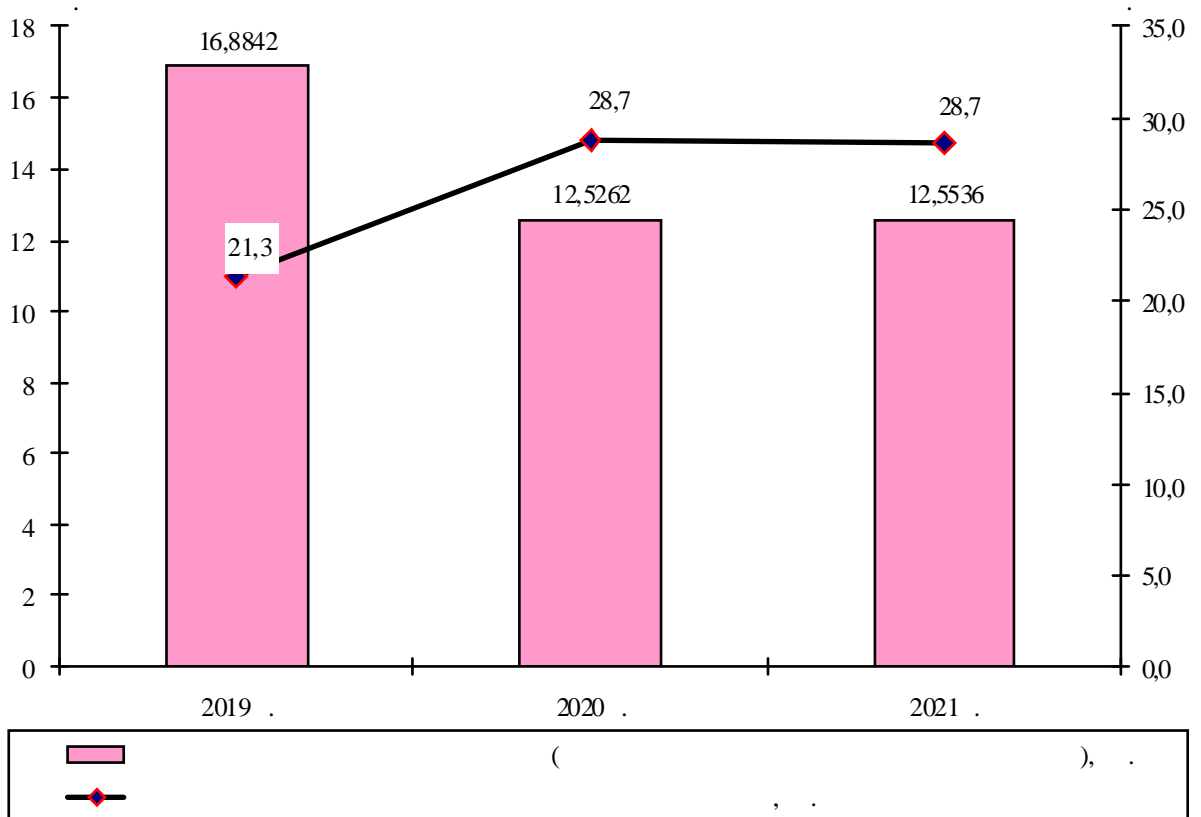
2019
 2021
 1,6127
 223,2
 7,5

13.
 2020 — 2019 2021
 30,2
 « « ».

14.

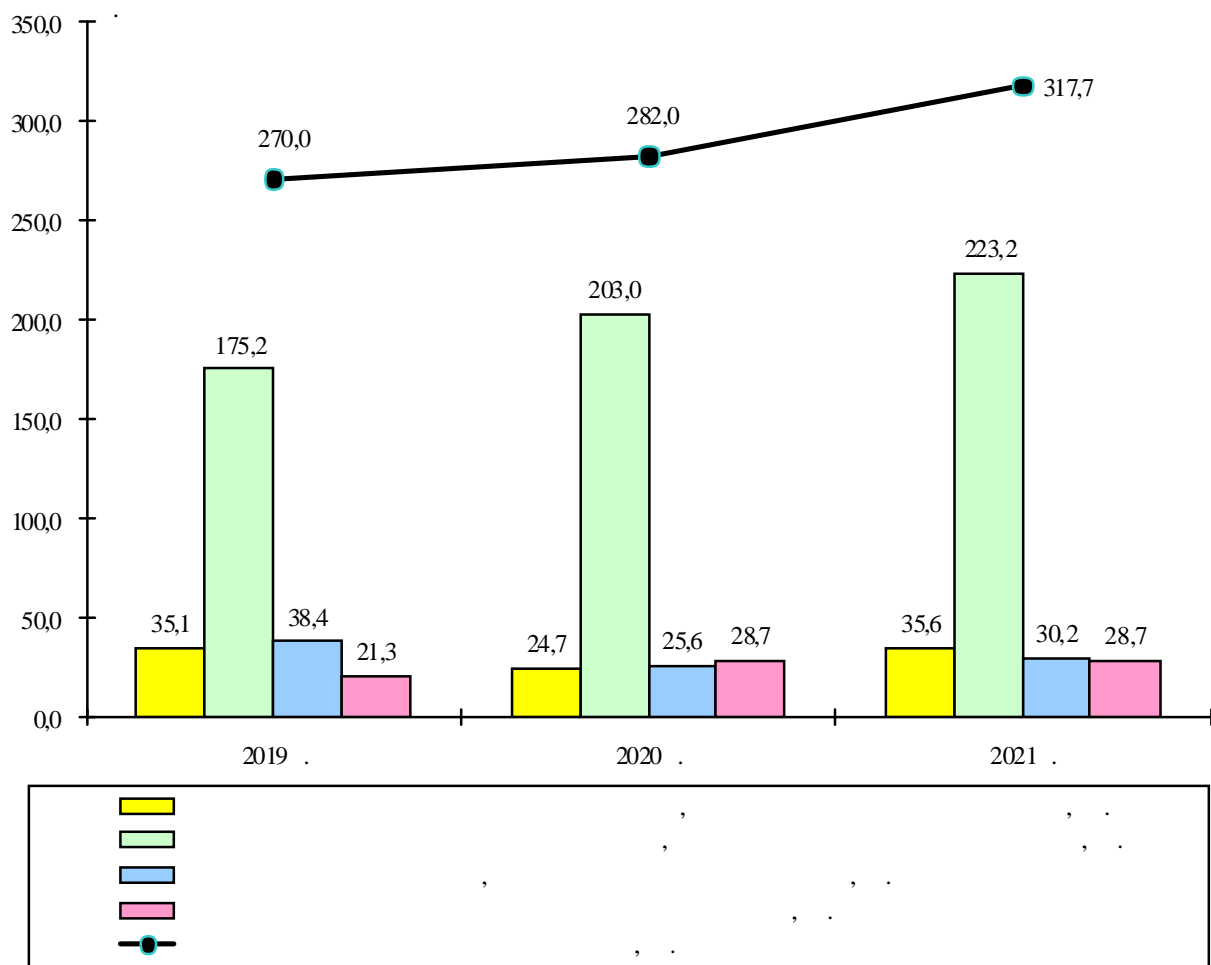


.13. " "» 2019–2021 ([1]) , «



.14. ([1]) , « " "»

2019
 28,7
 30
 15.



15.
 « " "» 2019-
 2021 ([1])

317,7
 10,5
 2021

1. « » / : : disclosure.skrin.ru/disclosure/9102048745/?DTI=8 (: 09.10.2023).
2. , . . // . — 2020. — 1(97). — . 124–129. — EDN WSAMHM.
3. , . . // - : , , . — 2012. — 4(17). — . 111–120. — EDN ULZSFP.
4. [] / . — : simferopol.lcbit.ru/blog/vneoborotnye-aktivy/?ysclid=lqb6tklztn166524083 (: 09.10.2023).
5. , . . : . — 2021. — 4(57). — . 63–70. — EDNETMSGA.
6. . . // . — 2016. — 12-5. — . 1071–1075.
7. , . . // . — 2017. — 2. — . 5-10. — EDN YODQPL.
8. . . : / — . : - , 2016. — 374 .
9. , . . // . — 2019. — 1.10(28). — . 193–197. — EDN YWUAIH.
10. , . . « » / // . — 2016. — 58. — . 209–233. — EDN WZQXPX.
11. , . . // : , , . — 2021. — 3(56). — . 110–118. — EDN QWLJED.
12. , . . / , // . — 2020. — 2, 4(43). — . 270–273. — EDN GIOTVN.
13. , . . // - . — 2020. — 2(21). — . 69–76. — EDN IRRSNU.
14. , . . / . . // . — 2011. — 43(475). — . 62–68. — EDN OJCSDN.
15. , . . - / . . // - . — 2019. — 7-3(22). — . 58–60. — EDN GBCRTK.
16. , . . / / / . — 2017. — 4(17). — . 213–227. — DOI 10.5281/zenodo.546295. — EDN YKVRNJ.
17. , . . / / / : / . — 2007. — 1(9). — . 57–60. — EDN OOWBXZ.
18. . . / . — . : - , 2017. — 421 .
19. () : / . . ([.] ; . . . - . — 2- „ . — : - , 2018. — 260 .
20. , . . // . — 2016. — 1-2(8). — . 265-266. — EDN VKNMDZ. XXI

SPISOK LITERATURY

1. AO Zavod «Fioleht» / SKRIN: sayt raskrytiya informatsii. — Rezhim dostupa: disclosure.skrin.ru/disclosure/9102048745/?DTI=8 (data obrashcheniya: 09.10.2023).
2. Arskaya, Ye. V. Ekonomicheskaya sushchnost' i rol' vneoborotnykh aktivov v deyatelnosti organizatsii / Ye. V. Arskaya, S. A. Usatov, V. S. Kretinina // Belgorodskiy ekonomicheskii vestnik. — 2020. — 1(97). — S. 124–129. — EDN WSAMHM.

3. Blazhevich, O. G. Upravleniye delovoy aktivnost'yu predpriyatiya / O. G. Blazhevich, I. V. Sokolov // *Naukoviy vestnik: finansi, banki, investitsii*. — 2012. — 4(17). — S. 111–120. — EDN ULZSFP.
4. Vneoborotnyye aktivy [Elektronnyy resurs] / pervyy Bit. — Rezhim dostupa: simferopol.1cbit.ru/blog/vneoborotnye-aktivy/?ysclid=lqb6tklzt166524083 (data obrashcheniya: 09.10.2023).
5. Galazova, M. V. Klassifikatsiya vidov aktivov organizatsii: sinerhiya traditsionnogo i al'ternativnogo vzglyada / M. V. Galazova // *Nauchnyy vestnik: finansi, banki, investitsii*. — 2021. — 4(57). — S. 63–70. — EDN ETMSGGA.
6. Derbush N.M. Upravleniye oborotnymi aktivami kak chast' finansovoy politiki sovremennogo predpriyatiya / N.M. Derbush, Ye. V. Krasova // *Fundamental'nyye issledovaniya*. — 2016. — 12-5. — S. 1071–1075.
7. Kiril'chuk, N. A. Opredeleniye sushchnosti aktivov predpriyatiya / N. A. Kiril'chuk, O. G. Blazhevich // *Finansi i uchelnaya politika*. — 2017. — 2. — S. 5–10. — EDN YODQPL.
8. Krasnova L.N. *Ekonomika predpriyatii: uchebnoye posobiye* / L.N. Krasnova, M. Yu. Ginzburg, R.R. Sadykova — M.: NITS INFRA-M, 2016. — 374 s.
9. Kutin, M. V. Osobennosti upravleniya vneoborotnymi aktivami kommercheskoy organizatsii / M. V. Kutin, O. V. Mishchenko // *Vestnik sovremennykh issledovaniy*. — 2019. — 1.10(28). — S. 193–197. — EDN YWUAIH.
10. Lukashova, I. A. Klassifikatsiya uchelnoy kategorii «aktivy» / I. A. Lukashova, Ye. M. Golovashchenko // *Gosudarstvennoye upravleniye. Elektronnyy vestnik*. — 2016. — 58. — S. 209–233. — EDN WZQXPX.
11. Manuylenko, V. V. Osnovnyye napravleniya razvitiya kontseptsiy formirovaniya aktivov v retrospektive i sovremennykh usloviyakh / V. V. Manuylenko, M. V. Galazova // *Nauchnyy vestnik: finansi, banki, investitsii*. — 2021. — 3(56). — S. 110–118. — EDN QWLJED.
12. Martirosyan, L. A. *Ekonomicheskaya sushchnost' aktivov predpriyatiya* / L. A. Martirosyan, K. K. Burdin, A. Yu. Pyshkov // *Alleya nauki*. — 2020. — T. 2, 4(43). — S. 270–273. — EDN GIOTVN.
13. Panakhova, E. M. Upravleniye vneoborotnym kapitalom predpriyatiya / E. M. Panakhova // *Vestnik Cheboksarskogo filiala Rossiyskoy akademii narodnogo khozyaystva i gosudarstvennoy sluzhby pri Prezidente Rossiyskoy Federatsii*. — 2020. — 2(21). — S. 69–76. — EDN IRRSNU.
14. Romanova, O. A. Aktivny kompaniy s uchastiyem inostrannogo kapitala: teoreticheskiye aspekty i strukturno-dinamicheskyy analiz / O. A. Romanova // *Finansi i kredit*. — 2011. — 43(475). — S. 62–68. — EDN OJCSND.
15. Ryabova, T. A. Finansovo-ekonomicheskaya sushchnost' oborotnykh aktivov i ikh znacheneye v proizvodstvennoy deyatel'nosti predpriyatiya / T. A. Ryabova // *Nauchno-prakticheskiye issledovaniya*. — 2019. — 7-3(22). — S. 58–60. — EDN GBCRTK.
16. Safonova, N. S. Sushchnost' aktivov i ikh krugoborot na predpriyatii / N. S. Safonova, O. G. Blazhevich // *Byulleten' nauki i praktiki*. — 2017. — 4(17). — S. 213–227. — DOI 10.5281/zenodo.546295. — EDN YKVRNJ.
17. Sirotkin, S. A. Oborotnyye sredstva i oborotnyye aktivy v sovremennoy ekonomike / S. A. Sirotkin // *Regional'naya ekonomika i upravleniye: elektronnyy nauchnyy zhurnal*. — 2007. — 1(9). — S. 57–60. — EDN OOWBXZ.
18. Chernysheva Yu.G. *Analiz i diagnostika finansovo-khozyaystvennoy deyatel'nosti predpriyatiya* / Yu.G. Chernysheva. — M.: INFRA-M, 2017. — 421 s.
19. *Ekonomika organizatsii (predpriyatiya): uchebnoye posobiye* / T. K. Rutkauskas [i dr.]; pod obshch. red. d-ra ekon. nauk, prof. T. K. Rutkauskas. — 2-ye izd., pererab. i dop. — Yekaterinburg: Izd-voUMTSUPI, 2018. — 260 s.
20. YU, TS. Klassifikatsiya aktivov i upravleniye aktivami / TS. YU, V. A. Zhil'tsov // *Studencheskaya nauka XXI veka*. — 2016. — 1-2(8). — S. 265–266. — EDN VKNMDZ.

19 2023

27 2023

:004.056

Boychenko Oleg Valeriyevich,

Doctor of Technical Sciences, Professor,
Professor of the Department of Business Informatics and Mathematical Modeling,
Institute of Physics and Technology,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Polskaya Svetlana Igorevna,

Ph.D. in Economics,
Associate Professor of the Department of Informatics
Institute of Physics and Technology,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

**ANALYTICS OF CYBERSECURITY PROBLEMS OF BANKS' CRITICAL
INFORMATION INFRASTRUCTURE**

In the article modern problems of cyber security of informatization of the banking sphere are investigated. The system-analytical approach to the organization and implementation of organizational-mode, software-technical and cybernetic measures to ensure effective cyber protection of the modern object of informatization of the banking sphere is substantiated. The innovative-analytical system of a set of measures that determine the reliability of the use of mechanisms of preemptive and prompt response to cyber incidents in the activities of banks is proposed.

Cybersecurity risks will continue to grow, given that pandemic lockdowns have accelerated the digitalization of transactions, financial institutions and financial market infrastructure are particularly at risk, and the rise of the crypto universe further increases the likelihood of cybercrime in the broader financial sector, which includes traditional financial institutes. Expert analysis indicates that cyber attacks must account for a significant proportion of cyber incidents, among which phishing, supply chain attacks, and the distribution of malicious software for the purpose of extortion should be highlighted.

At the same time, it is important to note the fact that there are no special programs for the development of security infrastructure for banks financed from government sources, which makes the banking system more vulnerable, since most banks cannot afford such expenses due to the length of their payback and implicit commercial effect. The banking industry is quite often subject to external attacks, along with the increasing dominance of the insider factor. Thus, according to research results, most information incidents are associated with the actions of employees who do not always act intentionally; leaks often occur due to negligence and irresponsibility.

Keywords: banking activity, cyber incident, cyber security, system-analytical approach, complex of measures, innovation-analytical system.

10, 11, 13, 14, 16, 20, 22, 25],
12, 15, 17, 18, 19, 21].

[2, 4, 6, 9,
[1, 7, 8, 3, 10,

[3].
 [8].
 [12].
 [15].
 [17, 18].
 [19].
 [21].
 2022 \$ 170 2020 2023 35% Forbes, 360
 [5]. 40%
) [6,10].

ransomware

5G,

[11].

1000

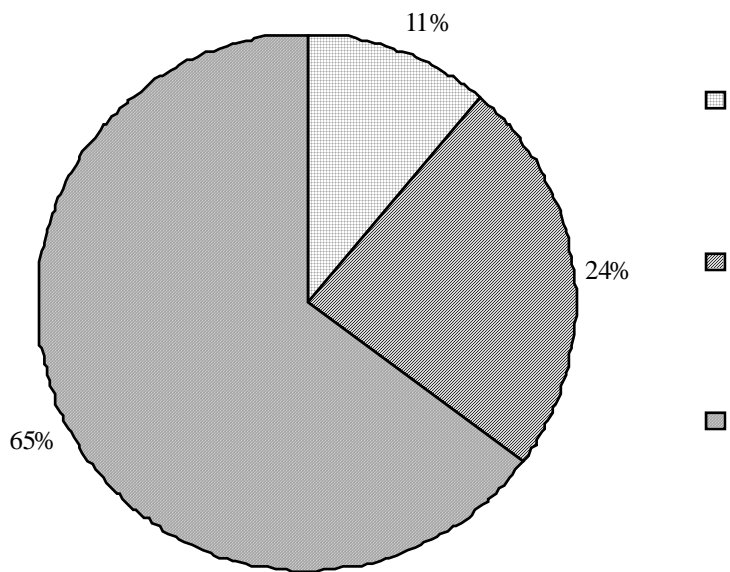
2018–2023 .

(.1),

[3].

[3].

[7].



.1.

([10])

1.

-

(.2),

,

,

,

-

-

.



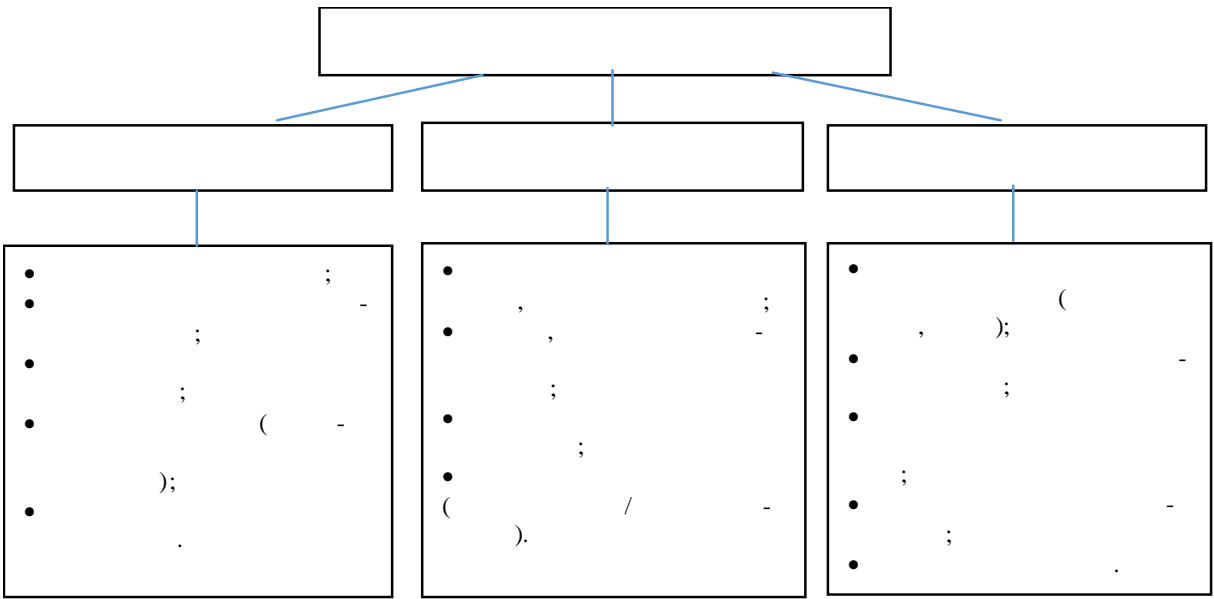
.2.

-

(

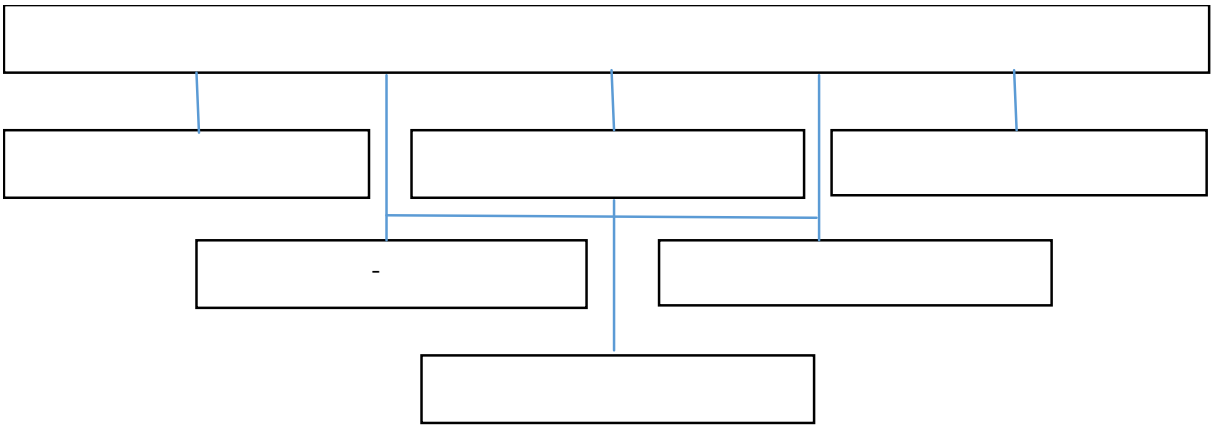
)

-
2. - ,
 3. - ,
 4. - ,
 5. - ,
 6. - , - ,
 7. - , ,
- [5].
- ;
 - ;
 - .
1. — ()
 2. —
 1. —
 2. —



3.

()



.4.

()

dos Ddos .

• ;

• ;

• ;

• .

1. // — 2020. — 1. — .16–19.
2. — 2022. — 9(146). — .1183–1185.
3. // — 2023. — 3(56). — .291–297.
4. // : , , — 2020. — 3(52). — .56–66.
5. « » / . . . // : , , — 2022. — 1(58). — .36–44.
6. // : , , — 2020. — 1(50). — .82–95.
7. // : , , — 2020. — .68–73.
8. // — 2020. — 27. — .294–298.
9. // — 2021. — 2. — .108–122.
10. []. — : econs.online/articles/techno/tsentralnye-banki-i-riski-kiberbezopasnosti/ (28.08.2023).
11. // : — 2022. — .26, 6. — .52–71.
12. IT // — 2020. — 1. — .26–31.
13. // — 2023. — .34, 1. — .93–102.
14. // — 2022. — .1, 1. — .89–93.
15. // : — 2020. — .10, 6. — .42–51.
16. // . 26: — 2022. — 2. — .77–84.
17. // - — 2019. — 5(79). — .80–82.
18. // — 2021. — 1. — .47–63.
19. // : — 2020. — 3(51). — .94–102.
20. // — 2023. — 1. — .48–52.
21. // : — 2019. — 24(2). — .63–68.
22. ESG- // , — 2023. — .13, 6. — .1889–1900.
23. // — 2022. — 8(145). — .108–111.
24. // : , , — 2020. — 1(50). — .63–71.
25. // — 2021. — 2(55). — .48–54.

СПИСОК ЛИТЕРАТУРЫ

1. Alekperov I.D. Kiberbezopasnost' v epokhu tsifrovogo obrazovaniya / I.D. Alekperov, E.A. Alekperova, A.I. Alekperova, A.I. Alekperova // *Intellektual'nyye resursy — regional'nomu razvitiyu*. — 2020. — 1. — S. 16–19.
2. Andrushchuk, V.V. Finansovaya bezopasnost' rossiyskikh bankov v usloviyakh sanktsiy / V.V. Andrushchuk // *Ekonomika i predprinimatel'stvo*. — 2022. — 9(146). — S. 1183–1185.
3. Babkin, A.V. Kiberbezopasnost' kreditno-finansovoy sistemy bankov v usloviyakh tsifrovoy ekonomiki / A.V. Babkin, O.V. Boychenko, S.I. Pol'skaya // *Vestnik Akademii znaniy*. — 2023. — 3(56). — S. 291–297.
4. Blazhevich, O.G. Primeneniye integral'nogo metoda v sisteme obespecheniya finansovoy bezopasnosti banka / O.G. Blazhevich, A.P. Bondar' // *Nauchnyy vestnik: finansy, banki, investitsii*. — 2020. — 3(52). — S. 56–66.
5. Boychenko, O.V. Finansovo-ekonomicheskaya bezopasnost' organizatsii PAO «RNKB» / O.V. Boychenko, V.V. Pobirchenko // *Nauchnyy vestnik: finansy, banki, investitsii*. — 2022. — 1(58). — S. 36–44.
6. Borshch, L.M. Informatsionno-analiticheskaya otsenka mekhanizma upravleniya investitsionnoy bezopasnost'yu v aspekte snizheniya riskov / L.M. Borshch, S.V. Gerasimova // *Nauchnyy vestnik: finansy, banki, investitsii*. — 2020. — 1(50). — S. 82–95.
7. Buy P.M. Otsenka riskov kiberbezopasnosti infokommunikatsionnykh sistem / P.M. Buy // *Kodirovaniye i tsifrovaya obrabotka signalov v infokommunikatsiyakh*. — Minsk, 2020. — S. 68–73.
8. Bukuyeva, A.O. Kiberbezopasnost' v Kyrgyzstane / A.O. Bukuyeva // *Vestnik Akademii gosudarstvennogo upravleniya pri Prezidente Kyrgyzskoy Respubliki*. — 2020. — 27. — S. 294–298.
9. Veretin, M.S. Analiz vliyaniya operatsionnykh riskov na ekonomicheskuyu bezopasnost' kommercheskikh bankov / M.S. Veretin // *Vek kachestva*. — 2021. — 2. — S. 108–122.
10. Volkova O. Tsentral'nyye banki i riski kiberbezopasnosti / O. Volkova [Elektronnyy resurs]. — Rezhim dostupa: econs.online/articles/techno/tsentralnye-banki-i-riski-kiberbezopasnosti/ (data obrashcheniya: 28.08.2023).
11. Dudin M.N. Vyzovy i ugrozy tsifrovoy ekonomiki dlya ustoychivosti natsional'noy bankovskoy sistemy / M.N. Dudin, S.V. Shkodinskiy // *Finansy: teoriya i praktika*. — 2022. — T. 26, 6. — S. 52–71.
12. Kritsyn, A.A. Kiberbezopasnost' kak drayver rosta eksporta rossiyskogo IT na mezhdunarodnykh rynkakh / A.A. Kritsyn // *Vestnik tsifrovoy ekonomiki*. — 2020. — 1. — S. 26–31.
13. Kul'bashevskiy, V.O. Tsifrovizatsiya bankovskogo sektora i yeye vliyaniye na finansovuyu bezopasnost' kommercheskikh bankov / V.O. Kul'bashevskiy // *Trud i sotsial'nyye otnosheniya*. — 2023. — T. 34, 1. — S. 93–102.
14. Malikova, D.M. Ekonomicheskaya bezopasnost' bankov i printsipy yeye formirovaniya v usloviyakh tsifrovoy ekonomiki / D.M. Malikova // *Mezhdunarodnyy zhurnal teoreticheskikh i prikladnykh voprosov tsifrovyykh tekhnologiy*. — 2022. — T. 1, 1. — S. 89–93.
15. Obukhova, A.S. Kiberprestupleniya i kiberbezopasnost' v bankovskom sektore: ponyatiye i sovremennyye ugrozy / A.S. Obukhova, A.I. Piyal'tsev // *Izvestiya Yugo-Zapadnogo gosudarstvennogo universiteta. Seriya: Ekonomika. Sotsiologiya. Menedzhment*. — 2020. — T. 10, 6. — S. 42–51.
16. Pashchenko, I.Yu. Svoboda rasprostraneniya informatsii kak faktor razvitiya tsifrovoy ekonomiki / I.Yu. Pashchenko // *Vestnik Moskovskogo universiteta. Seriya 26: Gosudarstvennyy audit*. — 2022. — 2. — S. 77–84.
17. Popov, M.V. Kiberbezopasnost' kak element natsional'noy bezopasnosti Rossii / M.V. Popov, L.N. Mamayeva // *Vestnik Saratovskogo gosudarstvennogo sotsial'no-ekonomicheskogo universiteta*. — 2019. — 5(79). — S. 80–82.
18. Popova, A.V. Kiberbezopasnost' bankovskoy sistemy i eticheskiye pravila vzaimodeystviya cheloveka s IT: k voprosu o neobkhodimosti sosushchestvovaniya / A.V. Popova // *Bankovskoye pravo*. — 2021. — 1. — S. 47–63.
19. Putyato, M.M. Kiberbezopasnost' kak neot'yemlyemyy atribut mnogourovnevnogo zashchishchennogo kiberprostranstva / M.M. Putyato, A.S. Makaryan // *Prikaspiyskiy zhurnal: upravleniye i vysokkiye tekhnologii*. — 2020. — 3(51). — S. 94–102.
20. Ramzayeva, Ye.P. Ekonomicheskaya bezopasnost' kak faktor stabil'nosti sfery potrebitel'skogo kreditovaniya kommercheskogo banka / Ye.P. Ramzayeva, V.M. Ramzayev // *Vestnik Mezhdunarodnogo instituta rynka*. — 2023. — 1. — S. 48–52.
21. Safonova, M.F. Kiberbezopasnost': problemy i resheniya / M.F. Safonova, S.A. Tsipliyayeva // *Yestestvenno-gumanitarnyye issledovaniya*. — 2019. — 24(2). — S. 63–68.
22. Sigova, M.V. ESG-dannyye dlya kommercheskikh bankov i ekonomicheskaya bezopasnost' / M.V. Sigova, V.A. Dolbezhkin, I.A. Kruglova // *Ekonomika, predprinimatel'stvo i pravo*. — 2023. — T. 13, 6. — S. 1889–1900.
23. Tarasova, T.M. Ekonomicheskaya bezopasnost' bankov v sisteme natsional'noy bezopasnosti gosudarstva i riski finansovoy sistemy strany / T.M. Tarasova // *Ekonomika i predprinimatel'stvo*. — 2022. — 8(145). — S. 108–111.
24. Tsifrovyye innovatsii dlya kreditnoy kooperatsii / O.M. Korobeynikova, D.A. Korobeynikov, Ye.V. Golubeva, N.V. Chernovanova // *Nauchnyy vestnik: finansy, banki, investitsii*. — 2020. — 1(50). — S. 63–71.
25. Yagupova, Ye.A. Tsifrovaya transformatsiya bankovskoy sistemy Rossii / Ye.A. Yagupova // *Nauchnyy vestnik: finansy, banki, investitsii*. — 2021. — 2(55). — S. 48–54.

7 2023

27 2023

various quantitative and qualitative methods. A special place among the methods of image assessment is occupied by ratings, which allow stakeholders to obtain objective information about the market positions of commercial banks without in-depth analysis of their activities and make economically sound decisions about conducting transactions with them. The article discusses various approaches to the formation of ratings of commercial banks based on the assessment of both financial and non-financial indicators. The comparison of the credit ratings most often used in the practice of rating of commercial banks, which are based on the assessment of reliability in terms of asset volumes and growth rates, capital adequacy, liquidity, the share of deposits in liabilities, profitability and a number of other financial criteria, is carried out. It is noted that the image of a commercial bank is a multidimensional category, and therefore ratings are based not only on the financial results of its activities. The ratings of commercial banks based on service quality assessments, the degree of their social responsibility and prospects as an employer are considered. Special attention is paid to the consideration of CSR ratings, which began to be formed relatively recently. It is determined that significant differences in the positions of banks in different ratings are not always related only to the peculiarities of the methods of their compilation, but also to the policy of the management of banking institutions in the field of transparency of their activities. A small group of commercial banks — leaders of various ratings was identified, which allowed us to assert that their activities are oriented towards achieving sustainable development goals

Keywords: image, assessment, rating, commercial banks, corporate social responsibility, sustainable development, ESG index.

I. (Forbes)*

-		
*****	« » AAA	
****	AA+, AA, -	
***	+ , -	(),
**	B+, B -	
*	2022 . 1	« » ,

* [39]

- « » (earnings) — ()
- «L» (liquidity) — ,
- «S» (sensitivity) — [25].

- [16].
- Banki.ru [40] :
- 1) — .
 - 2) « » ;
101 , ()
123 ,
135

3) « »,

4) ((. .));

2 -10

2. -10

Banki.ru *

	— (01.10.2023 .)	- (01.02.2022 .)	« » (01.10.2023 .)
1	-		
2			
3			
4		(-)	
5		-	
6			
7			
8		« »	
9	« »		
10			

* [40]

— ,
PR,

2015

3000

100

ESG (Environmental—

, Social

, Governance—).

COVID-19.

« ».

:

« »

[7].

COVID-19, « » 2020 .

(COVID-19, ESG 2021–2023 .—

20% .), 40%;

[11].

ESG

[4, . 23–28]

ESG-

[37, c. 77–95],

GRI,

GRI,

[36, c. 53–69].

A. .

78

2000–

2019 . [13, c. 87–100].

22 (), -
 ; ; -
 [24, c. 113–116]. () , -
 1000), 1000 (AccountAbility -
 « 2000 .. -
 » (GRI), -
 : 1000, GRI, ISO 26000, ISO -
 14 000, 1000SES, SA 8000, -
 . [14; 19; 20; 21; 22; 26; 32; 35]. -
 [1]. -
 3. -
 ((, ,),). -
 3. *

1	2	3
CPI (Corporate Philanthropy Index) —	CPI 4 , 5, - - -	- - -
SI (Social Index) —	60, , 0 100. - -	- - -

[1].

ESG (

).

« (CPI, Social Index (

)

» [33, c. 25].

« », CorporateRegister.com (CR Reporting Awards) [17], CRRA,

(—) (). « —

» [3].

2014 «

1. « »

70 43

2. « »

10 :

«

;

2021 » [41].

(—) [29],

Rate the Raters 2020 Sustain Ability

Rate the Raters 2020 Sustain Ability

: S&P Global Scores (SAM); Sustainalytics ESG Risk Rating; MSCI ESG Rating; CDP Climate, Water & Forest Scores» [43].

- « » [30];
- « » «ESG-» [42];
- 2020 « » [29];
- AK&M « ESG»: [31];
- « -100 » [27].
- «ESG- ESG- . 2023 114 20 — » [12]. ESG- 2023 1. « 320 800 » [12].

I уровень **Высокий, 460–800 баллов**

АФК «Система»	ДОМ.РФ	Райффайзен Банк	Совкомбанк
ВСК	Московский Кредитный Банк	СберБанк	
Газпромбанк	МТС Банк	«Сбербанк страхование жизни»	Тинькофф Банк

II уровень **Выше среднего, 340–459 баллов**

ГТЛК	«Сбербанк страхование»	СПБ Биржа	Docomo
НПФ Сбербанка		CORE.XP	QIWI Групп

. I. ESG- 2023

[12]

1. . . . / . . . // : :
 , 28 2022 . — : I -
 « », 2022. — . 177–178. — EDN MMOSYM.
2. . . . PR- /
 []. — : bookree.org/reader?file=809891&pg=1 (
 : 10.10.2023).

3. [].— : rspp.ru/simplepage/bazovye-indikatory-rezultativnosti-rekomendatsii-po-ispolzovaniyu/ (: 10.09.2023).
4. ESG- []// .— 2021. — . 12. .6.— .20–32.— : elibrary.ru/item.asp?id=47494552 (: 15.09.2023).
5. [].— : imageology.ru/content/view/21/ (: 12.08.2023).
6. [].— : hr-portal.ru/article/vnutrenniy-imidzh-kompanii (: 08.10.2023).
7. « » [] / Copyright 2022 .— : vbudushee.ru/ (: 01.10.2023).
8. []// .— 2021. — . 9. — 10. — . 306–310. — : www.strategybusiness.ru/jour/article/view/775/ (: 01.10.2023).
9. // : , , .— 2022. — 2. — . 62–70.
10. « »— 2020/ [].— : mintrud.gov.ru/events/1319 (: 01.10.2023).
11. « » 2020/ [].— : rspp.ru/download/9ae2099e2ed64af0c2f294818204d7c7/ (: 10.09.2023).
12. ESG- 2023 [] (: 10.09.2023).
13. : trends.rbc.ru/trends/green/650b1a619a79478e138a37ba (: 10.09.2023).
14. []// : .— 2021. — . 25. . 1. — . 84–102.— : elibrary.ru/item.asp?id=45428254 (: 20.09.2023).
15. []// .— 2019. — 3. — . 86–105.— : elibrary.ru/item.asp?id=41138211 (: 12.09.2023).
16. [].— 2- , : « » : , 2019. — 446 .— ().— ISBN 978-5-8199-0890-7. — : : znanium.com/catalog/product/1007997 (: 11.09.2023).
17. CRRR / Corporate Register — Global CSR Resources [].— : corporateregister.com/ (: 10.08.2023).
18. // « ».— 2017. — 4 (60). — . 92–104.
19. ISO 14000 / « » : : docs.cntd.ru/document/1200134681 (: 10.10.2023).
20. ISO 26000 « » / « » [].— : amu.edu.kz/upload/iblock/1a5/1a5bae065f9ded9768ab6f5e7a385554.pdf. (: 10.09.2023).
21. SA 8000 / SAI Social Accountability International [].— : smartcons.org/photoz/downloadfiles/SA_8000-2001_RUS.pdf. (: 20.09.2023).
22. 1000/ « » [].— : expert-ru.turbopages.org/expert.ru/s/siberia/2007/47/mezhdunarodnye_standarty/ (: 10.10.2023).
23. « » : , — 2021» []/ .—

- : rspp.ru/events/news/nachalsya-priem-zayavok-na-vserossiyskiy-konkurs-rspp-lidery-rossiyskogo-biznesa-dinamika-otvetstven-622f4ccec2ab2/ (: 10.08.2023).
24.)/ . . []// — — : . — 2018. — . 2 — . 112–116. — : elibrary.ru/item.asp?id=36679722 (: 20.09.2023).
25. . LS []. — : analizbankov.ru/metod.php?Metod=cam (: 10.09.2023).
26. / « -4» []. — : unipro.energy/files/117/ (: 12.09.2023).
27. « -100 » []/ : . — : amr.ru/ (: 20.09.2023).
28. []. — : mainfin.ru/banki/rating/po-nadezhnosti?page=2 (: 02.09.2023).
29. [-]/ . — : rspp.ru/activity/social/indexes/ (: 28.08.2023).
30. []/ « - » []. — : expert.ru/expert/2021/50/spetsdoklad/49/ (: 28.08.2023).
31. AK&M « ES» []/ AK&M. — : akmrating.ru/rejtingotchetnostiesg/ (: 02.09.2023).
32. GRI []/ Global Reporting Initiative. — : media.rspp.ru/document/1/e/6/e6aef2d23c03d8181b6230003f977361.pdf (: 08.09.2023).
33. . . []// — 2020. — 4(28). — . 24–27. — : elibrary.ru/item.asp?id=44405385 (: 11.09.2023).
34. MSCI KLD 400 []/ Investopedia. — : www.investopedia.com/terms/d/domini_400.asp (: 10.10.2023).
35. 1000SES / : « » []. — : urbaneconomics.ru/sites/default/files/2526_import.pdf (: 02.10.2023).
36. . . []// — 2020. — . 18. — . 1. — . 51–72. — : elibrary.ru/item.asp?id=42909259 (: 10.08.2023).
37. . . []// — 2020. — . 46. — . 2. — . 73–96. — : elibrary.ru/item.asp?id=4306571 (: 12.09.2023).
38. « . . »/ . . // . — 2017. — 7(306). — . 16–25.
39. 100 — 2022. Forbes []. — : www.forbes.ru/rating/459867-100-nadezhnyh-rossijskih-bankov-2022-rejting-forbes (: 10.10.2023).
40. Banki.ru []. — : www.banki.ru (: 10.10.2023).
41. ESG []/ : rspp.ru/activity/social/indexes/ (: 10.09.2023).
42. ESG- []/ : « » — : raexpert.ru/ratings/esg_all/ (: 10.09.2023).
43. ESG- []/ « - » — : www.if24.ru/esg-rejtingi-i-rossijskaya-praktika/ (: 10.09.2023).

SPISOK LITERATURY

1. Andriyenko Ye. A. Mezhdunarodnyy i otechestvennyy opyt realizatsii korporativnoy sotsial'noy otvetstvennosti predpriyatij / Ye. A. Andriyenko // Vlast', biznes i obshchestvo v tsifrovoy ekonomike: global'nyy i natsional'nyy

konteksty : Sbornik materialov I Mezhdunarodnoy nauchno-prakticheskoy konferentsii, Stavropol', 28 fevralya 2022 goda. — Stavropol': Obshchestvo s ogranichennoy otvetstvennost'yu 'Izdatel'sko-informatsionnyy tsentr 'Fabula', 2022. — S. 177–178. — EDN MMOSYM.

2. Afanas'yev S. V. Formirovaniye korporativnogo imidzha kak osnovnaya sostavlyayushchaya PR-strategii / S. V. Afanas'yev [Elektronnyy resurs]. — Rezhim dostupa: bookree.org/reader?file=809891&pg=1 (data obrashcheniya: 10.10.2023).

3. Bazovyye indikatory rezul'tativnosti. Rekomendatsii po ispol'zovaniyu / Rossiyskiy soyuz promyshlennikov i predprinimateley [Elektronnyy resurs]. — Rezhim dostupa: rsp.ru/simplepage/bazovye-indikatory-rezultativnosti-rekomendatsii-po-ispolzovaniyu/ (data obrashcheniya: 10.09.2023).

4. Batayeva B. S. Vliyaniye raskrytiya ESG-pokazateley na finansovyye rezul'taty rossiyskikh publichnykh kompaniy / B. S. Batayeva, A. D. Kokurina, N. A. Karpov [Elektronnyy resurs] // Upravlenets. — 2021. — T. 12. — S. 20–32. — Rezhim dostupa: elibrary.ru/item.asp?id=47494552 (data obrashcheniya: 15.09.2023).

5. Belobragin V. Ya. Nekotoryye voprosy formirovaniya imidzhelologii kak nauki / V. Ya. Belobragin, V. V. Belobragin [Elektronnyy resurs]. — Rezhim dostupa: imageology.ru/content/view/21/ (data obrashcheniya: 12.08.2023).

6. Binetskiy A. Vnutrenniy imidzh kompanii / A. Binetskiy [Elektronnyy resurs]. — Rezhim dostupa: hr-portal.ru/article/vnutrenniy-imidzh-kompanii (data obrashcheniya: 08.10.2023).

7. Blagotvoritel'nyy fond Sberbanka 'Vklad v budushcheye' [Elektronnyy resurs] / Copyright 2022 Sberbank. — Rezhim dostupa: vbudushee.ru/ (data obrashcheniya: 01.10.2023).

8. Burkin N. G. Korporativnaya sotsial'naya otvetstvennost' kak faktor ustoychivogo razvitiya kompanii / N. G. Burkin [Elektronnyy resurs] // Strategii biznesa. — 2021. — T. 9. — S. 306–310. — Rezhim dostupa: www.strategybusiness.ru/jour/article/view/775/ (data obrashcheniya: 01.10.2023).

9. Vorobyova E. I. Napravleniya razvitiya bankovskoy deyatelnosti v Rossiyskoy Federatsii / E. I. Vorobyova // Nauchnyy vestnik: finansy, banki, investitsii. — 2022. — T. 2. — S. 62–70.

10. Vserossiyskiy konkurs 'Rossiyskaya organizatsiya vysokoy sotsial'noy effektivnosti' — 2020 / Ofitsial'nyy sayt 'Ministerstvo truda i sotsial'noy zashchity Rossiyskoy Federatsii' [Elektronnyy resurs]. — Rezhim dostupa: mintrud.gov.ru/events/1319 (data obrashcheniya: 01.10.2023).

11. Godovoy otchet PAO 'Sberbank Rossii' 2020 / Natsional'nyy Registr korporativnykh nefinansovykh otchetov RSPP [Elektronnyy resurs]. — Rezhim dostupa: rsp.ru/download/9ae2099e2ed64af0c2f294818204d7c7/ (data obrashcheniya: 10.09.2023).

12. Zhivikina Yu. Prodolzhayem zelenet': rezul'taty ESG-indeksa 2023 goda / Yu. Zhivikina [Elektronnyy resurs]. — Rezhim dostupa: trends.rbc.ru/trends/green/650b1a619a79478e138a37ba (data obrashcheniya: 10.09.2023).

13. Zhukova N. Yu. Sotsial'naya otvetstvennost' biznesa: usileniye stoimosti brenda i vliyaniye na finansovyye pokazateli kompanii / N. Yu. Zhukova, A. E. Melikova [Elektronnyy resurs] // Finansy: teoriya i praktika. — 2021. — T. 25. — S. 84–102. — Rezhim dostupa: elibrary.ru/item.asp?id=45428254 (data obrashcheniya: 20.09.2023).

14. Iglovskaya A. I. Otsenka effektivnosti sistem korporativnoy sotsial'noy otvetstvennosti elektrosetyevykh kompaniy Rossii s ispol'zovaniyem metoda analiza sredy funkcionirovaniya / A. I. Iglovskaya, A. A. Sal'nikova [Elektronnyy resurs] // Vek kachestva. — 2019. — T. 3. — S. 86–105. — Rezhim dostupa: elibrary.ru/item.asp?id=41138211 (data obrashcheniya: 12.09.2023).

15. Imidzh i brend kommercheskogo banka [Elektronnyy resurs]. — Rezhim dostupa: megaobuchalka.ru/4/14351.html (data obrashcheniya: 15.11.2021).

16. Karminskiy A. M. Entsiklopediya reytingov: ekonomika, obshchestvo, sport : monografiya / A. M. Karminskiy, A. A. Polozov [Elektronnyy resurs]. — 2-ye izd., pererab. i dop. — Moskva : ID 'FORUM' : INFRA-M, 2019. — 446 s. — (Nauchnaya mysl'). — ISBN 978-5-8199-0890-7. — Tekst : elektronnyy. — Rezhim dostupa: znanium.com/catalog/product/1007997 (data obrashcheniya: 11.09.2023).

17. Korporativnyy reyestr CRRA / Corporate Register — Global CSR Resources [Elektronnyy resurs]. — Rezhim dostupa: corporateregister.com/ (data obrashcheniya: 10.08.2023).

18. Mamayeva V. Yu. Imidzh kak ob'yekt nauchnogo analiza i kategoriya marketinga / V. Yu. Mamayeva, V. V. Mats'ko // Vestnik Omskogo universiteta. Seriya 'Ekonomika'. — 2017. — T. 4(60). — S. 92–104.

19. Mezhdunarodnyy standart ISO 14000 / Elektronnyy tekst dokumenta podgotovlen ZAO 'Kodeks' i sveren po: ofitsial'noye izdaniye M.: Standartinform. — Rezhim dostupa: docs.cntd.ru/document/1200134681 (data obrashcheniya: 10.10.2023).

20. Mezhdunarodnyy standart ISO 26000 'Rukovodstvo po sotsial'noy otvetstvennosti' / ANO 'Tsentr ekspertnykh programm Vserossiyskoy organizatsii kachestva' vzamen standarta CSR/KSO [Elektronnyy resurs]. — Rezhim dostupa: amu.edu.kz/upload/iblock/1a5/1a5bae065f9ded9768ab6f5e7a385554.pdf. (data obrashcheniya: 10.09.2023).

21. Mezhdunarodnyy standart SA 8000 / SAI Social Accountability International [Elektronnyy resurs]. — Rezhim dostupa: smartcons.org/photoz/downloadfiles/SA_8000-2001_RUS.pdf. (data obrashcheniya: 20.09.2023).

22. Mezhdunarodnyy standart sotsial'noy otchetnosti AA1000 / Rossiyskiy zhurnal 'Ekspert' [Elektronnyy resurs]. — Rezhim dostupa: expert-ru.turbopages.org/expert.ru/s/siberia/2007/47/mezhdunarodnye_standarty/ (data obrashcheniya: 10.10.2023).

23. Nachalsya priyem zayavok na Vserossiyskiy konkurs RSPP 'Lidery rossiyskogo biznesa: dinamika, otvetstvennost', ustoychivost' — 2021' [Elektronnyy resurs] / Rossiyskiy soyuz promyshlennikov i predprinimateley. — Rezhim dostupa: rspp.ru/events/news/nachalsya-priem-zayavok-na-vserossiyskiy-konkurs-rspp-lidery-rossiyskogo-biznesa-dinamika-otvetstven-622f4ccec2ab2/ (data obrashcheniya: 10.08.2023).
24. Poluyakhtova Ye. R. Vliyaniye kachestva korporativnogo upravleniya na stoimost' kompanii (na primere rossiyskikh PAO) / Ye. R. Poluyakhtova [Elektronnyy resurs] // Aziya — Rossiya — Afrika: ekonomika budushchego. Ural'skiy gosudarstvennyy ekonomicheskiy universitet. — 2018. — T. 2 — S. 112–116. — Rezhim dostupa: elibrary.ru/item.asp?id=36679722 (data obrashcheniya: 20.09.2023).
25. Portal bankovskogo analitika. Razdel SAMELS [Elektronnyy resurs]. — Rezhim dostupa: analizbankov.ru/metod.php?Metod=cam (data obrashcheniya: 10.09.2023).
26. Printsipy Global'nogo dogovora OON / Utverzhdeno prikazom OAO 'OGK-4' [Elektronnyy resurs]. — Rezhim dostupa: unipro.energy/files/117/ (data obrashcheniya: 12.09.2023).
27. Reyting 'Top-100 rossiyskikh menedzherov' [Elektronnyy resurs] / Assotsiatsiya menedzherov: delovoye ob'yedineniye Rossii. — Rezhim dostupa: amr.ru/ (data obrashcheniya: 20.09.2023).
28. Reyting bankov po nadezhnosti po dannym TSB RF [Elektronnyy resurs]. — Rezhim dostupa: mainfin.ru/banki/rating/po-nadezhnosti?page=2 (data obrashcheniya: 02.09.2023).
29. Reyting raskrytiya informatsii ob integratsii Tseley ustoychivogo razvitiya OON [Elektronnyy resurs] / Rossiyskiy soyuz promyshlennikov i predprinimateley. — Rezhim dostupa: rspp.ru/activity/social/indexes/ (data obrashcheniya: 28.08.2023).
30. Reyting ustoychivogo razvitiya rossiyskikh kompaniy [Elektronnyy resurs] / Rossiyskiy zhurnal 'Ekspert' [Elektronnyy resurs]. — Rezhim dostupa: expert.ru/expert/2021/50/spetsdoklad/49/ (data obrashcheniya: 28.08.2023).
31. Reytingovoye agentstvo AK&M 'Reyting ES' [Elektronnyy resurs] / Informatsionnoye agentstvo AK&M. — Rezhim dostupa: akmrating.ru/rejtingotchetnostiesg/ (data obrashcheniya: 02.09.2023).
32. Rukovodstvo po otchetnosti v oblasti ustoychivogo razvitiya GRI [Elektronnyy resurs] / Global Reporting Initiative. — Rezhim dostupa: media.rspp.ru/document/1/e/6/e6aef2d23c03d8181b6230003f977361.pdf (data obrashcheniya: 08.09.2023).
33. Snetov S. S. Kriterii effektivnosti sistemy strategicheskogo upravleniya investitsiyami na predpriyatii neftegazovogo profilya / S. S. Snetov [Elektronnyy resurs] // Aktual'nyye problemy ekonomiki i upravleniya. — 2020. — 4(28). — S. 24–27. — Rezhim dostupa: elibrary.ru/item.asp?id=44405385 (data obrashcheniya: 11.09.2023).
34. Sotsial'nyy indeks MSCI KLD 400 [Elektronnyy resurs] / Investopedia. — Rezhim dostupa: www.investopedia.com/terms/d/domini_400.asp (data obrashcheniya: 10.10.2023).
35. Standart vzaimodeystviya s zainteresovannymi storonami AA1000SES / Perevod osushchestvlen Fondom «Institut ekonomiki goroda» [Elektronnyy resurs]. — Rezhim dostupa: urbaneconomics.ru/sites/default/files/2526_import.pdf (data obrashcheniya: 02.10.2023).
36. Fedorova Ye. A. Vliyaniye kachestva raskrytiya nefinansovoy informatsii rossiyskimi kompaniyami na ikh investitsionnyu privlekatel'nost' / Ye. A. Fedorova, L. Ye. Khrustova, I. S. Demin [Elektronnyy resurs] // Rossiyskiy zhurnal menedzhmenta. — 2020. — T. 18. — . 1. — S. 51–72. — Rezhim dostupa: elibrary.ru/item.asp?id=42909259 (data obrashcheniya: 10.08.2023).
37. Fedorova Ye. A. Vliyaniye nefinansovoy informatsii na osnovnyye pokazateli rossiyskikh kompaniy // Ye. A. Fedorova, D. O. Afanas'yev, R. G. Nersesyan, S. V. Ledyayeva [Elektronnyy resurs] // Zhurnal Novoy ekonomicheskoy assotsiatsii. — 2020. — T. 46. — . 2. — S. 73–96. — Rezhim dostupa: elibrary.ru/item.asp?id=4306571 (data obrashcheniya: 12.09.2023).
38. Yachmeneva V. M. Rol' sredstv massovoy informatsii i kommunikatsii v formirovanii imidzha FGAOU VO «KFU im. V.I. Vernadskogo» / V. M. Yachmeneva, N. V. Tsarenko // Ekonomicheskiye i gumanitarnyye nauki. — 2017. — 7(306). — S. 16–25.
39. 100 nadezhnykh rossiyskikh bankov — 2022. Reyting Forbes [Elektronnyy resurs]. — Rezhim dostupa: www.forbes.ru/rating/459867-100-nadezhnyh-rossijskih-bankov-2022-rejting-forbes (data obrashcheniya: 10.10.2023).
40. Banki.ru [Elektronnyy resurs]. — Rezhim dostupa: www.banki.ru (data obrashcheniya: 10.10.2023).
41. ESG indeksy i reytingi RSPP v oblasti ustoychivogo razvitiya [Elektronnyy resurs] / Rossiyskiy soyuz promyshlennikov i predprinimateley. — Rezhim dostupa: rspp.ru/activity/social/indexes/ (data obrashcheniya: 10.09.2023).
42. ESG-reyting ekologicheskoy i sotsial'noy otvetstvennosti [Elektronnyy resurs] / Rossiyskoye reytingovoye agentstvo «Ekspert RA». — Rezhim dostupa: raexpert.ru/ratings/esg_all/ (data obrashcheniya: 10.09.2023).
43. ESG-reytingi i rossiyskaya praktika [Elektronnyy resurs] / Delovoy zhurnal 'Invest-Forsayta'. — Rezhim dostupa: www.if24.ru/esg-rejtingi-i-rossijskaya-praktika/ (data obrashcheniya: 10.09.2023).

15 2023

27 2023

338.43

Norets Nadezhda Konstantinovna,
Candidate of Economic Sciences (PhD in Economics),
Associate Professor of the Department of the Business Informatics and Mathematical Modeling,
Institute of Physics and Technology,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

DETERMINATION OF ECONOMICALLY SOUNDED AREA OF FARMING ON THE BASIS OF REGRESSION ANALYSIS

The article under consideration concerns farming in conditions of instability. The farming is presented as a social-economic system with peculiar proportions of its elements and relationships with other APC enterprises. To determine the model for the development of the Crimean farms, a regression analysis which presents how random variable depends on the variables (factors) X_1, X_2, \dots, X_k is used. Following the number of calculations, the output values of the indicators are acquired. Thus, we can calculate the desired metric using the matrix. Besides, the result of the farming area being optimal under these conditions is achieved. Based on the regression analysis performed in the MathCad program, we obtain a pool of significant indicators that, according to a given level of significance and confidence interval, to a greater extent affect the optimal farm area in the region. Statistical testing of the hypothesis of significant coefficients and their linear combination is implemented through the Fisher distribution quantile. The output values of indicators are obtained by the number of calculations. Thus, we can calculate the desired metric using a matrix. In addition, the result of the cultivation area optimal under the given conditions is achieved. To determine the optimal farm area, we propose to use regression analysis based on the dependence of Y (optimal area) on variable factors X (farm performance indicators). Regression analysis is a method for evaluating relationships between variables. We use it to assess the degree of relationship between variables and to model future dependence. Regression analysis shows how changes in the independent variables can be used to fix the change in the dependent variable. 20 farms of the Republic of Crimea were selected for the study. It is determined that the optimal area of a farm in the Republic of Crimea depends on 9 independent variables.

Keywords: farming, value, variable, matrix, crop capacity, net profit, regression, metric.

MathCad

$Y ($) $X ($

).

20

9

INTRODUCTION

The issues of optimization in agriculture and industry have been quite acute at all times. At the present stage of digital development, the issues of optimizing the area of a farm based on regression analysis seem to be quite interesting. Professor Yu.N. Novikov [5] and his students [3] in their publications repeatedly raised the issues of optimizing the area of agricultural enterprises. Professor V.I. Safonova [8] in her monograph reveals some features of the formation of agricultural land and suggests directions for their improvement. The use of mathematical methods in decision-making in the economy was studied by such scientists as E.S. Ablyalimova and O.L. Korolev [1], K.R. Adamadeiev and N.M. Kurbanov [2], N.V. Apatova, O.N. Goncharova and V.N. Pomeranets [et al.] [5], E.V. Sidorenko and A.N. Tikhomirova [11], V.V. Khokhlov and E.I. Piskun [12]. We believe that the approach proposed by the author will complement the conducted research and lay a solid foundation in the theory of economic and mathematical modeling of the optimization of economic processes.

FORMULATION OF THE PROBLEM

Farms are a special type of entrepreneurial activity that pays a single agricultural tax. The basis for the transition to this system of taxation is the presence of income from agricultural activities of more than 70 % in relation to other income. Determining the optimal area of a farm is a constantly emerging problem that needs to be solved and the search for the optimal value. Based on research conducted by domestic scientists, we propose to carry out optimization using regression analysis methods.

METHODS

To determine the optimal farm area, we propose to use regression analysis based on the dependence of Y (optimal area) on variable factors X (farm performance indicators). Regression analysis is a method for evaluating relationships between variables. We use it to assess the degree of relationship between variables and to model future dependence. Regression analysis shows how changes in the independent variables can be used to fix the change in the dependent variable. 20 farms of the Republic of Crimea were selected for the study.

RESULTS

Farming is a social-economic system with peculiar proportions of its elements and relationships with other APC enterprises.

The market economy is based on self-payment and self-financing. Thus, enterprises are responsible for the results of management. Besides, the most important thing is the initiative, ability to find sales markets and the system of marketing in general. In the article under consideration except determining the farming space some changeable factors are foreseen.

The farm should be expanded including real land and labor resources.

The most important factor in business economics is the interconnection of farming and crop, net profit and the number of workers, etc. As a result of optimization, these interconnections should provide the land optimization on the basis of an optimal correlation of the farming indicators of grain-type farms.

Farming is a part of the state economic system, a participant in the social division of labor, which means the necessity to predict the optimal area of the economy for the specific conditions that it has: crop capacity, number of workers, the area occupied by cereals.

The most favorable criteria for solving this issue will be the optimal area of the farm.

Predicting the farm activities is a difficult and unforeseen task. Farming is not just entrepreneurial structure; it is also a way of life. A farmer is not always governed by market laws: either the demand, or the supply; the industry which he can engage depends on his attitude to work.

A farmer cannot be forced to grow a certain type of produce, it is necessary for him to be motivated for that. The current market situation does not involve planned production. Everything produced will be

sold in the market, so it is difficult to predict and plan what products will be in high demand this season, what products will have an increased price, etc. There is one question that will always be facing farmers — what farming area is optimal for a particular specialization?

In the previous investigations [3], we covered the agricultural holdings of the grain type in the Republic of Crimea. We have divided the farms into three groups, according to their area, and made a conclusion that farms with different areas have various profitability for the products they produce. Thus, there is a question: what factors influence the necessity of the farming area?

To determine the model for the development of the Crimean farms, we use a regression analysis which presents how random variable depends on the variables (factors) X_1, X_2, \dots, X_k .

One-way stochastic dependence is expressed by a function called a regression function or simply regression. According to our observations, we obtain the n data that correlates with values X_1, X_2, \dots, X_k and $Y = f(X_1, X_2, \dots, X_k) + U$ where the random variable U is presented as the deviation. Based on regression analysis and assuming the theoretical values, the indicators are the following:

Y — farmland area, ha;

n — farms being analyzed;

k — average values of the analyzed farms.

Thus:

$k = 1$ — fixed assets of the farm, thousand, RUB.;

$k = 2$ — equity of the farm, thousand, RUB.;

$k = 3$ — revenue from sales, thousand, RUB.;

$k = 4$ — net profit, thousand, RUB.;

$k = 5$ — state support for the farm, thousand, RUB.;

$k = 6$ — the area occupied by the cereals sowing, ha;

$k = 7$ — grain yield, c / ha;

$k = 8$ — cost of crop production, thousand, RUB.;

$k = 9$ — net profit from the sale of crop products, thousand, RUB.;

$k = 10$ — the cost of crop products production, thousand, RUB.;

$k = 11$ — number of farm workers, pers.;

$k = 12$ — area under arable land, ha.

$n = 5-8$ — the farming «Agrarnoe»;

$n = 9-12$ — the farming «Genesis»;

$n = 23-25$ — the farming «Impul'se»;

$n = 49-51$ — the farming «Svetliy pyt'»;

$n = 58-60$ — the farming «Sakhalin»;

$n = 67-69$ — the farming «Vesta»;

$n = 70-72$ — the farming «Dalnyee»;

$n = 73-75$ — the farming «Ivushka 3»;

$n = 76-78$ — the farming «Don»;

$n = 13-18$ — the farming «Agris»;

$n = 19-22$ — the farming «Drugmi»;

$n = 26-30$ — the farming «Rostok-2»;

$n = 43-48$ — the farming «Yabloko»;

$n = 82-85$ — the farming «Ivanov»;

$n = 79-81$ — the farming «Pijyanikh N.V.»;

$n = 31-39$ — the farming «Khliborob»;

$n = 40-42$ — the farming «Rossia»;

$n = 1-4$ — the farming «Sivash»;

$n = 64-66$ — the farming «Rut»;

$n = 52-54$ — the farming «Teslik»;

$n = 55-57$ — the farming «Flora».

Using our observational data, we construct a value matrix based on MathCad. Then, the matrix of values from the result indicator Y will have the following form table 1.

Table 1. Matrix initial variables *

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	85	$4.804 \cdot 10^5$	$1.593 \cdot 10^6$	$2.047 \cdot 10^6$	$3.228 \cdot 10^5$	$1.831 \cdot 10^4$	$1.331 \cdot 10^6$	$2.353 \cdot 10^3$	$4.215 \cdot 10^5$	$4.189 \cdot 10^6$	$4.766 \cdot 10^6$	$5.805 \cdot 10^3$	$1.904 \cdot 10^5$
1	$4.804 \cdot 10^5$	$2.844 \cdot 10^{10}$	$8.942 \cdot 10^{10}$	$1.334 \cdot 10^{11}$	$1.366 \cdot 10^{10}$	$3.223 \cdot 10^8$	$1.187 \cdot 10^6$	$1.549 \cdot 10^7$	$4.6 \cdot 10^9$	$5.274 \cdot 10^9$	$5.54 \cdot 10^9$	$9.684 \cdot 10^7$	$1.847 \cdot 10^9$
2	$1.593 \cdot 10^6$	$8.942 \cdot 10^{10}$	$3.086 \cdot 10^{11}$	$4.377 \cdot 10^{11}$	$4.648 \cdot 10^{10}$	$9.976 \cdot 10^8$	$4.09 \cdot 10^9$	$5.424 \cdot 10^7$	$1.629 \cdot 10^{10}$	$1.836 \cdot 10^{10}$	$1.971 \cdot 10^{10}$	$3.342 \cdot 10^8$	$6.276 \cdot 10^9$
3	$2.047 \cdot 10^6$	$1.334 \cdot 10^{11}$	$4.377 \cdot 10^{11}$	$6.453 \cdot 10^{11}$	$6.694 \cdot 10^{10}$	$1.453 \cdot 10^9$	$5.428 \cdot 10^9$	$6.848 \cdot 10^7$	$2.15 \cdot 10^{10}$	$2.449 \cdot 10^{10}$	$2.589 \cdot 10^{10}$	$4.567 \cdot 10^8$	$8.424 \cdot 10^9$
4	$3.228 \cdot 10^5$	$1.366 \cdot 10^{10}$	$4.648 \cdot 10^{10}$	$6.694 \cdot 10^{10}$	$9.721 \cdot 10^9$	$1.56 \cdot 10^8$	$7.873 \cdot 10^6$	$9.838 \cdot 10^6$	$3.034 \cdot 10^9$	$3.307 \cdot 10^9$	$3.587 \cdot 10^6$	$5.743 \cdot 10^7$	$1.152 \cdot 10^9$
5	$1.831 \cdot 10^4$	$3.223 \cdot 10^8$	$9.976 \cdot 10^8$	$1.453 \cdot 10^9$	$1.56 \cdot 10^8$	$1.178 \cdot 10^7$	$4.256 \cdot 10^7$	$5.766 \cdot 10^6$	$1.459 \cdot 10^8$	$1.368 \cdot 10^8$	$1.661 \cdot 10^8$	$2.197 \cdot 10^6$	$5.698 \cdot 10^7$
6	$1.331 \cdot 10^6$	$1.187 \cdot 10^9$	$4.09 \cdot 10^9$	$5.428 \cdot 10^9$	$7.873 \cdot 10^8$	$4.256 \cdot 10^7$	$3.335 \cdot 10^6$	$4.019 \cdot 10^6$	$1.077 \cdot 10^9$	$1.025 \cdot 10^9$	$1.194 \cdot 10^9$	$1.31 \cdot 10^7$	$4.205 \cdot 10^8$
7	$2.353 \cdot 10^3$	$1.549 \cdot 10^7$	$5.424 \cdot 10^7$	$6.848 \cdot 10^7$	$9.838 \cdot 10^6$	$5.766 \cdot 10^5$	$4.019 \cdot 10^6$	$7.706 \cdot 10^4$	$1.439 \cdot 10^7$	$1.385 \cdot 10^7$	$1.616 \cdot 10^7$	$2.027 \cdot 10^5$	$5.651 \cdot 10^6$
8	$4.215 \cdot 10^5$	$4.6 \cdot 10^9$	$1.629 \cdot 10^{10}$	$2.15 \cdot 10^{10}$	$3.034 \cdot 10^9$	$1.459 \cdot 10^8$	$1.077 \cdot 10^6$	$1.439 \cdot 10^7$	$4.423 \cdot 10^9$	$4.065 \cdot 10^9$	$4.985 \cdot 10^9$	$5.007 \cdot 10^7$	$1.464 \cdot 10^9$
9	$4.189 \cdot 10^5$	$5.274 \cdot 10^9$	$1.836 \cdot 10^{10}$	$2.449 \cdot 10^{10}$	$3.307 \cdot 10^9$	$1.368 \cdot 10^8$	$1.025 \cdot 10^6$	$1.385 \cdot 10^7$	$4.065 \cdot 10^9$	$4.228 \cdot 10^9$	$4.609 \cdot 10^9$	$4.642 \cdot 10^7$	$1.407 \cdot 10^9$
10	$4.766 \cdot 10^5$	$5.54 \cdot 10^9$	$1.971 \cdot 10^{10}$	$2.589 \cdot 10^{10}$	$3.587 \cdot 10^9$	$1.661 \cdot 10^8$	$1.194 \cdot 10^6$	$1.616 \cdot 10^7$	$4.985 \cdot 10^9$	$4.609 \cdot 10^9$	$5.736 \cdot 10^9$	$5.682 \cdot 10^7$	$1.674 \cdot 10^9$
11	$5.805 \cdot 10^3$	$9.684 \cdot 10^7$	$3.342 \cdot 10^8$	$4.567 \cdot 10^8$	$5.743 \cdot 10^7$	$2.197 \cdot 10^6$	$1.31 \cdot 10^7$	$2.027 \cdot 10^6$	$5.007 \cdot 10^7$	$4.642 \cdot 10^7$	$5.682 \cdot 10^7$	$8.485 \cdot 10^5$	$1.807 \cdot 10^7$
12	$1.904 \cdot 10^5$	$1.847 \cdot 10^9$	$6.276 \cdot 10^9$	$8.424 \cdot 10^9$	$1.152 \cdot 10^9$	$5.698 \cdot 10^7$	$4.205 \cdot 10^6$	$5.651 \cdot 10^6$	$1.464 \cdot 10^9$	$1.407 \cdot 10^9$	$1.674 \cdot 10^9$	$1.807 \cdot 10^7$	$5.927 \cdot 10^8$

* Calculated by the author

For the regression analysis implementation, it is necessary to calculate the inverse of the analyzed data matrix X^T .

The product of the output matrix and the inverse matrix calculated using formula $(X^T \times X) b = X^T y$ is presented in table. To determine the estimates of the individual regression coefficients required for further calculations, we should determine the value of the indicator b (linear regression parameters).

Table 2. Definition of linear regression parameters b.

	0
0	428.383
1	-0.014
2	$-7.278 \cdot 10^{-3}$
3	$6.535 \cdot 10^{-3}$
4	$3.487 \cdot 10^{-3}$
5	0.025
6	0.105
7	-9.688
8	-0.034
9	$2.033 \cdot 10^{-3}$
10	0.064
11	2.326
12	0.772

* Calculated by the author

Having calculated the estimates of linear regression parameters we calculate the residual sum of squares \hat{u} .

Then, we calculate the estimate of the final variance. Variance is a measure of the deviation of a random variable values from the center of distribution. Higher variance values indicate larger deviations of the random variable values from the distribution center. The final variance is as follows: $\sigma^2 = 6,212 \times 10^4$.

Besides, we calculate the covariance index. Covariance is a numerical characteristic of the random variables dependence, in probability theory and mathematical statistics. The essence of covariance is that it arises because there is no result of multiplying two sets of numbers. The covariance estimate is a matrix.

For further calculations, we take the level of significance as $\alpha = 0,03$. The level of significance is an assessment of certainty in its «truth» (in the sense of «representativeness of the sample»). In statistics, a

value is called statically significant if it or even more extreme values are unlikely to occur. Here, the extreme is the degree of deviation from the null hypothesis.

Table 3. Product of the matrix of initial data *

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	85	5.226·10 ⁵	1.634·10 ⁶	2.347·10 ⁶	3.228·10 ⁵	3.215·10 ⁵	1.331·10 ⁵	3.942·10 ⁸	4.215·10 ⁵	4.189·10 ⁵	4.766·10 ⁵	5.805·10 ³	1.904·10 ⁵
1	5.226·10 ⁵	3.015·10 ¹⁰	9.099·10 ¹⁰	1.349·10 ¹¹	1.378·10 ¹⁰	2.787·10 ⁹	1.223·10 ⁹	4.045·10 ¹⁰	4.717·10 ⁹	5.395·10 ⁹	5.663·10 ⁹	9.883·10 ⁷	1.916·10 ⁹
2	1.634·10 ⁶	9.099·10 ¹⁰	3.104·10 ¹¹	4.595·10 ¹¹	4.645·10 ¹⁰	9.667·10 ⁹	4.123·10 ⁹	1.399·10 ¹¹	1.638·10 ¹⁰	1.847·10 ¹⁰	1.982·10 ¹⁰	3.3610 ⁸	6.342·10 ⁹
3	2.347·10 ⁶	1.349·10 ¹¹	4.595·10 ¹¹	7.031·10 ¹¹	7.159·10 ¹⁰	1.487·10 ¹⁰	6.073·10 ⁹	2.157·10 ¹¹	2.522·10 ¹⁰	2.857·10 ¹⁰	3.046·10 ¹⁰	5.194·10 ⁸	9.437·10 ⁹
4	3.228·10 ⁵	1.378·10 ¹⁰	4.645·10 ¹⁰	7.159·10 ¹⁰	9.721·10 ⁹	1.865·10 ⁹	7.873·10 ⁸	2.661·10 ¹⁰	3.034·10 ⁹	3.307·10 ⁹	3.587·10 ⁹	5.743·10 ⁷	1.152·10 ⁹
5	3.215·10 ⁵	2.787·10 ⁹	9.667·10 ⁹	1.487·10 ¹⁰	1.865·10 ⁹	2.798·10 ⁹	8.645·10 ⁸	2.978·10 ¹⁰	3.314·10 ⁹	3.117·10 ⁹	3.712·10 ⁹	3.424·10 ⁷	1.122·10 ⁹
6	1.331·10 ⁵	1.223·10 ⁹	4.123·10 ⁹	6.073·10 ⁹	7.873·10 ⁸	8.645·10 ⁸	3.335·10 ⁸	1.044·10 ¹⁰	1.077·10 ⁹	1.025·10 ⁹	1.194·10 ⁹	1.3110 ⁷	4.205·10 ⁸
7	3.942·10 ⁸	4.045·10 ¹⁰	1.399·10 ¹¹	2.157·10 ¹¹	2.661·10 ¹⁰	2.978·10 ¹⁰	1.044·10 ¹⁰	3.649·10 ¹¹	3.764·10 ¹⁰	3.561·10 ¹⁰	4.159·10 ¹⁰	4.589·10 ⁸	1.318·10 ¹⁰
8	4.215·10 ⁵	4.717·10 ⁹	1.638·10 ¹⁰	2.522·10 ¹⁰	3.034·10 ⁹	3.314·10 ⁹	1.077·10 ⁹	3.764·10 ¹⁰	4.423·10 ⁹	4.065·10 ⁹	4.985·10 ⁹	5.007·10 ⁷	1.464·10 ⁹
9	4.189·10 ⁵	5.395·10 ⁹	1.847·10 ¹⁰	2.857·10 ¹⁰	3.307·10 ⁹	3.117·10 ⁹	1.025·10 ⁹	3.561·10 ¹⁰	4.065·10 ⁹	4.228·10 ⁹	4.609·10 ⁹	4.642·10 ⁷	1.407·10 ⁹
10	4.766·10 ⁵	5.663·10 ⁹	1.982·10 ¹⁰	3.046·10 ¹⁰	3.587·10 ⁹	3.712·10 ⁹	1.194·10 ⁹	4.159·10 ¹⁰	4.985·10 ⁹	4.609·10 ⁹	5.736·10 ⁹	5.682·10 ⁷	1.674·10 ⁹
11	5.805·10 ³	9.883·10 ⁷	3.3610 ⁸	5.194·10 ⁸	5.743·10 ⁷	3.424·10 ⁷	1.3110 ⁷	4.589·10 ⁸	5.007·10 ⁷	4.642·10 ⁷	5.682·10 ⁷	8.485·10 ⁵	1.807·10 ⁷
12	1.904·10 ⁵	1.916·10 ⁹	6.342·10 ⁹	9.437·10 ⁹	1.152·10 ⁹	1.122·10 ⁹	4.205·10 ⁸	1.318·10 ¹⁰	1.464·10 ⁹	1.407·10 ⁹	1.674·10 ⁹	1.807·10 ⁷	5.927·10 ⁸

* Calculated by the author

Table 4. Covariance matrix *

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	4.258·10 ⁸	-1.036·10 ³	-0.011	0.023	-0.034	9.935·10 ³	0.199	0.019	-0.095	-0.214	0.427	-17.623	-2.066
1	-1.036·10 ³	2.169·10 ⁵	-5.810 ⁶	-2.829·10 ⁷	-1.115·10 ⁶	-5.438·10 ⁶	2.854·10 ⁵	5.381·10 ⁷	-2.012·10 ⁵	-8.303·10 ⁷	2.544·10 ⁵	-1.139·10 ⁴	-3.965·10 ⁵
2	-0.011	-5.810 ⁶	9.618·10 ⁶	-5.474·10 ⁶	2.231·10 ⁶	2.424·10 ⁶	-5.876·10 ⁵	1.062·10 ⁶	3.559·10 ⁶	3.658·10 ⁶	-8.956·10 ⁶	1.148·10 ⁴	2.005·10 ⁵
3	0.023	-2.829·10 ⁷	-5.474·10 ⁶	4.425·10 ⁶	-4.428·10 ⁶	-4.029·10 ⁷	3.683·10 ⁵	-6.265·10 ⁷	6.512·10 ⁶	-6.304·10 ⁶	-2.884·10 ⁷	-3.44·10 ⁴	-1.103·10 ⁵
4	-0.034	-1.115·10 ⁶	2.231·10 ⁶	-4.428·10 ⁶	3.162·10 ⁵	8.397·10 ⁶	-6.031·10 ⁵	5.255·10 ⁷	-8.446·10 ⁶	2.737·10 ⁶	-1.926·10 ⁶	2.194·10 ⁴	2.817·10 ⁵
5	9.935·10 ³	-5.438·10 ⁶	2.424·10 ⁶	-4.029·10 ⁷	8.397·10 ⁶	4.206·10 ⁴	-2.565·10 ⁴	-1.559·10 ³	-6.91·10 ⁵	-3.19·10 ⁵	-1.192·10 ⁴	6.403·10 ³	9.86·10 ³
6	0.199	2.854·10 ⁵	-5.876·10 ⁵	3.683·10 ⁵	-6.031·10 ⁵	-2.565·10 ⁴	6.318·10 ³	-1.132·10 ⁴	-4.847·10 ⁴	1.668·10 ⁴	8.483·10 ⁴	6.833·10 ³	-3.28·10 ³
7	0.019	5.381·10 ⁷	1.062·10 ⁶	-6.265·10 ⁷	5.255·10 ⁷	-1.559·10 ⁶	-1.132·10 ⁴	5.889·10 ⁶	-2.183·10 ⁵	9.145·10 ⁶	1.435·10 ⁵	-9.376·10 ⁴	3.218·10 ⁵
8	-0.095	-2.012·10 ⁵	3.559·10 ⁶	6.512·10 ⁶	-8.446·10 ⁶	-6.91·10 ⁵	-4.847·10 ⁴	-2.183·10 ⁵	1.524·10 ³	-9.256·10 ⁵	-1.098·10 ³	-4.088·10 ³	6.094·10 ⁴
9	-0.214	-8.303·10 ⁷	3.658·10 ⁶	-6.304·10 ⁶	2.737·10 ⁶	-3.19·10 ⁵	1.668·10 ⁴	9.145·10 ⁶	-9.256·10 ⁵	2.197·10 ⁴	-2.507·10 ⁵	4.167·10 ³	-7.671·10 ⁵
10	0.427	2.544·10 ⁵	-8.956·10 ⁶	-2.884·10 ⁷	-1.926·10 ⁶	-1.192·10 ⁴	8.483·10 ⁴	1.435·10 ⁵	-1.098·10 ³	-2.507·10 ⁵	1.061·10 ³	-2.618·10 ³	-9.563·10 ⁴
11	-17.623	-1.139·10 ⁴	1.148·10 ⁴	-3.44·10 ⁴	2.154·10 ⁴	6.403·10 ³	6.833·10 ³	-9.376·10 ⁴	-4.088·10 ³	4.167·10 ³	-2.618·10 ³	0.686	1.179·10 ⁴
12	-2.066	-3.965·10 ⁵	2.005·10 ⁵	-1.103·10 ⁵	2.817·10 ⁵	9.86·10 ⁵	-3.28·10 ³	3.218·10 ⁵	6.094·10 ⁴	-7.671·10 ⁵	-9.563·10 ⁴	1.179·10 ⁴	3.617·10 ³

* Calculated by the author

Number of degrees of freedom is $n - k - 1 = 71$. What we do next is calculate the confidence interval of the classical normal regression parameters ($b_{j,0}$). Confidence Interval is the interval within which a given (probable) random variable value can be expected with a given confidence probability. It is used for a more complete estimation of accuracy compared to a point estimate.

Table 5. Calculation of the confidence interval

$(b_{j,0} - tT \cdot \sqrt{K_{j,j}}) =$	$b_{j,0} + tT \cdot \sqrt{K_{j,j}} =$
321.706377	535.06039
-0.024486	-0.00366
-0.01027	-0.00429
0.003068	0.01
-0.001975	0.00895
-0.096356	0.14657
0.048076	0.16273
-13.196339	-6.18008
-0.072194	0.00461
-0.01171	0.01578
0.031724	0.09651
1.546221	3.10646
0.712863	0.83024

* Calculated by the author

Here is the tabular value of Student’s quintile distribution $T = 1,044$.

Table 6. Calculation of the quantile of Student’s distribution *

	0
0	4.193
1	-1.411
2	-2.54
3	1.968
4	0.666
5	0.216
6	1.92
7	-2.883
8	-0.919
9	0.154
10	2.067
11	3.113
12	13.725

* Calculated by the author

To determine the adequacy of linear regression, we calculate the coefficient of determination $R_2 = 0,975$ and the measure of linear dependence that is the multiple correlation coefficient

$R = 0,987$ and empirical standard deviations $sr = 2,374 \times 10^3$, $Ysr_2 = 7,714 \times 10^6$, $sy = 1,441 \times 10^3$.

Our calculated data R is closed to 1, which indicates a close linear relationship.

With the value of the confidence interval and the above calculations, we can affirm that the final result (farmland, ha) is influenced by the following factors: fixed assets of the farm, thousand RUB. ($k = 1$); $k = 2$ — equity of the farm, thousand RUB; $k = 3$ — sales revenue, thousand RUB; $k = 6$ is the area occupied by sowing cereals, ha; $k = 7$ — grain yield, μ ; $k = 10$ — costs for production of crop production, thousand RUB; $k = 11$ — number of farm workers, people; $k = 12$ is the area under arable land, ha.

However, we can statistically verify the hypotheses about the values of several coefficients or several of their linear combinations, as well as the combination of one with the other. Fisher distribution quantile with equal significance $\alpha = 0,3$ is $T = 1,197$. The hypothesis that not all regressors in the aggregate have any effect on the regressor is rejected, because $F_f > F_{\alpha}$ if $F_f = 213,155$.

We have calculated a data matrix for determination the predictive value of the dependent variable $Xisx$ (table 7).

Thus, the predicted value calculated using the matrix b is $Xisx^T \times b = -1,402 \times 10^6$.

$$\sigma_{ysr} = \sqrt{\sigma_2 \times \sqrt{Xisx^T \times (X^T \times X)^{-1} \times Xisx}} = 4,879 \times 10^5.$$

$$\sigma_{y0} = \sqrt{\sigma_2 + \sigma_{ysr}^2} = 4,879 \times 10^5.$$

Here, $MYsr_{min} \leq MYsr \leq MYsr_{max}$ is the predictive interval of the regressor mathematical expectation, $MY_{min} \leq MY \leq MY_{max}$ the interval prediction of individual value. Thereby,

$$MYsr_{min} = Xisx^T \times b - tT \times sysr = -1,912 \times 10^6.$$

$$MYsr_{max} = Xisx^T \times b - tT \times sy0 = -8,929 \times 10^5.$$

$$MY_{min} = Xisx^T \times b - tT \times sy0 = -1,912 \times 10^6.$$

$$MY_{max} = Xisx^T \times b - tT \times sysr = -8,928 \times 10^5.$$

It is presented that the intervals are identical, which indicates the coincidence of the intervals and the completest predictive value. Thus, we have an equation of the farming area estimation which depends on 9 independent variables. Matrix will be an equation for finding the desired result (area of land).

Table 7. Matrix for determining the predictive value of the dependent variable X.

$$\mathbf{Xisx} := \begin{pmatrix} 1 \\ 5285 \\ 9439 \\ 18772 \\ 2604 \\ 11834.4 \\ 3523 \\ 145256 \\ 12799 \\ 14533.5 \\ 13489.9 \\ 130 \\ 4180 \end{pmatrix}$$

* Calculated by the author

$$Y = 428,383 - 0,014 k_1 - 7,278 \times 10^{-3} k_2 + 6,535 \times 10^{-3} k_3 + 3,487 \times 10^{-3} k_4 + 0,025 k_5 + 0,105 k_6 - 9,688 k_7 - 0,034 k_8 + 2,033 \times 10^{-3} k_9 + 0,064 k_{10} + 2,326 k_{11} + 0,772 k_{12}.$$

So, if we know the output values of the indicators, we can calculate the desired metric using this matrix. Besides, we can set inputs (which we aim to achieve or actually have) and obtain the result of the farming area that will be optimal under these conditions.

CONCLUSIONS

Thus, we have obtained a matrix for assessing the required area of land required by farms, which depends on 9 independent variables. Matrix b will be an equation for finding the desired indicator (profitability).

Thus, knowing the initial values of the indicators x, we can calculate the desired indicator y using this matrix.

REFERENCES

1. Ablyalimova E.S. Application of economic and mathematical methods in solving economic problems / E.S. Ablyalimova, O.L. Korolev // Scientific and technological complex of Russia: research and development: collection of scientific papers based on materials of the I international scientific and practical conference, Nizhny Novgorod, October 31, 2016 — pp. 69–73.
2. Adamadeiev K.R. Analysis of the influence of agriculture on the regional economy using the methods of statistical groupings and regression analysis / K.R. Adamadeiev, N.M. Kurbanov // Economy of Natural Resources. — 2007. — No. 3. — P. 12–23.
3. Izmodenova N.K. Implementation of regression analysis in the context of the organizational and economic mechanism for the development of farms / N.K. Izmodenova // Modern scientific research and innovation. — 2013. — No. 11 (31). — P. 77–81.
4. Izotova Z.A. Methodology for assessing the level of socio-economic development of municipalities of the Republic of Crimea / Z.A. Izotova // Scientific Bulletin: finance, banks, investments. — 2022. — No. 3(60). — P. 132–142.
5. Mathematical and information modeling of socio-economic processes and systems / N.V. Apatova, O.N. Goncharova, V.N. Pomeranets [etc.]. — Simferopol: Diaipi Publishing House, 2011. — 552 p.
6. Methodology for assessing the development of regional production infrastructure (using the example of the Republic of Crimea) / S.P. Kirilchuk, S.M. Ergin, E.V. Nalivaychenko, I.V. Artyukhova // MIR (Modernization. Innovation. Development). — 2022. — T. 13, No. 4. — P. 720–736.
7. Novikov Yu.N. Assessment and forecast of the development of new organizational forms of management after reforming the CSP / Yu.N. Novikov, T.V. Bugaeva // Scientific works of the Crimean State Agrarian University. Economic Sciences. — 2001. — Issue No. 67. — P. 3–8.
8. Saaty T. Decision making with dependencies and feedbacks: analytical networks / T. Saaty. — M.: Librocom, 2009. — 360 p.

9. Saati T. Decision making. Method of analysis of hierarchies / T. Saaty. — M.: Radio and Communications, 1993. — 278 p.
10. Safonova V.I. Transformation of agrarian land relations in environmental management of Ukraine: [monograph] / V.I. Safonova. — Simferopol: IT «ARIAL», 2009. — 378 p.
11. Sivash O.S. Formation of a forecast for the level of inflation in the Southern Federal District taking into account the dynamics of development of the regional economy / O.S. Sivash, R.S. Usenko // Scientific Bulletin: finance, banks, investments. — 2020. — No. 2(51). — P. 223–231.
12. Sidorenko E.V. Means of visualization and display of interrelations of financial indicators in management decision support systems / E.V. Sidorenko, A.N. Tikhomirova // Audit and financial analysis. — 2010. — No. 2. — P. 354–357.
13. Khokhlov V.V. Regional development: instrumental methods for modeling dynamics / V.V. Khokhlov, E.I. Piskun // Economics and management: theory and practice. — 2020. — T. 6, No. 2. — P. 93–98.

1. . . . // I - : -
2. . . . // .—
3. . . . // - -
4. . . . // : , , .—2022. — 3(60).—
5. . . . [.].— : ,2011.—552 .
6.)/ . . . , . . . // (. . . .
7. / . . . , . . . // .—2001.— 67.— .3–8.
8. ,2009.—360 . : / . . . — :
9. . . . / . . . — : ,1993.—278 .
10.]/— : « »,2009.—378 . :[-
11. . . . / . . . , . . . // : , , .—2020.—
12. . . . / . . . , . . . // .—2010.— 2.— .354–357.
13. . . . // : .—2020.— .6, 2.— .93–98.

4 2023

27 2023

338.45:504.062

Gorda Alexander Sergeevich,
Ph.D. in Economics, Associate Professor,
Associate Professor Department of World Economy,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

IMPLEMENTATION OF THE ECOSYSTEM APPROACH IN MODELS OF GLOBAL DEVELOPMENT OF THE SMART ECONOMY

The article examines the features of the process of greening the current stage of socio-economic development in the context of the formation of a smart economy, analyzes theoretical approaches to the study of the green economy and the environmentally oriented development of the smart society, as well as methodological approaches to assessing the level of development of the green economy.

The features of the manifestation of a comprehensive process of greening are determined, in particular: the priority of sustainable development as a key goal of the progress of human society; the penetration of the ideas of preserving the external environment into all spheres of economic activity and the life of society; the emergence of a mandatory environmental component at all levels of economic management. Consistent implementation of the goals of inclusive growth, climate conservation, human-centeredness in the model of global economic development contributes to the formation of a smart, intellectual nature of modern

production and the economy as a whole. The green economy, as the embodiment of the global greening trend, permeates the manifestations of the smart economy at all levels, becoming an important strategic goal for further progress.

It is concluded that greening is becoming the main trend of modern political and economic activity, first at the global level, and then at the level of governments of individual countries. The international practice of state support for the environmental orientation of the entire life of the country is becoming more diverse and large-scale. The chain reaction goes on — there is a formation of an environmentally conscious public opinion that corresponds to the mentality. This has a wide range of manifestations in economic, social, social and other activities. The formation of ecological consciousness, a holistic ecosystem approach that can be implemented at all stages of economic and economic activity, is becoming a priority task in the context of the formation of a smart society and a smart economy.

Keywords: smart economy, greening, global environment, innovative development, intellectualization, sustainable development.

[1], [2], [3],
[4], [5], [6], [7],
[8],
[9], [10], [11].

• ;

• ;

— «greening» ;

«greening» ;

«greening» ;

«greening» [12].

«greening» [13].

5% (EFA), [13].

1) ;

2) ;

[14].

(The Economics of Ecosystems and Biodiversity, TEEB) — « ;

» [15].

» [16].

2009

2009

2011

[17].

(

),

[18].

[28].

Cities, Climate and Energy Fund on Smart

150

[28]. (2), (300

»,«

»,«

»(.1).

I.

*

		«zero»		
				zero waste

*

[28]

(.2). -20

2. -20 ,2020 .*

1	Orsted A/S		
2	Chr. Hansen Holding A/S		
3	Neste Oyj		
4	Cisco Systems Inc		
5	Autodesk Inc		()
6	Novozymes A/S		
7	ING Groep NV		
8	Enel SpA		
9	Banco do Brasil SA		
10	Algonquin Power & Utilities Corp		
11	Osram Licht AG		
12	Sekisui Chemical Co Ltd		
13	Storebrand ASA		
14	Umicore SA		
15	Hewlett Packard Enterprise Co		-
16	American Water		()
17	Iberdrola SA		
18	Outotec Oyj		
19	CEMIG		
20	Accenture PLC		

* [29]

Orsted,

450 2050 . [30]. 20

2019 2006 , 91%
26%, 67 , (

), (25%),

(Energy Star 6.1)

The Climate Group's EV100,
[30].

Chr. Hansen Holding A/S,

[31].

Neste Oyj,

2030

[32].
(.3).

3.

*

	Orsted A/S	Chr. Hansen Holding A/S	Neste Oyj	Novozymes A/S	ING Groep NV
	+	-	+/-	-	-
	+	+	+	+	+
	+	+	+	+	+/-
	+	+	+	+	+
ISO 14000	+	+	+	+	+/-
	-	+	+	+	-
	+	+/-	+/-	-	-

* [30-34]

1. . . . «Smart City»
2020.— 1(14).— .6–10.

2. — 2021. — 6(564). — 139–160.
3. — 2018. — 1(81). — 61–85.
4. COVID-19 / — 2021. — 4(57). — 132–142.
5. — 2020. — 12, 2. — 45.
6. — 2015. — 3-1. — 146–152.
7. — 2020. — 3(71). — 17–23.
8. — 2022. — 1(58). — 120–129.
9. — 2023. — 4. — 40–48.
10. — 2023. — 7(106). — 29–30.
11. « » // E-Scio. — 2020. — 6(45). — 379–385.
12. The Cambridge Dictionary [Electronic Resource] // University of Cambridge, 2023. — Access Mode: dictionary.cambridge.org (date of the application: 16.08.2023).
13. ()/ [Electronic Resource] // European Commission, 2023. — Access Mode: agriculture.ec.europa.eu/common-agricultural-policy/income-support/greening_en (date of the application: 16.08.2023).
14. Working towards a Balanced and Inclusive Green Economy [Electronic Resource] // A United Nations System-wide Perspective, 2009. — Access Mode: issuu.com/christinadianparmionova/docs/working_towards_a_green_economy (date of the application: 16.08.2023).
15. The Economics of Ecosystems and Biodiversity [Electronic Resource] // TEEB, 2023. — Access Mode: teebweb.org/ (date of the application: 16.08.2023).
16. J nicke M. Green growth: From a growing eco-industry to economic sustainability. [Electronic Resource] // Energy Policy. 2012. — Access Mode: www.sciencedirect.com/science/article/abs/pii/S0301421512003503 (date of the application: 16.08.2023).
17. Green Growth and Developing Countries [Electronic Resource] // OECD. Consultation Draft. 2012. — Access Mode: www.oecd.org/development/environment-development/50559116.pdf (date of the application: 16.08.2023).
18. Green Growth Index. [Electronic Resource] // GGGI, 2020. — Access Mode: greengrowthindex.gggi.org/#cover (date of the application: 16.08.2023).
19. Consolidated version of the Treaty on the Functioning of the European Union. [Electronic Resource] // European Union, 2012. — Access Mode: eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT (date of the application: 16.08.2023).
20. Roadmap for moving to a competitive low-carbon economy in 2050 [Electronic Resource] // European environment agency, 2011. — Access Mode: www.eea.europa.eu/policy-documents/com-2011-112-a-roadmap (date of the application: 16.08.2023).
21. The Swedish Environmental Code. [Electronic Resource] // Government Offices of Sweden, 2000. — Access Mode: www.government.se/contentassets/be5e4d4ebdb4499f8d6365720ae68724/the-swedish-environmental-code-ds-200061 (date of the application: 16.08.2023).
22. Vehicle Tax Calculation and Payment in Sweden. [Electronic Resource] // Carfax, 2023. — Access Mode: www.carfax.eu/article/vehicle-tax-sweden (date of the application: 16.08.2023).
23. The official ecolabel of the Nordic countries. [Electronic Resource] // Nordic Ecolabelling Portal, 2023. — Access Mode: www.nordic-swan-ecolabel.org/ (date of the application: 16.08.2023).
24. Perspectives for Germany — Our Strategy for Sustainable Development [Electronic Resource] // The Federal Government, 2002. — Access Mode: www.bundesregierung.de/resource/blob/998220/354630/eea87bb113a00fe576bda05ca399879/perspektives-for-germany-langfassung-data.pdf?download=1 (date of the application: 16.08.2023).
25. Kohlhaas M. Gesamtwirtschaftliche Effekte der kologischen Steuerreform. [Electronic Resource] // DIW Berlin. 2005. — Access Mode: www.umweltbundesamt.de/sites/default/files/medien/publikation/long/2961.pdf (date of the application: 17.08.2023).

26. Climate change legislation in Austria. [Electronic Resource] // Grantham Research Institute. 2015. — Access Mode: www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/05/AUSTRIA.pdf (date of the application: 17.08.2023).
27. The Austrian Strategy for Sustainable Development. [Electronic Resource] // Federal Ministry of Agriculture, Forestry, Environment and Water Management. 2002. — Access Mode: sdgtoolkit.org/tool/the-austrian-strategy-for-sustainable-development/ (date of the application: 17.08.2023).
28. Smart cities as sustainable innovation actors. [Electronic Resource] // Centre for social innovation, 2012. — Access Mode: www.zsi.at/object/news/3239/attach/0_CASI_Policy_brief_No1_Smart_Cities_As_Sustainable_Innovation_Actors_Insights_from_and_for_Austria.pdf (date of the application: 17.08.2023).
29. An index of the Global 100 most sustainable corporations in the world. [Electronic Resource] // Corporate Knights, 2020. — Access Mode: www.corporateknights.com/reports/2020-global-100/ (date of the application: 17.08.2023).
30. Green energy for the planet and its people. [Electronic Resource] // Orsted A/S, 2021. — Access Mode: orstedcdn.azureedge.net/-/media/annual2021/orsted-sustainability-report-2021 (date of the application: 17.08.2023).
31. Sustainability Report 2018/19. [Electronic Resource] // Chr. Hansen: website, 2019. — Access Mode: www.chr-hansen.com/_/media/files/chrhansen/home/sustainability/reporting-and-disclosure/2018-19/chr-hansen-sustainability-report-2018-19.pdf (date of the application: 17.08.2023).
32. Sustainability reports NESTE 2021. [Electronic Resource] // Neste Oyj, 2021. — Access Mode: www.neste.com/sites/neste.com/files/attachments/corporate/investors/corporate_governance/neste_sustainability_report_2021.pdf (date of the application: 17.08.2023).
33. Sustainable development goals. [Electronic Resource] // ING Groep NV. 2019. — Access Mode: www.ing.com/Sustainability/Partnerships-and-collective-action/Sustainable-development-goals.htm (date of the application: 17.08.2023).
34. The Novozymes report 2019. [Electronic Resource] // Novozymes A/S, 2019. — Access Mode: report2019.novozymes.com/#Industries (date of the application: 17.08.2023).

SPISOK LITERATURY

1. Aleyeva G.I. Kontsepsiya «Smart City» v segmente «zelenoy ekonomiki» / G.I. Aleyeva // Sila sistem. — 2020. — 1(14). — S. 6–10.
2. Burmatova O.P. Kontsepsiya ustoychivogo razvitiya umnogo goroda: ekologicheskiy aspekt / O.P. Burmatova // EKO. — 2021. — 6(564). — S. 139–160.
3. Zanizdra M.Yu. Kontseptual'nyye polozeniya «zelenoy smart» promyshlennosti / M.Yu. Zanizdra // Ekonomika promyshlennosti. — 2018. — 1(81). — S. 61–85.
4. Zakharchenko Ye.S. Sovremennyye tendentsii tsifrovizatsii mirovoy ekonomiki s uchetom razvitiya «zelenoy» ekonomiki v usloviyakh pandemii COVID-19 / Ye.S. Zakharchenko, N.N. Reshetnikova // Nauchnyy vestnik: finansy, banki, investitsii. — 2021. — 4(57). — S. 132–142.
5. Karagulyan Ye.A. Umnyye ustoychivyye goroda v Arkticheskom regione / Ye.A. Karagulyan // Vestnik yevraziyskoy nauki. — 2020. — T. 12, 2. — S. 45.
6. Karmanov A.M. Ekologicheskiye predposylki rasprostraneniya smart v sovremenном obshchestve / A.M. Karmanov // Izvestiya Tul'skogo gosudarstvennogo universiteta. Ekonomicheskiye i yuridicheskiye nauki. — 2015. — 3-1. — S. 146–152.
7. Karpova N.V. Smart-siti kak voploshcheniye ekoinnovatsionnoy paradigmy ustoychivogo gorodskogo razvitiya / N.V. Karpova // Vestnik Rostovskogo gosudarstvennogo ekonomicheskogo universiteta (RINKH). — 2020. — 3(71). — S. 17–23.
8. Korobeynikova O.M. Ekosistemnyy podkhod k tsifrovizatsii passazhirskogo obshchestvennogo transporta / O.M. Korobeynikova, D.A. Korobeynikov, T.A. Dugina, D.V. Ocheretyanaya // Nauchnyy vestnik: finansy, banki, investitsii. — 2022. — 1(58). — S. 120–129.
9. Pashkovskaya I.V. Perspektivy tsifrovizatsii proyektov ustoychivogo razvitiya v Rossiyskoy Federatsii / I.V. Pashkovskaya, B.B. Rubtsov, N.A. Amosova, O.S. Rudakova // Vestnik universiteta. — 2023. — 4. — S. 40–48.
10. Rakhmonov R. Osnovnyye osobennosti zelenoy ekonomiki. Tsirkulyatsionnaya ekonomika / R. Rakhmonov // Universum: ekonomika i yurisprudentsiya. — 2023. — 7(106). — S. 29–30.
11. Sukhovskaya D.N. Rol' kontsepta «umnyy gorod» v formirovaniy ekologicheskogo myshleniya gorozhanina / D.N. Sukhovskaya, N.A. Shul'gin // E-Scio. — 2020. — 6(45). — S. 379–385.
12. The Cambridge Dictionary [Electronic Resource] // University of Cambridge, 2023. — Access Mode: dictionary.cambridge.org (date of the application: 16.08.2023).
13. Ratsional'noye zemlepol'zovaniye (ozeleneniye) / Sel'skoye khozyaystvo i razvitiye sela [Electronic Resource] // European Commission, 2023. — Access Mode: agriculture.ec.europa.eu/common-agricultural-policy/income-support/greening_en (date of the application: 16.08.2023).
14. Working towards a Balanced and Inclusive Green Economy [Electronic Resource] // A United Nations System-wide Perspective, 2009. — Access Mode: issuu.com/christinadianparmionova/docs/working_towards_a_green_economy (date of the application: 16.08.2023).

-
15. The Economics of Ecosystems and Biodiversity [Electronic Resource] // TEEB, 2023. — Access Mode: teebweb.org/ (date of the application: 16.08.2023).
16. J. Nicke M. Green growth: From a growing eco-industry to economic sustainability. [Electronic Resource] // Energy Policy. 2012. — Access Mode: www.sciencedirect.com/science/article/abs/pii/S0301421512003503 (date of the application: 16.08.2023).
17. Green Growth and Developing Countries [Electronic Resource] // OECD. Consultation Draft. 2012. — Access Mode: www.oecd.org/development/environment-development/50559116.pdf (date of the application: 16.08.2023).
18. Green Growth Index. [Electronic Resource] // GGGI, 2020. — Access Mode: greengrowthindex.gggi.org/#cover (date of the application: 16.08.2023).
19. Consolidated version of the Treaty on the Functioning of the European Union. [Electronic Resource] // European Union, 2012. — Access Mode: eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT (date of the application: 16.08.2023).
20. Roadmap for moving to a competitive low-carbon economy in 2050 [Electronic Resource] // European environment agency, 2011. — Access Mode: www.eea.europa.eu/policy-documents/com-2011-112-a-roadmap (date of the application: 16.08.2023).
21. The Swedish Environmental Code. [Electronic Resource] // Government Offices of Sweden, 2000. — Access Mode: www.government.se/contentassets/be5e4d4ebdb4499f8d6365720ae68724/the-swedish-environmental-code-ds-200061 (date of the application: 16.08.2023).
22. Vehicle Tax Calculation and Payment in Sweden. [Electronic Resource] // Carfax, 2023. — Access Mode: www.carfax.eu/article/vehicle-tax-sweden (date of the application: 16.08.2023).
23. The official ecolabel of the Nordic countries. [Electronic Resource] // Nordic Ecolabelling Portal, 2023. — Access Mode: www.nordic-swan-ecolabel.org/ (date of the application: 16.08.2023).
24. Perspectives for Germany — Our Strategy for Sustainable Development [Electronic Resource] // The Federal Government, 2002. — Access Mode: www.bundesregierung.de/resource/blob/998220/354630/eea87bb113a00fe576ebda05ca399879/perspektives-for-germany-langfassung-data.pdf?download=1 (date of the application: 16.08.2023).
25. Kohlhaas M. Gesamtwirtschaftliche Effekte der ökologischen Steuerreform. [Electronic Resource] // DIW Berlin. 2005. — Access Mode: www.umweltbundesamt.de/sites/default/files/medien/publikation/long/2961.pdf (date of the application: 17.08.2023).
26. Climate change legislation in Austria. [Electronic Resource] // Grantham Research Institute. 2015. — Access Mode: www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/05/AUSTRIA.pdf (date of the application: 17.08.2023).
27. The Austrian Strategy for Sustainable Development. [Electronic Resource] // Federal Ministry of Agriculture, Forestry, Environment and Water Management. 2002. — Access Mode: sdgtoolkit.org/tool/the-austrian-strategy-for-sustainable-development/ (date of the application: 17.08.2023).
28. Smart cities as sustainable innovation actors. [Electronic Resource] // Centre for social innovation, 2012. — Access Mode: www.zsi.at/object/news/3239/attach/0_CASI_Policy_brief_No1_Smart_Cities_As_Sustainable_Innovation_Actors_Insights_from_and_for_Austria.pdf (date of the application: 17.08.2023).
29. An index of the Global 100 most sustainable corporations in the world. [Electronic Resource] // Corporate Knights, 2020. — Access Mode: www.corporateknights.com/reports/2020-global-100/ (date of the application: 17.08.2023).
30. Green energy for the planet and its people. [Electronic Resource] // Orsted A/S, 2021. — Access Mode: orstedcdn.azureedge.net/-/media/annual2021/orsted-sustainability-report-2021 (date of the application: 17.08.2023).
31. Sustainability Report 2018/19. [Electronic Resource] // Chr. Hansen: website, 2019. — Access Mode: www.chr-hansen.com/_/media/files/chrhansen/home/sustainability/reporting-and-disclosure/2018-19/chr-hansen-sustainability-report-2018-19.pdf (date of the application: 17.08.2023).
32. Sustainability reports NESTE 2021. [Electronic Resource] // Neste Oyj, 2021. — Access Mode: www.neste.com/sites/neste.com/files/attachments/corporate/investors/corporate_governance/neste_sustainability_report_2021.pdf (date of the application: 17.08.2023).
33. Sustainable development goals. [Electronic Resource] // ING Groep NV. 2019. — Access Mode: www.ing.com/Sustainability/Partnerships-and-collective-action/Sustainable-development-goals.htm (date of the application: 17.08.2023).
34. The Novozymes report 2019. [Electronic Resource] // Novozymes A/S, 2019. — Access Mode: report2019.novozymes.com/#Industries (date of the application: 17.08.2023).

18 2023

27 2023

The study of the essential forms of manifestation of the smart economy allows us to conclude that the trends in the development of economic science and practice indicate a transition to a new paradigm of economic development, which is based on the harmonious combination of elements of the concept of sustainable development and technological development. Global smart cities are becoming drivers for the formation of the smart economy concept and its practical implementation.

Keywords: smart economy, digitalization, innovative development, intellectualization, development of smart cities, development of modern society.

— Smart-City.

[1], [2], [3–5], [3], [6], [7], [8], [9], [10], [11], [12], M.V. Kumar, Daliya Bharat [17], R. Novotny, R. Kuchta, J. Kadlec [18], M. Eremia, L. Toma, M. Sanduleac [19]

5.0.

• ;

• ;

• ;

• ;

• ;

XX

29,6 % 1950 56,2 % 2020 2050

68,4 % —

1950–2020 (—3,04), (2,92),

(1,97).

— 2020 74,9 % 82,6 % (. 1).

I. , % *

	1950	1980	2000	2015	2020	2050
	14,3	26,8	35,0	41,2	43,5	58,9
	17,5	27,1	37,5	48,0	51,1	66,2
	51,7	67,6	71,1	73,9	74,9	83,7
	41,3	64,6	75,5	79,9	81,2	87,8
	63,9	73,9	79,1	81,6	82,6	89,0
	62,5	70,9	68,3	68,1	68,2	72,1
	29,6	39,3	46,7	53,9	56,2	68,4

* [13]

«World Population Review» 2023

—37,2 —32,9

—29,2 —23,2 —22,6

—22,3 (. 2).

(15,8), (12,7

), (11,2) [14].

2. -10

, 2022–2023 .*

			, 2022 .,	, 2023 .,	%
1			37,194,105	37,274,002	-0,21 %
2			32,941,309	32,065,760	2,73 %
3			29,210,808	28,516,903	2,43 %
4			23,209,616	22,478,117	3,25 %
5			22,619,736	22,429,799	0,85 %
6			22,281,442	22,085,139	0,89 %
7			22,183,201	21,750,020	1,99 %
8			21,766,214	21,333,331	2,03 %
9			21,296,517	20,961,473	1,6 %
10			19,013,434	19,059,857	-0,24 %

*

[14]

«future city», «smart city», «sustainable city», «smart sustainable city», «connected city», «resilient city», «intelligent city», «digital city», «digital» community», «cyber city», «knowledge-based city», «cyberville»

Smart-city

2027 1,024 [15].

Transportation

(
)

Smart Utilities in Energy

Citizen Services

Smart Healthcare.

Smart

[15].

Smart-city [16].

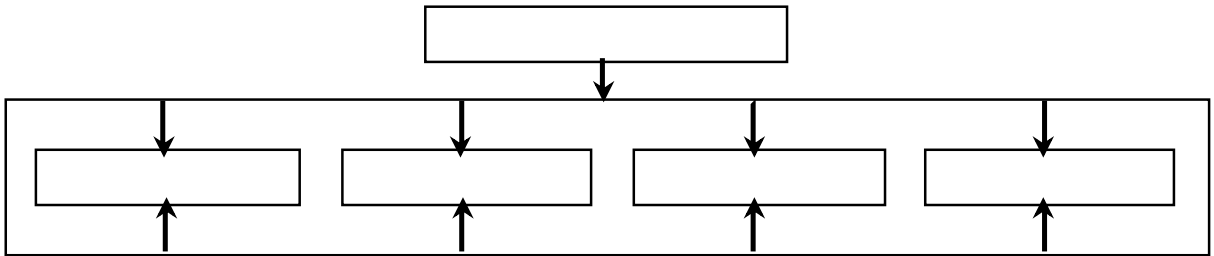
360-

Waze Citymapper,

«Incredible Edible»,

Better Reykjavik,
CCCB Data Quality Datathon,

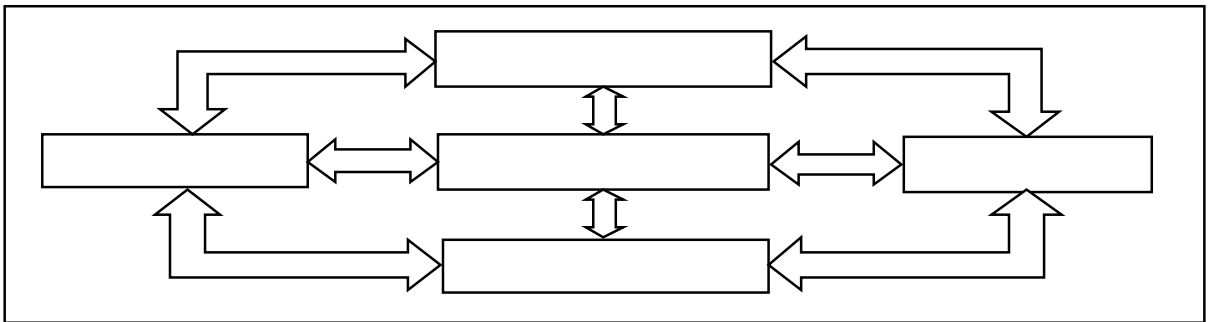
(.1).



.1.

()

(.2).



.2.

()

Smart-city (),

30

» «West Orange»,

[20].

« »

Tekes

», MaaS) [21].

Mobility as a Service («

VR

2015

[22].

[23].

Smart & Clean,

4.

-15

-

, 2020 (GFCI) *

	-	-	-	-	-
1	-	-	-	-	-
2					
3					
4					
5					
6			-		
7					
8					
9				-	
10					
11		-			
12					-
13		-		-	
14	-				
15					

*

[25]

); « » (

«

» (

. .) [26].

[26].

[27].

1. « »: .—2020.— 6(66).— .55–63. / . . . , . . . //
2. /—2022.— 2(34).— .26–38. //
3. smart city / // .—2021.— .15, 2.— .164–172. :
4. Smart City / // Kant.—2022.— 2(43).— .26–32.
5. Smart City / // .—2022.— .16, 1.— .116–123. -
6. ?/ , , // .—2020.— .17, 3.— .657–678. -
7. / // ().—2020.— 3(71).— .17–23. -
8. / , // .—2021.— 4(57).— .123–131. -
9. « »/ // .—2019.— 1.— .223–230. -
10. Smart city ()/ // Kant.—2022.— 2(43).— .153–159. -
11. « » : / , , // .—2020.— 1(255).— .84–89. 5: .—
12. « » / // .—2019.— .14, 2(106).— .61–72. -

13. World Urbanization Prospects: The 2018 Revision, Online Edition. [Electronic Resource] // United Nations, Department of Economic and Social Affairs, Population Division 2018. — Access Mode: population.un.org/wup/Download/ (date of the application: 10.08.2023).

14. World City Populations. 2023. [Electronic Resource] // United Nations, World Population Review, 2023. — Access Mode: worldpopulationreview.com/world-cities (date of the application: 11.08.2023).

15. Global Smart Cities Market [Electronic Resource] // Global Smart Cities Market by Focus Area, Smart Transportation, Smart Buildings, Smart Utilities, Smart Citizen Services (Public Safety, Smart Healthcare, Smart Education, Smart Street Lighting, e-Governance), and Region — Forecast to 2027. — Access Mode: www.researchandmarkets.com (date of the application: 11.08.2023).

-
16. Redefining the smart city concept: a new smart city definition. 2017. [Electronic Resource] // Bee smart city, 2017. — Access Mode: hub.beesmart.city/en/strategy/towards-a-new-smart-city-definition (date of the application: 11.08.2023).
 17. Kumar M.V. Smart Economy in Smart Cities. Smart Cities / M.V. Kumar, Daliya Bharat // Local Community and Socio-economic Development: The Case of Bologna. — 2017. — P. 12.
 18. Novotny R. Smart City Concept, Applications and Services. / R. Novotny, R. Kuchta, J. Kadlec // Journal of Telecommunications System & Management. 2014. — Vol. 3. — Is. 2.
 19. Eremia M. The Smart City Concept in the 21st Century: 10th International Interdisciplinarity in Engineering / M. Eremia, L. Toma, M. Sanduleac [Electronic Resource] // INTER-ENG, 2016. — Access Mode: www.sciencedirect.com/science/article/pii/S1877705817309402 (date of the application: 11.08.2023).
 20. Amsterdam Smart City [Electronic Resource] // Amsterdam Smart City official website, 2023. — Access Mode: amsterdamsmartcity.com/ (date of the application: 12.08.2023).
 21. Finland's Mobility as a Service Legislation [Electronic Resource] // Nordicpolicycentre, 2022. — Access Mode: www.nordicpolicycentre.org.au/mobility_as_a_service_legislation_in_finland (date of the application: 12.08.2023).
 22. Arias-Molinares. The Ws of MaaS: understanding mobility as a service from a literature review / Arias-Molinares and Garc a-Palomares [Electronic Resource] // International Association of traffic and Safety Sciences Research, 2020. — Access Mode: www.sciencedirect.com/science/article/pii/S0386111220300455 (date of the application: 12.08.2023).
 23. Future Mobility Finland [Electronic Resource] // The Act on Transport Services — Mobility is a Service, 2022. — Access Mode: futuremobilityfinland.fi/cases/the-act-on-transport-services-mobility-is-a-service/ (date of the application: 12.08.2023).
 24. The Competitive Position of London as a Global Financial Centre. [Electronic Resource] // Z/Yen, 2005. — Access Mode: www.zyen.com/PDF/LCGFC.pdf (date of the application: 12.08.2023).
 25. The Global Financial Centres Index 28 September 2020. [Electronic Resource] // Long Finance, 2020. — Access Mode: www.longfinance.net/media/documents/GFCI_28_Full_Report_2020.09.25_v1.1.pdf (date of the application: 12.08.2023).
 26. Global Financial Centres Index 20. [Electronic Resource] // Long Finance, 2016. — Access Mode: www.longfinance.net/programmes/financial-centre-futures/global-financial-centres-index/gfci-publications/the-global-financial-centres-index-20/ (date of the application: 12.08.2023).
 27. Regional indicators of socioeconomic well-being. [Electronic Resource] // Official website of the European Union, 2016. — Access Mode: ec.europa.eu/social/BlobServlet?docId=17480&langId=en (date of the application: 12.08.2023).

SPISOK LITERATURY

1. Akimova O.Ye. Kontseptsiya «umnyy gorod»: evolyutsiya, elementy i forma realizatsii / O.Ye. Akimova, S.K. Volkov, A.A. Khryseva // Teoreticheskaya ekonomika. — 2020. — 6(66). — S. 55–63.
2. Golovenchik G.G. Rejtingovyy analiz prioritnykh napravleniy razvitiya umnykh gorodov / G.G. Golovenchik // Ekonomicheskiye i sotsial'no-gumanitarnyye issledovaniya. — 2022. — 2(34). — S. 26–38.
3. Grankina I.A. Organizatsiya upravleniya sovremennym gorodom v ramkakh kontseptsii smart city / I.A. Grankina, A.G. Reus, A.V. Shmidt // Vestnik Yuzhno-Ural'skogo gosudarstvennogo universiteta. Seriya: Ekonomika i menedzhment. — 2021. — T. 15, 2. — S. 164–172.
4. Grankina I.A. Podkhody k formirovaniyu sistemy upravleniya Smart City v mirovoy praktike / I.A. Grankina // Kant. — 2022. — 2(43). — S. 26–32.
5. Grankina I.A. Podkhody k tsifrovoy transformatsii sistemy upravleniya gorodov v kontseptsii Smart City / I.A. Grankina // Vestnik Yuzhno-Ural'skogo gosudarstvennogo universiteta. Seriya: Ekonomika i menedzhment. — 2022. — T. 16, 1. — S. 116–123.
6. Karagulyan Ye.A. Smart-siti — blagopoluchiye dlya vsekh? / Ye.A. Karagulyan, O.V. Zakharova, M.V. Batyreva, D.L. Dyusso // Zhurnal ekonomicheskoy teorii. — 2020. — T. 17, 3. — S. 657–678.
7. Karpova N.V. Smart-siti kak voploshcheniye ekoinnovatsionnoy paradigmy ustoychivogo gorodskogo razvitiya / N.V. Karpova // Vestnik Rostovskogo gosudarstvennogo ekonomicheskogo universiteta (RINKH). — 2020. — 3(71). — S. 17–23.
8. Kiril'chuk S.P. Teoreticheskiy bazis razrabotki kontseptsii intellektual'nykh resursov v natsional'noy innovatsionno-oriyentirovannoy ekonomicheskoy sisteme / S.P. Kiril'chuk, Ye.E. Golovchanskaya // Nauchnyy vestnik: finansy, banki, investitsii. — 2021. — 4(57). — S. 123–131.
9. Kreydenko T.F. Podkhody k otsenke urovnya vnedreniy tekhnologiy «Umnyy gorod» / T.F. Kreydenko, M.V. Chernyayev // Innovatsii i investitsii. — 2019. — 1. — S. 223–230.
10. Netesova M.V. Termin Smart city v kontekste terminologicheskogo planirovaniya (rossiyskiy i zarubezhnyy opyt) / M.V. Netesova // Kant. — 2022. — 2(43). — S. 153–159.

11. Teshev V.A. «Umnyy» gorod: osnovnyye kontseptsii i perspektivy razvitiya / V. A. Teshev, M. M. Tesheva, V.V. Shalotov, T.G. Khasinova // Vestnik Adygeyskogo gosudarstvennogo universiteta. Seriya 5: Ekonomika. — 2020. — 1(255). — S. 84–89.
12. Fedonenko M.V. Opyt razvitiya «umnykh» gorodov v sovremennom mire / M.V. Fedonenko // Sotsial'no-ekonomicheskiye yavleniya i protsessy. — 2019. — T. 14, 2(106). — S. 61–72.
13. World Urbanization Prospects: The 2018 Revision, Online Edition. [Electronic Resource] // United Nations, Department of Economic and Social Affairs, Population Division 2018. — Access Mode: population.un.org/wup/Download/ (date of the application: 10.08.2023).
14. World City Populations. 2023. [Electronic Resource] // United Nations, World Population Review, 2023. — Access Mode: worldpopulationreview.com/world-cities (date of the application: 11.08.2023).
15. Global Smart Cities Market [Electronic Resource] // Global Smart Cities Market by Focus Area, Smart Transportation, Smart Buildings, Smart Utilities, Smart Citizen Services (Public Safety, Smart Healthcare, Smart Education, Smart Street Lighting, e-Governance), and Region — Forecast to 2027. — Access Mode: www.researchandmarkets.com (date of the application: 11.08.2023).
16. Redefining the smart city concept: a new smart city definition. 2017. [Electronic Resource] // Bee smart city, 2017. — Access Mode: hub.beesmart.city/en/strategy/towards-a-new-smart-city-definition (date of the application: 11.08.2023).
17. Kumar M.V. Smart Economy in Smart Cities. Smart Cities / M.V. Kumar, Daliya Bharat // Local Community and Socio-economic Development: The Case of Bologna. — 2017. — P. 12.
18. Novotny R. Smart City Concept, Applications and Services. / R. Novotny, R. Kuchta, J. Kadlec // Journal of Telecommunications System & Management. 2014. — Vol. 3. — Is. 2.
19. Eremia M. The Smart City Concept in the 21st Century: 10th International Interdisciplinarity in Engineering / M. Eremia, L. Toma, M. Sanduleac [Electronic Resource] // INTER-ENG, 2016. — Access Mode: www.sciencedirect.com/science/article/pii/S1877705817309402 (date of the application: 11.08.2023).
20. Amsterdam Smart City [Electronic Resource] // Amsterdam Smart City official website, 2023. — Access Mode: amsterdamsmartcity.com/ (date of the application: 12.08.2023).
21. Finland's Mobility as a Service Legislation [Electronic Resource] // Nordicpolicycentre, 2022. — Access Mode: www.nordicpolicycentre.org.au/mobility_as_a_service_legislation_in_finland (date of the application: 12.08.2023).
22. Arias-Molinares. The Ws of MaaS: understanding mobility as a service from a literature review / Arias-Molinares and Garc a-Palomares [Electronic Resource] // International Association of traffic and Safety Sciences Research, 2020. — Access Mode: www.sciencedirect.com/science/article/pii/S038611220300455 (date of the application: 12.08.2023).
23. Future Mobility Finland [Electronic Resource] // The Act on Transport Services — Mobility is a Service, 2022. — Access Mode: futuremobilityfinland.fi/cases/the-act-on-transport-services-mobility-is-a-service/ (date of the application: 12.08.2023).
24. The Competitive Position of London as a Global Financial Centre. [Electronic Resource] // Z/Yen, 2005. — Access Mode: www.zyen.com/PDF/LCGFC.pdf (date of the application: 12.08.2023).
25. The Global Financial Centres Index 28 September 2020. [Electronic Resource] // Long Finance, 2020. — Access Mode: www.longfinance.net/media/documents/GFCI_28_Full_Report_2020.09.25_v1.1.pdf (date of the application: 12.08.2023).
26. Global Financial Centres Index 20. [Electronic Resource] // Long Finance, 2016. — Access Mode: www.longfinance.net/programmes/financial-centre-futures/global-financial-centres-index/gfci-publications/the-global-financial-centres-index-20/ (date of the application: 12.08.2023).
27. Regional indicators of socioeconomic well-being. [Electronic Resource] // Official website of the European Union, 2016. — Access Mode: ec.europa.eu/social/BlobServlet?docId=17480&langId=en (date of the application: 12.08.2023).

18 2023

27 2023

338.24.004

Kravchenko Larisa Anatolievna,
Ph.D. in Economics, Associate Professor,
Associate Professor of the Department of Economic Theory,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Abibullaev Memet Serverovich,
Ph.D. in Economics, Associate Professor,
Associate Professor of the department Finance and credit,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Toropova Irina Semenovna,
Ph.D. in Economics, Associate Professor,
Associate Professor of the Department of State and Municipal Administration,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

:

**PRIORITY DIRECTIONS OF THE RUSSIAN ECONOMY: PROBLEMS AND
PROSPECTS FOR DEVELOPMENT IN CONDITIONS OF DIGITIZATION**

Today, global turbulence has the character of a deep structural crisis caused by fundamental technological and institutional changes. In the context of sanctions pressure on the Russian economy, there is an increasing need to transition to a new paradigm for building economic values and institutional regulators of economic relations, which make it possible to effectively solve the problems of ensuring technological sovereignty based on achieving a balance of economic interests. Rapid digitalization creates the need for a comprehensive study of the competitive conditions of priority areas of development in the new economic realities. The article examines the scientific and practical problems of the functioning of sectors of the Russian economy, while emphasizing that the search for ways to develop a highly efficient economy requires identifying the main priorities, the systematic use of external and internal resources and the implementation of the active role of the state. The study draws attention to the fact that Russia has identified priority areas of the national economy, the development of which will be given special attention by state regulation, namely: aviation, medical, chemical, machine tool industries, as well as automotive, railway, oil and gas, agricultural, specialized mechanical engineering, shipbuilding, pharmaceuticals, electronics and energy. The structural transformations of the Russian economy are also considered and it is noted that the development of digital technologies and software have created the prerequisites for a new form of interaction and management in all sectors of the economy. It is shown that the process of import substitution and further overcoming the impact of sanctions is associated with the use of a mechanism to support and stimulate investments in technologically complex projects, with additional costs for the formation of own technologies and the need to train specialists to work in new conditions.

Keywords: government regulation, government programs, sanctions, priority areas, economic sectors, investments, import substitution, technological sovereignty, digitalization.

[1].

[2].

[2, 3, 4, 5, 6, 7].

[3].

... ..

« ... »
... ..
(...)

[9].
... ..
(...)

« ... »
... ..

» (...) « ... » (...)
... ..

[9].
... ..

[10].
« ... »

»[4].

I. , 2019–2024 .*

	2019 .	2020 .	2021 .	2022 .	2023 . ()	2024 . ()
%	1,4	-2,7	4,6	-2,1	1,2	2,3
%	2,1	-1,4	7,6	4,6	6,0	2,3
%	1,9	-4,1	7,3	-6,5	5,8	3,6
%	0,8	-1,4	3,4	-1,0	4,3	2,7
%	4,6	5,8	4,8	3,9	3,1	3,1
% /	3,0	4,9	8,4	11,9	5,8	7,2

* [14, 15]

2022 0,6 %, 2023 0,2 %, 2023 0,9 %, 2024 1 %, 2023 1,7 %, 2023 0,6 % [16]. 2022 7,6 % II 2023 2023 6 %, 2024–2026 3 % (12,6 %).

...

[17].

[18]. 2023

3 15

[17].

« 2024 » « 2025

2026 »;

» [14].

[19].

— « » ,3D-

89

-2023- 3

« .2.) , , 2011 .
 2020 . (25 %), 2021 . 2022 . 23,9 % 22,6 %

2.

2011–2021 . (2), % *

2011 .	2012 .	2013 .	2014 .	2015 .	2016 .	2017 .	2018 .	2019 .	2020 .	2021 .	2022 .
19,6	20,2	21,0	21,6	21,1	21,3	21,8	21,3	22,2	25,0	23,9	22,6

* [15].

« , , -
 ,
 (2,62 , .) 2021 , 70 %
 ,
 ; : « », 5G; / -
 ;
 » [13].

(.1).

1. [// elibrary.ru/download/elibrary_54369928_50540597.pdf (:05.10.2023). — 2023. — . 25. 2. — . 19–32. — : elibrary.ru/download/

2. — , 2014. — 176 .

3. , 2015. — 54 .

4. [// AlterEconomics. — 2022. — . 19. 1. — . 93–115. — : jet-russia.com/wp-content/uploads/2022/03/06_Glaziev.pdf (:05.10.2023).

5. / . . . ; —2- — : , 2021. — 254 :
6. [. . . .]// — 2022. — 2. — : 75–96. — : www.elibrary.ru/download/elibrary_49230957_39114816.pdf (: 07.10.2023).
7. . . . [. . . .]// : — 2022. — 16. 4. — . 188–196. — : journal.omga.su/wp-content/files/16.4/journal16-4-188-196.pdf (: 20.09.2023).
8. . . . / , , , 5. — : , 2005.
9. : : / ; — : , 2015. — 246 :
10. . . . / [. . . .]// : — 2022. — 2. — . 159–170. — : www.elibrary.ru/download/elibrary_49524224_26859567.pdf (: 15.09.2023).
11. . . . [. . . .] — : www.kommersant.ru/doc/5939507 (. . . . 28.08.2023).
12. . . . [. . . .] — : www.economy.gov.ru/material/departments/d19/metodologicheskoe_obespechenie_razrabotki_i_realizacii_gos_programm_rf/novaya_sistema_upravleniya_gosudarstvennymi_programmami_rf/ (: 25.09.2023).
13. . . . : / [. . . . , , , ,] ; ; — : - , 2022. — 285 :
14. . . . - 2024 : www.economy.gov.ru/material/file/310e9066d0eb87e73dd0525ef6d4191e/prognoz_socialno_ekonomicheskogo_razvitiya_rf_2024-2026.pdf (: 22.09.2023).
15. . . . [. . . .] — : rosstat.gov.ru/folder/11186 (. . . . 20.09.2023).
16. . . . 2023-2024 [. . . .] — : www.rbc.ru/economics/30/06/2023/649d8c289a7947ba30027c04 (: 22.08.2023).
17. . . . [. . . .] — : www.economy.gov.ru/material/news/maksim_reshetnikov_obsudil_s_deputatami_komiteta_gosdumy_po_byudzhetu_i_nalogam_prognoz_socialno_ekonomicheskogo_razvitiya_rf.htm(. . . . 06.10.2023).
18. . . . [. . . .]// : — 2023. — 17. — 3. — . 224–232. — : journal.omga.su/wp-content/files/17.3/17.3.pdf (: 27.08.2023).
19. // — 2021. — 2(47). — . 111–119. . . . :
20. . . . // : , — 2023. — 1(62). — . 161–171. . . . [. . . .] — : tass.ru/ekonomika/17477947 (: 29.08.2023).
22. . . . [. . . .] — : cyberleninka.ru/article/n/prioritety-razvitiya-otchestvennyh-otrasley-ekonomiki-v-usloviyah-realizatsii-strategii-importozamesheniya (: 17.09.2023).
23. . . . / // — 2016. — 4. — . 107–110. . . . :
24. . . . / , // : , — 2022. — 16. 3. — . 189–199.

25. ratings.ru/files/research/corps/NCR_Horizons_Jun23.pdf [29.08.2023]. —
26. vael.ru/ru/article/view?id=943 [17.09.2023]. — 2020. — 1-1. — 86–94. —
27. (); (); « » [mirror/pubs/share/401421877.pdf] (29.08.2023). — 2020. — 112. — : www.hse.ru/

СПИСОК ЛИТЕРАТУРЫ

- Ivanov A.S. Razvitiye otechestvennoy promyshlennoy politiki: novyye usloviya i faktory / A.S. Ivanov, T.V. Klenova, D.A. Koneva [Elektronnyy resurs] // Vestnik Volgogradskogo gosudarstvennogo universiteta. Ekonomika. — 2023. — T. 25. — 2. — S. 19–32. — Rezhim dostupa: elibrary.ru/download/elibrary_54369928_50540597.pdf (data obrashcheniya: 05.10.2023).
- Knyazev Yu.K. Sovremennaya ekonomika — sintez rynka i sotsial'nogo regulirovaniya: Monografiya / Yu.K. Knyazev. — M.: INFRA-M, 2014. — 176 s.
- Livshits V.N. Novaya paradigma gosudarstvennogo regulirovaniya ekonomiki / V.N. Livshits. — M.: Institut ekonomiki RAN, 2015. — 54 s.
- Glaz'yev S.Yu. Global'naya transformatsiya cherez prizmu smeny tekhnologicheskikh i mirokhozyaystvennykh ukladov / S.Yu. Glaz'yev [Elektronnyy resurs] // AlterEconomics. — 2022. — T. 19. — 1. — S. 93–115. — Rezhim dostupa: jet-russia.com/wp-content/uploads/2022/03/06_Glaziev.pdf (data obrashcheniya: 05.10.2023).
- Ekonomicheskiiye sanktsii protiv Rossii i rossiyskiye antisanktsii: izderzhki i vygody konfrontatsii: monografiya / kol. avtorov; pod red. R.M. Nureyeva. — 2-ye izd., ispr. — Moskva : KNORUS, 2021. — 254 s.
- Shkodinskiy S.V. Vliyaniye sanktsiy na tekhnologicheskiiy suverenitet Rossii / S.V. Shkodinskiy, A.M. Kushnir, I.A. Prodchenko [Elektronnyy resurs] // Problemy rynochnoy ekonomiki. — 2022. — 2. — S. 75–96. — Rezhim dostupa: www.elibrary.ru/download/elibrary_49230957_39114816.pdf (data obrashcheniya: 07.10.2023).
- Biryukov V.V. Paradigmal'nyye osobennosti razrabotki al'ternativnykh strategiy issledovaniya institutsional'noy ekonomiki [Elektronnyy resurs] // Nauka o cheloveke: gumanitarnyye issledovaniya. — 2022. — Tom 16. — 4. — S. 188–196. — Rezhim dostupa: journal.omg.su/wp-content/files/16.4/journal16-4-188-196.pdf (data obrashcheniya: 20.09.2023).
- Mirovaya ekonomicheskaya mysl'. Skvoz' prizmu vekov / Sopred. redkol. G.G. Fetisov, A.G. Khudokormov, T. 5. — M.: Mysl', 2005.
- Ekonomicheskaya politika gosudarstva: novyye faktory i mekhanizmy realizatsii: monografiya / kol. avt.; otv. red. O.Ye. Malykh. — Syktyvkar: GOU VO KRAGSiU, 2015. — 246 s.
- Gorda A.S. Determinanty koordinatsii strategiy ekonomicheskogo razvitiya na razlichnykh urovnyakh global'noy ekonomiki / A.S. Gorda [Elektronnyy resurs] // Nauchnyy vestnik: finansy, banki, investitsii. — 2022. — 2. — S. 159–170. — Rezhim dostupa: www.elibrary.ru/download/elibrary_49524224_26859567.pdf (data obrashcheniya: 15.09.2023).
- Pravitel'stvo utverdilo perechen' prioritnykh otrasley tekhnologicheskogo suvereniteta [Elektronnyy resurs]. — Rezhim dostupa: www.kommersant.ru/doc/5939507 (data obrashcheniya 28.08.2023).
- Novaya sistema upravleniya gosudarstvennymi programmami Rossiyskoy Federatsii. — [Elektronnyy resurs]. — Rezhim dostupa: www.economy.gov.ru/material/departments/d19/metodologicheskoe_obespechenie_razrabotki_i_realizatsii_gos_programm_rf/novaya_sistema_upravleniya_gosudarstvennymi_programmami_rf/ (data obrashcheniya: 25.09.2023).
- Effekty koronakrizisa i novykh ekonomicheskikh sanktsiy v tsifrovoy ekonomike: vyssheye obrazovaniye i rynek truda : monografiya / [G.V. Astratova, Ye.B. Bedrina, I.B. Britvina, V.V. Klimuk, i dr.] ; pod obshch. red. prof. G.V. Astratovoy ; Ministerstvo nauki i vysshego obrazovaniya Rossiyskoy Federatsii, Ural'skiy federal'nyy universitet. — Yekaterinburg : Izd-vo Ural. un-ta, 2022. — 285 s.
- Prognoz sotsial'no-ekonomicheskogo razvitiya Rossiyskoy Federatsii na 2024 god i na planovyy period 2025 i 2026 godov [Elektronnyy resurs]. — Rezhim dostupa: www.economy.gov.ru/material/file/310e9066d0eb87e73dd0525ef6d4191e/prognoz_socialno_ekonomicheskogo_razvitiya_rf_2024-2026.pdf (data obrashcheniya 22.09.2023).
- Effektivnost' ekonomiki Rossii [Elektronnyy resurs]. — Rezhim dostupa: rosstat.gov.ru/folder/11186 (data obrashcheniya 20.09.2023).
- V RAN nazvali lideruyushchiye i otstayushchiye otrasli 2023–2024 godov [Elektronnyy resurs]. — Rezhim dostupa: www.rbc.ru/economics/30/06/2023/649d8c289a7947ba30027c04 (data obrashcheniya 22.08.2023).

17. Maksim Reshetnikov obsudil s deputatami komiteta Gosdumy po byudzhetu i nalogam prognoz sotsial'no-ekonomicheskogo razvitiya RF [Elektronnyy resurs]. — Rezhim dostupa: www.economy.gov.ru/material/news/maksim_reshetnikov_obsudil_s_deputatami_komiteta_gosdumy_po_byudzhetu_i_nalogam_prognoz_socialno-ekonomicheskogo_razvitiya_rf.htm (data obrashcheniya 06.10.2023).
18. Domashchenko G.A. Sanktsii kak trigger k obretniyu finansovo-ekonomicheskogo suvereniteta strany / G.A. Domashchenko [Elektronnyy resurs] // Nauka o cheloveke: gumanitarnyye issledovaniya. — 2023. — Tom 17. — 3. — S. 224–232. — Rezhim dostupa: journal.omg.su/wp-content/files/17.3/17.3.pdf (data obrashcheniya 27.08.2023).
19. Kravchenko L.A. Antikrizisnoye gosudarstvennoye regulirovaniye v usloviyakh novykh vyzovov i ogranicheniy / L.A. Kravchenko, I.A. Troyan // Voprosy regional'noy ekonomiki. — 2021. — 2(47). — S. 111–119.
20. Kravchenko L.A. Razvitiye biznesa v tsifrovoy ekosisteme: vozmozhnosti, riski i upravleniye / L.A. Kravchenko, I.A. Troyan // Nauchnyy vestnik: finansy, banki, investitsii. — 2023. — 1(62). — S. 161–171.
21. MER nazvalo prioritetnyye otrasli ekonomiki RF dlya vnedreniya II do 2024 goda [Elektronnyy resurs]. — Rezhim dostupa: tass.ru/ekonomika/17477947 (data obrashcheniya 29.08.2023).
22. Rozhkova D.V. Prioritety razvitiya otechestvennykh otrasley ekonomiki v usloviyakh realizatsii strategii importozameshcheniya [Elektronnyy resurs]. — Rezhim dostupa: cyberleninka.ru/article/n/prioritety-razvitiya-otechestvennykh-otrasley-ekonomiki-v-usloviyah-realizatsii-strategii-importozameshcheniya (data obrashcheniya 17.09.2023).
23. Bekmurzayeva Z.Kh. K voprosu ob osnovnykh instrumentakh gosregulirovaniya industrial'nogo razvitiya na sovremennom etape / Z.Kh. Bekmurzayeva // Vestnik Severo-Osetinskogo gosudarstvennogo universiteta im. K.L. Khetagurova. Obshchestvennyye nauki. — 2016. — 4. — S. 107–110.
24. Kryukova O.N. Obespecheniye prodovol'stvennoy bezopasnosti: bar'yery, initsiativy, perspektivy v transgranichnykh ekosistemakh / O.N. Kryukova, O.V. Shumakova // Nauka o cheloveke: gumanitarnyye issledovaniya. — 2022. — T.16. — 3. — S. 189–199.
25. Rossiyskaya ekonomika. Analiticheskoye issledovaniye [Elektronnyy resurs]. — Rezhim dostupa: ratings.ru/files/research/corps/NCR_Horizons_Jun23.pdf (data obrashcheniya 29.08.2023).
26. Sokolova A.P. Ekonomicheskiye usloviya i prioritetnyye napravleniya innovatsionnogo razvitiya ekonomiki Rossii / A.P. Sokolova, Ye.A. Kabannik [Elektronnyy resurs] // Vestnik Altayskoy akademii ekonomiki i prava. — 2020. — 1-1. — S. 86–94. — Rezhim dostupa: vael.ru/ru/article/view?id=943 (data obrashcheniya: 17.09.2023).
27. Rossiya v novuyu epokhu: vybor prioritetov i tseli natsional'nogo razvitiya: ekspert. dokl. / Ya.I. Kuz'minov (ruk. avt. kol.); P.V. Orekhin, P.N. Netreba (otv. red.); Nats. issled. un-t «Vysshaya shkola ekonomiki» [Elektronnyy resurs]. — M. : Izd. dom Vysshey shkoly ekonomiki, 2020. — 112 s. — Rezhim dostupa: www.hse.ru/mirror/pubs/share/401421877.pdf (data obrashcheniya: 29.08.2023).

14 2023

27 2023

338.2

Osmanova Zarema Osmanovna,
Candidate of Economics,
Senior Lecturer of the Management Department,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

:

RUSSIAN BUSINESS: BANKRUPTCY RESULTS OF THE CRISIS PERIOD

2018–2022 .
COVID-2019

2018–2022 .

2018–2022 .

In the context of the impact on the activities of modern enterprises of the numerous forces of crisis phenomena, bankruptcy procedures continue to occupy a significant place in the system of economic relations. The Institute of Bankruptcy of the Russian Federation continues to develop and improve in legal terms.

The article presents a comprehensive analysis of the bankruptcy statistics of legal entities in the Russian Federation for the period 2018–2022. The five-year period chosen for analysis is described as a crisis: the global economic crisis, COVID-2019 and its consequences, the complication of geopolitical relations in the world, sanctions and military conflicts have already made irreversible adjustments to the functioning of business and slowed down its development. Actions of the Government of the Russian Federation in relation to business for the analyzed period 2018–2022. re largely related to the development and implementation of state support measures of various directions, scale and nature. The action of many activities continues to this day.

To identify the features of the functioning of the institution of bankruptcy of the Russian Federation, the statistics on bankruptcy procedures for legal entities for the period 2018–2022 were analyzed. The indicators describing the effectiveness of the implementation of bankruptcy procedures, including rehabilitation ones, have been identified and analyzed. The essence is described and the effectiveness of one of the main anti-crisis measures of the Government to support business — the introduction of a moratorium on bankruptcy — is analyzed. The main directions of infrastructural development of the institution of bankruptcy of the Russian Federation are described.

Based on the results of a comprehensive study, the importance of focusing at all levels of management, primarily on preventive anti-crisis management and rehabilitation bankruptcy procedures (provided that the bankruptcy procedure is inevitable) is substantiated. A list of actions of preventive anti-crisis management of the enterprise activity is proposed. The main obstacles to the application of bankruptcy rehabilitation procedures in practice are highlighted.

Keywords: bankruptcy (insolvency) of enterprises, institution of bankruptcy of the Russian Federation, statistics of bankruptcies of legal entities, moratorium on bankruptcy, anti-crisis management.

1992 .

[8]

« (

) » - .

1994–1997 . 260 000

1997 . 2500 %.

—228,5 250,5 .,

1998 . 2002 . « ()» [9]

[9] « » « » -

« » -

() , ()

» [9].

« » -

» -

[1, 2, 3, 14, 16], -

2018-

2022 .,

2022 .; (); () .

2020 .

COVID-2019,

« »

2015–2019 . () .1).

I.
2018–2022 .*

	2018	2019	2020	2021	2022	,%	
						2022/ 2021 .	2022/ 2018 .
	13 117	12 401	9 930	10 317	9 055	-12,23	-30,97
	10 547	10 134	7 775	8 575	5 227	-39,04	-50,44
	278	209	150	157	140	-10,83	-49,64
	297	228	173	179	149	-16,76	-49,83

* [17]

2018–2022 . 2022 .

2018 . 30,97% .

« »

2022 . 2021 .

—66,4% (72,4% 2021 .).

(23,1% 2022 . 18,8% 2021 .), (10,1%
 2022 . 8,2% 2021 .), (0,4% 2022 . 0,6% 2021 .)[17].
 2021–
 2022 . (2585 / 2235), (2317 / 2105), -
 (1199 / 987), (1154 / 937), - (529
 / 538), (514 / 545) [17].

2018–2022 .

(.2).

2.

*

	2020	2022
1.	06.04.2020 – 06.10.2020	01.04.2022 – 01.10.2022
2.	07.01.2021	
3.	COVID-2019	-
4.	<ul style="list-style-type: none"> • ; • ; - • ; - 	<ul style="list-style-type: none"> • ; • ; - • ; (-)
5.	-	

* [6, 7]

[6, 7]

(2020 .) -
 COVID-2019, -
 (2022 .) -

[5, 14]

2021 . 2020 . (2020 .)
 3,9%; — 10,29%,
 « ».
 2021 / 2020 : 2392 / 2607 (8,25 %),
 2525 / 1895 (24,95 %), 2490 / 2890 (13,84 %)
 2910 / 2538 14,66 % [17].

2022 . 12,23 %, 2021 . — 39,04 %.
 (2022 .).
 2646 — , 2037 — 1828 — 2544 .
 2022 . 10,26 %.
 813,887 , [17]. 2022 . — 1824,1703,
 () .
 [9] pre-packaged insolvency (pre-pack).
 « () ».
 2000- . (, ,) .
 (.3).
 2018–2022 . 16,75 %; — 51,84 %.
 ()
 2018-2022 . 12,31 % (65 %
 57 %).
 « 2022 . 2018 . 139,22 %.
 2018 .
 5,12 %, 2019 . — 5,24 %, 2020 . — 4,59 %, 2021 . — 3,54 %, 2022 . — 6,84 % [17].

3.
2018–2022 .*

	2018	2019	2020	2021	2022	, % 2022 / 2018 (2021 / 2018 .)
	191	191	215	216	223	+16,75
	465	537	583	607		(+30,54)
	544	499	568	615		(+13,05)
	681	752	842	954	1034	+51,84
	2,26	1,84	1,74	1,74	1,65	-26,99
	37 %	37 %	37 %	37 %	38 %	+2,70
«0 .», %	65 %	62 %	60 %	58 %	57 %	-12,31
	1 992	2 500	2 092	4 486	3 568	+79,12
	102	131	96	159	244	+139,22
	5,12	5,24	4,59	3,54	6,84	+33,59

* [17]

(.4).

2021 . 615
(13,05 %);
— 607 — 30,54 % [17].
(1,65 % 2022 .)
(26,99 % 2022 . 2018 .)

[4] 72 %

2011–2014 .« »
()

-
-

[15],

(

(

[16]:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

- [] — : www.consultant.ru/document/cons_doc_LAW_349332/ (: 13.02–17.02.2023).
7. 28.03.2022 497 (. 13.07.2022) [] — : www.consultant.ru/document/cons_doc_LAW_413460/ (: 13.02–17.02.2023).
8. () : 14.06.1992 . 623 [] — : www.kremlin.ru/acts/bank/1515 (: 13.02–17.02.2023).
9. () : 26.10.2002 127- () [] — : www.consultant.ru/document/cons_doc_LAW_39331/ (: 13.02–17.02.2023).
10. : 02.10.2007 229- () [] — : www.consultant.ru/document/cons_doc_LAW_71450/ (: 13.02–17.02.2023).
11. 27.12.2004 855 [] — : www.consultant.ru/document/cons_doc_LAW_51004/ (: 13.02–17.02.2023).
12. : 05.04.2013 178 [] — : www.consultant.ru/document/cons_doc_LAW_149463/ (: 13.02–17.02.2023).
13. 25.06.2003 367 [] — : www.consultant.ru/document/cons_doc_LAW_42901/ (: 13.02–17.02.2023).
14. —2022: / . [] — : pravo.ru/opinion/244012/ (: 13.02–17.02.2023).
15. PRO [] — : probankrotstvo.ru/companies (: 13.02–17.02.2023).
16. / . . . [] — : www.vectoreconomy.ru/images/publications/2019/2/economicsmanagement/Svistunova_Zemlyakova.pdf (: 13.02–17.02.2023).
17. [] — : fedresurs.ru/ (: 13.02–17.02.2023).

SPISOK LITERATURY

1. Averyasova Ye.D. Bankrotstvo yuridicheskikh lits v Rossii i puti yego preduprezhdeniya / Ye.D. Averyasova, Ye.D. Mit'kina // *Alleya nauki*. — 2021. — 11(62), T. 1. — S. 668–671.
2. Butuzova I.V. Aktual'nyye problemy bankrotstva yuridicheskikh lits / I.V. Butuzova // *Tendentsii razvitiya nauki i obrazovaniya*. — 2021. — 73–75. — S. 25–28.
3. Volkova A.G. Predprinimatel'skaya deyatel'nost' v usloviyakh neblagopriyatnoy rynochnoy obstanovki i povyshennogo riska bankrotstva / A.G. Volkova, N.B. Gorbacheva // *Region: sistemy, ekonomika, upravleniye*. — 2021. — 1(52). — S. 42–46.
4. Yedinyy federal'nyy reyestr svedeniy o bankrotstve [Elektronnyy resurs]. — Rezhim dostupa: old.bankrot.fedresurs.ru/?attempt=1 (data obrashcheniya: 13.02–17.02.2023).
5. Moratoriy na bankrotstvo: byl li on polezen biznesu [Elektronnyy resurs]. — Rezhim dostupa: delo.modulbank.ru/all/bankruptcy-moratorium (data obrashcheniya: 13.02–17.02.2023).
6. O vvedenii moratoriya na vzbuzhdeniye del o bankrotstve po zayavleniyu kreditorov v otnoshenii otdel'nykh dolzhnikov: Postanovleniye Pravitel'stva RF ot 03.04.2020 428 (red. ot 22.05.2020) [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_349332/ (data obrashcheniya: 13.02–17.02.2023).
7. O vvedenii moratoriya na vzbuzhdeniye del o bankrotstve po zayavleniyam, podavayemym kreditorami: Postanovleniye Pravitel'stva RF ot 28.03.2022 497 (red. ot 13.07.2022) [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_413460/ (data obrashcheniya: 13.02–17.02.2023).
8. O merakh po podderzhke i ozdorovleniyu nesostoyatel'nykh gosudarstvennykh predpriyatiy (bankrotov) i primenenii k nim spetsial'nykh protsedur: Ukaz Prezidenta Rossiyskoy Federatsii ot 14.06.1992 g. 623 [Elektronnyy resurs]. — Rezhim dostupa: www.kremlin.ru/acts/bank/1515 (data obrashcheniya: 13.02–17.02.2023).

9. O nesostoyatel'nosti (bankrotstve): Federal'nyy zakon ot 26.10.2002 127-FZ (poslednyaya redaktsiya) [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_39331/ (data obrashcheniya: 13.02–17.02.2023).

10. Ob ispolnitel'nom proizvodstve: Federal'nyy zakon ot 02.10.2007 229-FZ (poslednyaya redaktsiya) [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_71450/ (data obrashcheniya: 13.02–17.02.2023).

11. Ob utverzhdenii Vremennykh pravil proverki arbitrazhnym upravlyayushchim nalichiya priznakov fiktivnogo i prednamerennogo bankrotstva: Postanovleniye Pravitel'stva RF ot 27.12.2004 855 [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_51004/ (data obrashcheniya: 13.02–17.02.2023).

12. Ob utverzhdenii Poryadka formirovaniya i vedeniya Yedinogo federal'nogo reyestra svedeniy o faktakh deyatel'nosti yuridicheskikh lits i Yedinogo federal'nogo reyestra svedeniy o bankrotstve i Perechnya svedeniy, podlezhashchikh vklyucheniyu v Yedinyy federal'nyy reyestr svedeniy o bankrotstve: Prikaz Minekonomrazvitiya Rossii ot 05.04.2013 178 [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_149463/ (data obrashcheniya: 13.02–17.02.2023).

13. Ob utverzhdenii Pravil provedeniya arbitrazhnym upravlyayushchim finansovogo analiza: Postanovleniye Pravitel'stva RF ot 25.06.2003 367 [Elektronnyy resurs]. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_42901/ (data obrashcheniya: 13.02–17.02.2023).

14. Petrov S. Rossiyskoye bankrotstvo posle moratoriya — 2022: problemnyye voprosy / S. Petrov [Elektronnyy resurs]. — Rezhim dostupa: pravo.ru/opinion/244012/ (data obrashcheniya: 13.02–17.02.2023).

15. Portal PRObankrotstvo. Igroki rynka [Elektronnyy resurs]. — Rezhim dostupa: probankrotstvo.ru/companies (data obrashcheniya: 13.02–17.02.2023).

16. Svistunova N.G. K voprosu o bankrotstve predpriyatiy Rossii / N.G. Svistunova, N.S. Zemlyakova [Elektronnyy resurs] // Elektronnyy zhurnal «Vektor ekonomiki». — 2019. — 2. — Rezhim dostupa: www.vectoreconomy.ru/images/publications/2019/2/economicsmanagement/Svistunova_Zemlyakova.pdf (data obrashcheniya: 13.02–17.02.2023).

17. Fedresurs [Elektronnyy resurs]. — Rezhim dostupa: fedresurs.ru/ (data obrashcheniya 13.02–17.02.2023).

7 2023

27 2023

Fokina Natalya Alexandrovna,
 Ph.D. in Economics, Associate Professor,
 Associate Professor of Management Departments,
 Institute of Economics and Management,
 V.I. Vernadsky Crimean Federal University,
 Simferopol, Russian Federation.

DIGITIZATION AS A WAY TO IMPROVE BUSINESS PROCESSES

The President and Government of the Russian Federation have set the task of digital transformation of priority sectors of the national economy, as well as achieving leading positions in the global technology market. For this purpose, a number of incentive measures have been developed and responsible organizations have been identified that set the pace of innovative development and promote the spread of digital technologies. Under the influence of this circumstance, as well as a number of market factors, an increasing number of enterprises are seeking to use emerging digital opportunities to improve not only individual business processes, but also business models. This, in turn, allows companies to reduce costs, increase operational efficiency, improve products and increase sales volumes. However, despite the growing influence of digitalization on various areas of activity, this concept does not have an unambiguous interpretation. In this regard, a situation has arisen in which terms related to digitalization act as interchangeable concepts, and business process automation processes are associated with digitalization and/or digital transformation.

Within the framework of the proposed work, various approaches to defining the concepts of digitalization and digital transformation are analyzed. The distinctive features of digital transformation are considered. Trends in the digital transformation of domestic business are analyzed, namely: statistical information is presented on the dynamics of the share of Russian organizations using digital technologies, changes in the costs of enterprises for using various digital technologies are analyzed, a rating of the digitalization index by type of activity is presented, as well as an assessment of the digitalization index by

«
 » [15].
 «
 »—«
 » [4].
 ». . .
 —«
 » [12].
 —«
 » [12].
 :
 :«
 » [7].
 [3; 9; 11; 12; 14; 15]:
 •
 •
 •
 •
 2020–2021
 2022 (.1).
 2022 «
 »— 42,9% 2019 25,4%
 2022 . 2022 . 2019
 2019 78,9%, 2022—72,4%. —21,1% 27,6%
 ()
 5,8% 4,1% [7].
 2021 .— 2022

I.

*

	2020	2021	2022
	80,7	81,8	79,6
	46,4	42,2	41,2
	54,7	54,9	53,1
	54,3	55,4	53,7
	13,0	12,6	13,0
	17,2	14,7	14,9
	22,4	25,8	16,5
	5,4	5,7	6,6
	25,7	27,1	28,9
	13,0	13,7	10,0
(RFID,)		19,1	14,8
	44,3	46,2	45,6
	33,5	34,7	36,7

* [7].

« ».

2022

«

2021

15,7 , 2,6 % (15,3).

2020 5,03 2021); (4,88 5,02); (4,9

(3,18 3,35). «

» (1,9). «

»(0,42 2020 0,37 2021).

2021 : 2020 14 % , 2021—16,5 % [5].

2021 .27,1 % .25,8 %

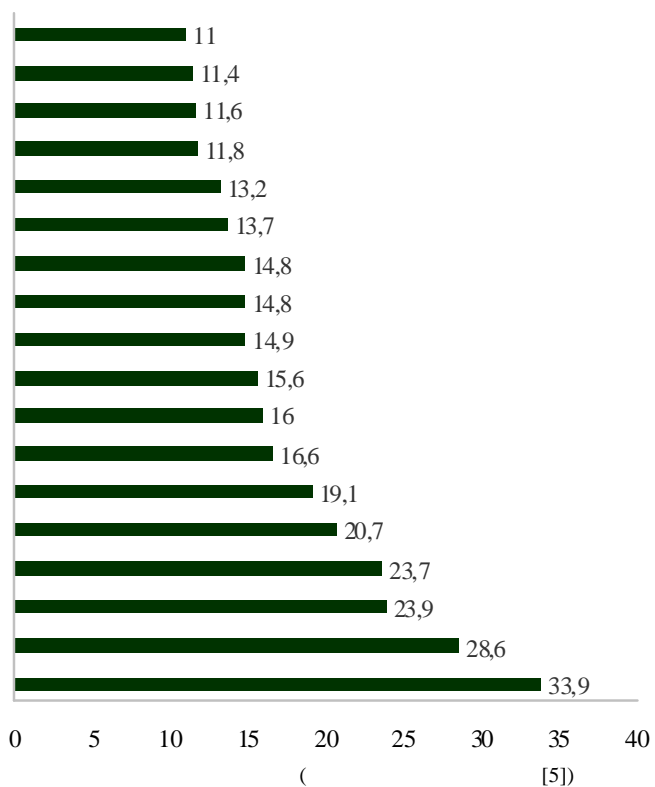
;13,7 % — .10 %

ERP-

« »

1,4 % 4,4 % , 2021

1.



.1.

(: 2,3). 1,9 2021 - - -
 (0,2 0,1). « » -
 [2]. « » 16 %
 , 72% — , 12% — » [2]. -
 (— 51). 2020 2022 52 -
 50 ., -
 2022 — « (43 % 24 %). 64 % » [2]. -

- « — , , -
- , — , 3D , -
- , - ;

- — ;
- — » [2].

2.

2.

*

(BDI)	2020	2021	2022
		50	51	52
	66	66	63
	59	60	66
-	62	65	62
	37	38	42
	28	27	29

* [2]

, 2022

, ,

2021 «

», [6].

, , ERP- , RFID- » [6].

: [16-23]; [24-25]; [26-27]; [28-29]; [30-35].

, 35 , -16 27

[14].

: « », «

», « »

« » —

», « » —

, « » 2016

12

(,)

[10]: 16 7 ;

115

• - 24 (10);
 • 3 1 ;
 • - 1 5- . - -
 , . , « » (, , , -
 1,4). « ».
 , , , .
 , « ».
 « - », Strategy Partners —
 : [13].
 — , , -
 , , « -
 » . « » , -
 , — , . -
 , « », , :
 • « - » 68 — ;
 • 2 ;
 , , -
 , « » —
 « » [13]. , -
 .80 % « -
 ». - -
 . : ,
 , .
 • ;
 • ;

1. Directum RX [] /
: globalcio.ru/news/21473/ (: 14.09.2023).
2. « »:
2022
[]. — : nafi.ru/analytics/bank-otkrytie-interes-malogo-biznesa-k-tsifrovizatsii-udalennyoy-rabote-rezko-vyros-v-2022-godu/ (: 14.09.2023).
3. , . .
// : , , . — 2021. — 1(54). — . 106–124. — DOI 10.37279/2312-5330-2021-1-106-124. — EDN HXNCGG.
4. , . . « », « », « -
»/ . . // . — 2023. — 18(465). — . 80–82. — EDN UEKARW.
5. [] /
. — 2022. — : issek.hse.ru/mirror/pubs/share/785333175.pdf (: 14.09.2023).
6. : 2021 : / . . , . . -
[.]. — : « -
», 2021. — 380 . — ISBN 978-5-7598-2385-8. — DOI 10.17323/978-5-7598-2385-8. — EDN OUNNIJ.
7. [] /
. — : rostat.gov.ru/statistics/science (: 14.09.2023).
8. « »:
28 2017 . 1632- . [] . — : static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf (: 14.09.2023).
9. , . . / . . . — :
« », 2019. — 368 .
10. : [] . — : profi.erzrf.ru/upload/iblock/9de/5-Budkova-TSifrovaya_transformatsiya_Opyt_Sbera.pdf (: 14.09.2023).
11. , . .
/ // . — 2022. — 213. — . 113–119. — DOI 10.14451/1.213.113. — EDN XLYLUW.
12. , . .
// . — 2022. — 2(60). — . 20–26. — DOI 10.36683/2076-5347-2022-2-60-20-26. — EDN VSSPSA.
13. : sber.pro/digital/cases (: 14.09.2023).
14. , . . / . . //
: , , . — 2022. — 3(60). — . 157–166. — EDN GOZKFL.
15. : : . XXIII () .
 , 2022 . [] / . . ; .
 ; .
 . - « » . — : . , 2022. — 221 .

SPISOK LITERATURY

1. ALROSA ispol'zuyet Directum RX dlya upravleniya protsessami OTSO [Elektronnyy resurs] / Proyekt goda. — Rezhim dostupa: globalcio.ru/news/21473/ (data obrashcheniya: 14.09.2023).
2. Bank «Otkrytiye»: interes malogo biznesa k tsifrovizatsii i udalennyoy rabote rezko vyros v 2022 godu [Elektronnyy resurs]. — Rezhim dostupa: nafi.ru/analytics/bank-otkrytie-interes-malogo-biznesa-k-tsifrovizatsii-i-udalennyoy-rabote-rezko-vyros-v-2022-godu/ (data obrashcheniya: 14.09.2023).
3. Blazhevich, O.G. Osobennosti razvitiya finansovogo rynka v usloviyakh tsifrovizatsii / O.G. Blazhevich, N.S. Safonova // Nauchnyy vestnik: finansy, banki, investitsii. — 2021. — 1(54). — S. 106–124. — DOI 10.37279/2312-5330-2021-1-106-124. — EDN HXNCGG.
4. Bubnova, Ye.L. Sootnosheniye i razgranicheniye ponyatiy «tsifrovaya ekonomika», «tsifrovizatsiya», «tsifrovaya transformatsiya» / Ye.L. Bubnova // Molodoy uchenyy. — 2023. — 18(465). — S. 80–82. — EDN UEKARW.
5. Indeks tsifrovizatsii otrasley ekonomiki i sotsial'noy sfery [Elektronnyy resurs] / Tsifrovaya ekonomika. — 2022. — Rezhim dostupa: issek.hse.ru/mirror/pubs/share/785333175.pdf (data obrashcheniya: 14.09.2023).
6. Indikatory tsifrovoy ekonomiki: 2021 : Statisticheskiy sbornik / G.I. Abdrakhmanova, K.O. Vishnevskiy, L.M. Gokhberg [i dr.]. — Moskva : Natsional'nyy issledovatel'skiy universitet «Vysshaya shkola ekonomiki», 2021. — 380 s. — ISBN 978-5-7598-2385-8. — DOI 10.17323/978-5-7598-2385-8. — EDN OUNNIJ.

7. Ispol'zovaniye tsifrovyykh tekhnologiy organizatsiyami po Rossiyskoy Federatsii, sub'yektam Rossiyskoy Federatsii i vidam ekonomicheskoy deyatel'nosti [Elektronnyy resurs] / Federal'naya sluzhba gosudarstvennoy statistiki. — Rezhim dostupa: rosstat.gov.ru/statistics/science (data obrashcheniya: 14.09.2023).

8. Programma «Tsifrovaya ekonomika Rossiyskoy Federatsii»: Rasporyazheniye Pravitel'stva Rossiyskoy Federatsii ot 28 iyulya 2017 g. 1632-r. [Elektronnyy resurs]. — Rezhim dostupa: static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf (data obrashcheniya: 14.09.2023).

9. Prokhorov, A. Tsifrovaya transformatsiya. Analiz, trendy, mirovoy opyt / A. Prokhorov, L. Konik. — M.: OOO «KomN'yus Grup», 2019. — 368 s.

10. Sber: tsifrovaya transformatsiya [Elektronnyy resurs]. — Rezhim dostupa: profi.erzrf.ru/upload/iblock/9de/5-Budkova-TSifrovaya_transformatsiya_Opyt_Sbera.pdf (data obrashcheniya: 14.09.2023).

11. Samsonova, M.V. Osobennosti ekonomicheskogo upravleniya promyshlennymi predpriyatiyami v usloviyakh tsifrovizatsii / M.V. Samsonova, O.V. Fedorishcheva, I.YU. Tsyganova // Ekonomicheskiye nauki. — 2022. — 213. — S. 113–119. — DOI 10.14451/1.213.113. — EDN XLYLUW.

12. Tuktarova, R.I. Tsifrovaya transformatsiya kak prioritetnoye napravleniye razvitiya sfery uslug / R.I. Tuktarova, T.V. Divina // Vestnik OrelGIET. — 2022. — 2(60). — S. 20–26. — DOI 10.36683/2076-5347-2022-2-60-20-26. — EDN VSSPSA.

13. Uspeshnyye keysy tsifrovoy transformatsii biznesa v Rossii [Elektronnyy resurs] / SberPro. — Rezhim dostupa: sber.pro/digital/cases (data obrashcheniya: 14.09.2023).

14. Fokina, N.A. Formirovaniye kontseptual'noy tsifrovoy modeli regiona / N.A. Fokina // Nauchnyy vestnik: finansy, banki, investitsii. — 2022. — 3(60). — S. 157–166. — EDN GOZKFL.

15. Tsifrovaya transformatsiya: ozhidaniya i real'nost': dokl. k XXIII Yasinskoy (Aprel'skoy) mezhdunar. nauch. konf. po problemam razvitiya ekonomiki i obshchestva, Moskva, 2022 g. [Tekst] / G.I. Abdrakhmanova, S.A. Vasil'kovskiy, K.O. Vishnevskiy, M.A. Gershman, L.M. Gokhberg i dr.; ruk. avt. kol. P.B. Rudnik; Nats. issled. unt «Vysshaya shkola ekonomiki». — M.: Izd. dom Vysshey shkoly ekonomiki, 2022. — 221 s.

26 2023

27 2023

379.8.091.6

Vernikov Vitaly Alexandrovich,

Doctor of Economic Sciences,
Professor of the Management Department,
S. Yu. Witte Moscow University,
Moscow, Russian Federation.

Vysotskaya Natalia Vladimirovna,

Doctor of Economic Sciences, Professor,
Russian University of Transport,
Moscow, Russian Federation.

Konovalenko Irina Evgenievna,

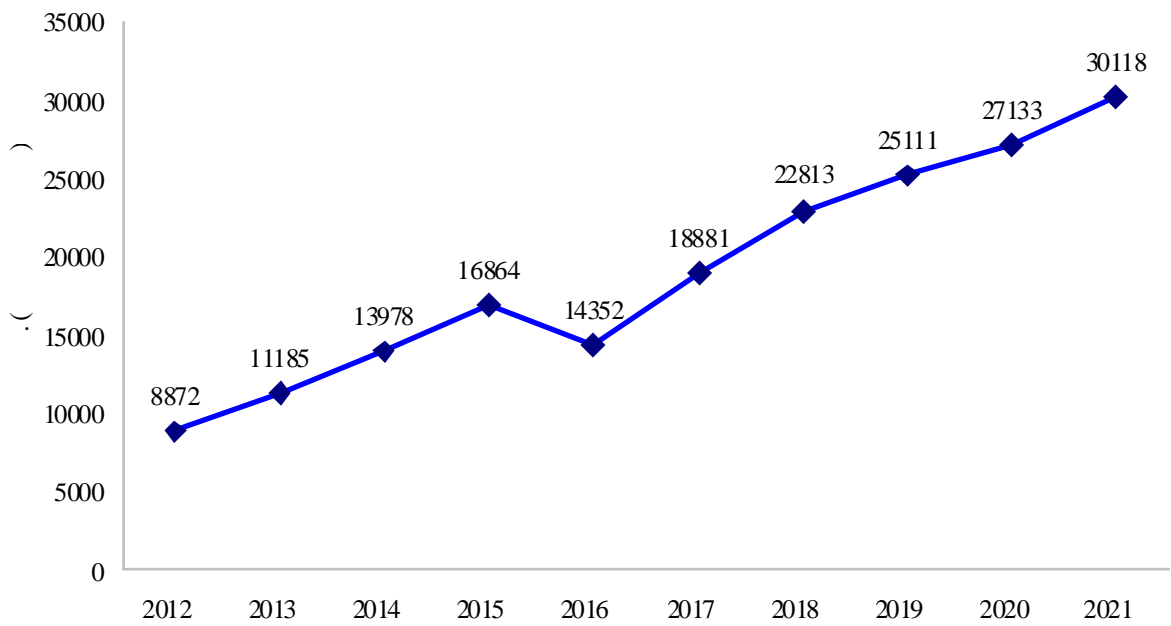
Senior Lecturer, Basic Department of Financial Control, Analysis and Audit,
Main Control Department of the City of Moscow,
G.V. Plekhanov Russian University of Economics,
Moscow, Russian Federation.

**ASSESSMENT OF BUSINESS ACTIVITY OF ENTREPRENEURIAL
ORGANIZATIONS OF THE INDUSTRIAL AND PRODUCTION SECTOR
IN THE RUSSIAN ECONOMY**

The current instability at the macroeconomic, as well as at the political level, creates obstacles to improving the performance and growth of business activity in the manufacturing sector, pushing entrepreneurs to move into activities in areas with the lowest capital intensity and with the fastest financial and economic dedication. The purpose of the article is to study the business activity of entrepreneurial structures in the manufacturing sector of the national economy. The result of the study was the conclusion that, in a subjective perspective, the instability of the development of production structures, the low quality and low level of business activity in general in the industrial and production sector are primarily due to a non-strategic approach to managing activities.

Keywords: business activity, production sector of the national economy, industrial and production potential, entrepreneurial activity, stagnation, crisis, economic instability.

«
» [3]. 2012 2021 10
(« »)
3,4 .
2022
5,9%.
(.2).
2012 2021 , 2012
- 42 %
2021 [2]



.1.

» 2012–2021 . [8]

«



.2.

2022 . [10]

2019–1–3

49%,

(.3).

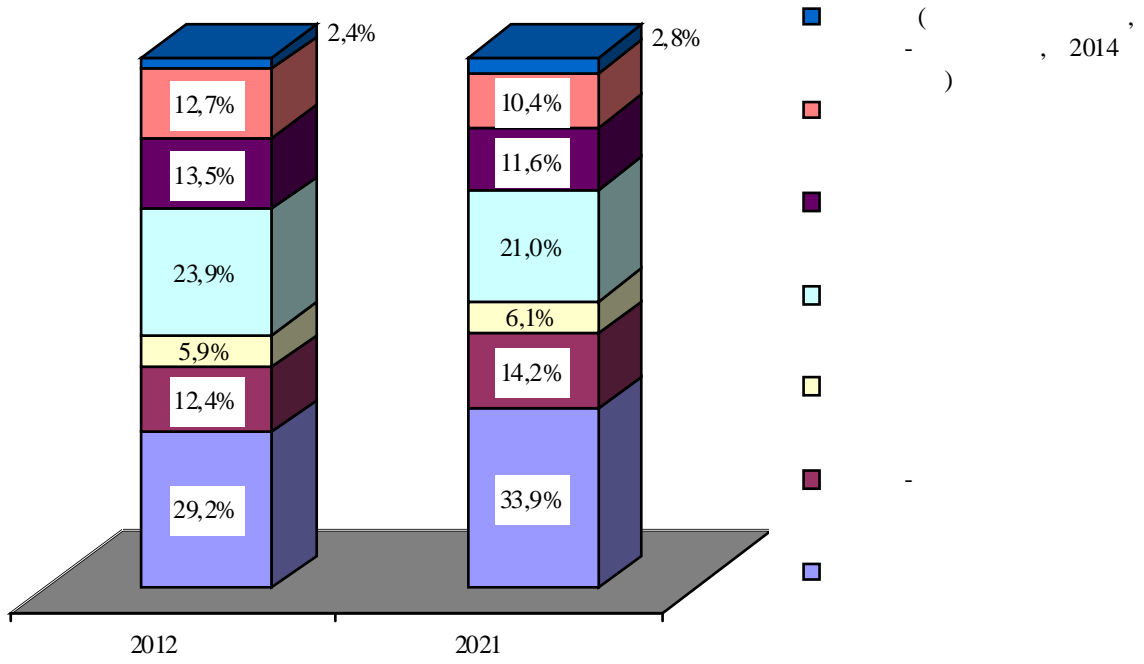
« ,

» [3]. , ,

(.1).

»

2–2,3 ,



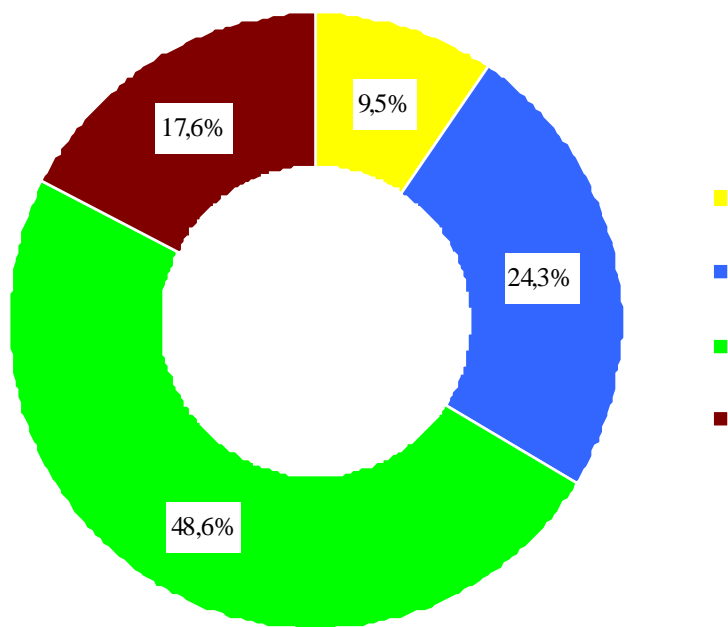
3. 2012–2021 . ([8])

I.

-	.	'
-	(),	
-	,	
-	:	
-	,	
-	:	
-	,	
-	,	
-	:	
-	,	

*

(.4).



.4.

([8])

«

» [3].

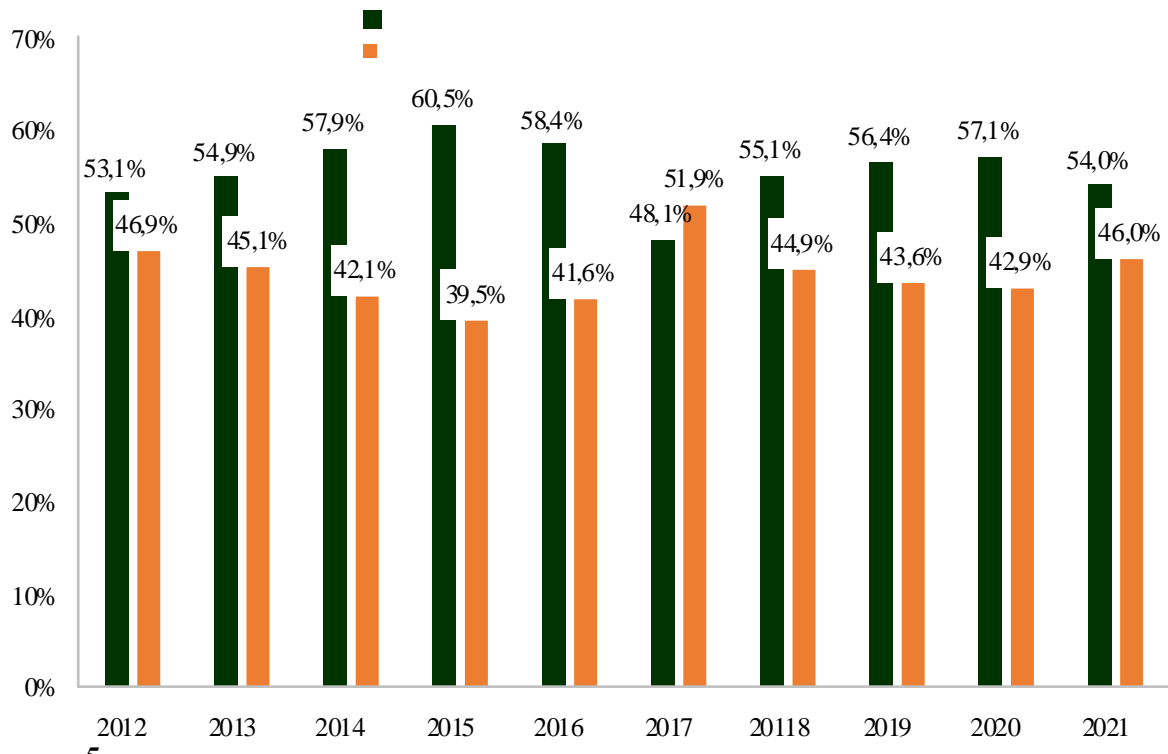
«

».

50–55 %

(.5).

«
»,
72–78 %



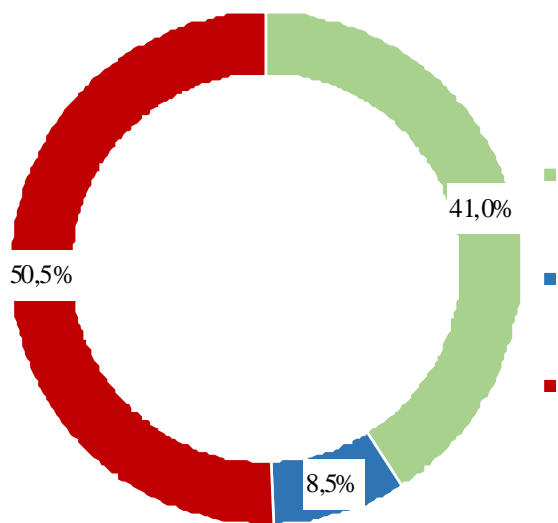
5. « 2012–2021 . ([8]) »

2017–2018 .
 60–80 . . .
 40–50 . . .
 2019 2022

2022
 8 . . .

« 51,3 » , 8,5 %

« .6) » 41%

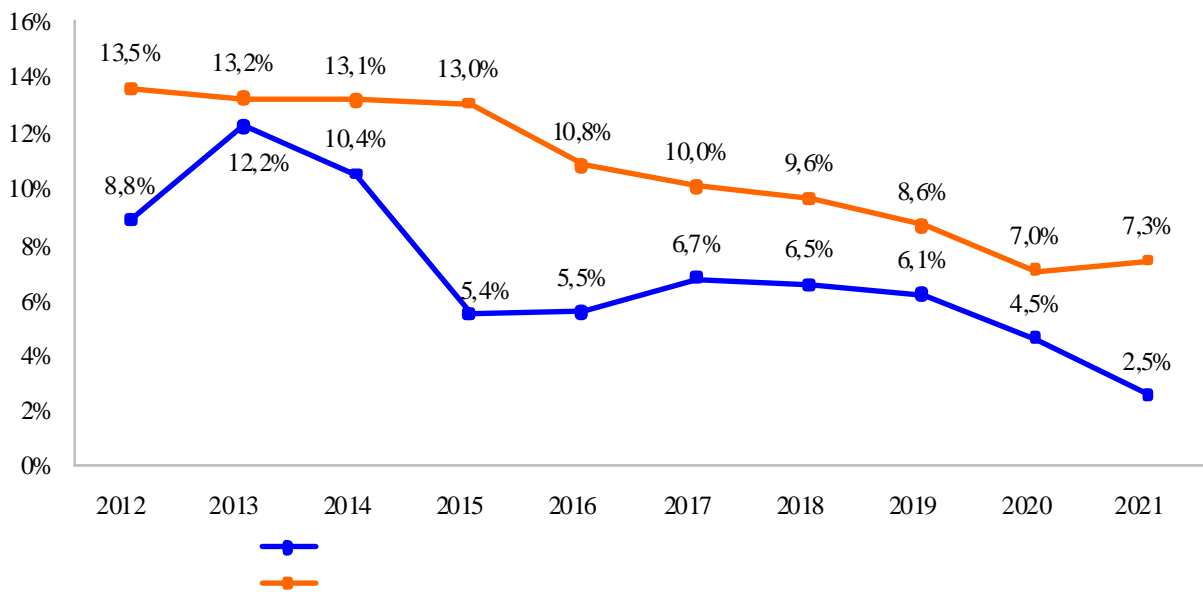


.6.

2021 ([8])

Global Entrepreneurship Monitor [10] (2020–2021

) ,
 (.. , ,) .
 , ,) , - (, , ,) .
 , , - , , (, ,) , ,
 , , , ,) [4].
 ,
 « ,
 » [3].
 « ,
 » [3].
 , ,
 » [3],
 , , , , ,
 , 2013
 « » (.7).



.7.

» 2012–2021 .([8]

« -

» [1] «

11–12 %),

(20%)

20 %

, 30%

0,8

0,7

1 . . ,

0,8 . . » [2].

• (,);

• (,) .

20%

» [3].

« » [3].

» [3].

« » [3].

» [3].

» [3].

1. . . . / . . . // (.).— 2013. — .4. 2(14). — .4–14.
2. . . . // .—2015. — 26. — .13–24. — EDN TTJQIX.
3. . . . // : . . . ,— 2022. — 2(59). — .121–134. — EDN MURRIH.
4. . . . // :—2022. — .12, 3. — .195–212. — DOI 10.18334/ecsoc.12.3.116210. — EDN ETPLLY.
5. : . . . , 2017. — 194 . — ISBN 978-5-4365-1498-7. — DOI 10.15216/978-5-4365-1498-7. — EDN XRRNCR.
6. / // : . . . ,—2021. — 3(56). — .178–187. — EDN HF5MQF.
7. : rosstat.gov.ru (: 15.03.2023).
8.].— : chemosil.ru (« »— Lord [: 15.03.2023).
9. — 2021–2022 // . — , 2022.

СПИСОК ЛИТЕРАТУРЫ

1. Akayev A.A. Srednesrochnaya importozameshchayushchaya modernizatsiya — puskovoy mekhanizm strategii formirovaniya innovatsionnoy ekonomiki Rossii / A.A. Akayev // MIR (Modernizatsiya. Innovatsii. Razvitiye). — 2013. — T. 4. 2(14). — S. 4–14.
2. Baranenko, S.P. Vliyaniye venchurnogo predprinimatel'stva na razvitiye proizvodstvennogo sektora / S.P. Baranenko, A.V. Busygina // Putevoditel' predprinimatel'ya. — 2015. — 26. — S. 13–24. — EDN TTJQIX.
3. Vysotskaya, N.V. Innovatsionnaya aktivnost' kak osnovnoye usloviye razvitiya proizvodstvennykh predprinimatel'skikh struktur / N.V. Vysotskaya, E.S. Kornilova // Nauchnyy vestnik: finansy, banki, investitsii. — 2022. — 2(59). — S. 121–134. — EDN MURRIH.
4. Vernikov, V.A. Strategicheskoye planirovaniye kak upravlencheskiy instrumentariy razvitiya proizvodstvennykh predprinimatel'skikh struktur / V.A. Vernikov // Ekonomika i sotsium: sovremennyye modeli razvitiya. — 2022. — T. 12, 3. — S. 195–212. — DOI 10.18334/ecsoc.12.3.116210. — EDN ETPLLY.
5. Rossiya v sisteme mirovoy ekonomiki i mezhdunarodnykh svyazey v usloviyakh innovatsionnoy transformatsii sotsial'no-ekonomicheskikh sistem / M.N. Dudin, N.V. Lyasnikov, N.P. Ivashchenko, Ye.Ye. Frolova. — Moskva : Rusayns, 2017. — 194 s. — ISBN 978-5-4365-1498-7. — DOI 10.15216/978-5-4365-1498-7. — EDN XRRNCR.
6. Gaysarova, A.A. Vyyavleniye osobennostey funktsionirovaniya regional'nogo kompleksa Respubliki Krym / A.A. Gaysarova, G.A. Shtofer // Nauchnyy vestnik: finansy, banki, investitsii. — 2021. — 3(56). — S. 178–187. — EDN HF5MQF.
7. Federal'naya sluzhba gosudarstvennoy statistiki: ofitsial'nyy sayt [Elektronnyy resurs]. — Rezhim dostupa: rosstat.gov.ru (data obrashcheniya: 15.03.2023).
8. Obshchestvo s ogranichennoy otvetstvennost'yu «Polar» — predstavitel' kompanii Lord [Elektronnyy resurs]. — Rezhim dostupa: chemosil.ru (data obrashcheniya: 15.03.2023).
9. Global'nyy monitoring predprinimatel'stva — 2021–2022 // Vysshaya shkola menedzhmenta Sankt-Peterburgskogo gosudarstvennogo universiteta. — SPb, 2022.

30 2023

27 2023

REGION BUSINESS ACTIVITY LEVEL IN THE ASSESSMENT SYSTEM OF REGIONAL SOCIO-ECONOMIC PROCESSES

(67),

The article presents a new approach to assessing regional socio-economic processes based on a comprehensive indicator of the region's business activity. The features of the system for assessing the business activity of the region are considered, taking into account the place of regional complexes in the national economy. Based on an analysis of literary sources and previously completed developments on the topic, the author's definition of business activity in the region is presented. The author's methodological approach to assessing the business activity of a region as a complex characteristic is proposed, taking into account ten blocks of indicators (in total includes 67 indicators) reflecting the mechanisms of functioning of the regional system based on the official statistics base. A methodological approach to assessing the business activity of a region was used to analyze the processes of functioning of a new region of the Russian Federation — the Republic of Crimea, which made it possible to identify development trends of both the regional system as a whole based on a comprehensive indicator of the level of business activity in the region, and its subsystems — according to the levels of general indicators of blocks. The use of a methodological approach allows us to increase the degree of scientific validity of the developed medium-term and current management impacts in order to ensure sustainable environmental, socio-economic development of the territory, since it allows us to reduce the subjectivity of the method for assessing the current trends in the functioning of the region.

Keywords: regional system, region business activity, assessment of regional processes.

(, ,) ,

(),

[21],

(1).

$$ДАР = f(A_i) = f(A_1, A_2, A_3, A_4, A_5, A_6, A_7, A_8, A_9, A_{10})$$

A_1 - использование ресурсов региона	A_2 - активность в производстве и сфере создания услуг в регионе	A_3 - инвестиционная активность региона	A_4 - инновационная активность региона	A_5 - инфраструктурная активность региона	A_6 - активность региона по решению социальных проблем	A_7 - экономическая активность населения региона	A_8 - активность финансовой сферы региона	A_9 - предпринимательская активность	A_{10} - обеспечение экологической безопасности региона
--	--	---	--	---	--	--	---	--	---

1.

() ()

(67) — (i) 1), [21].

2014

2015–2020

- 2 « » — « »;
- 3 « » — () ;
- 8 « » — () ;

[1, 15, 19].

(, -)

[2, 9, 10].

(.1).

I.

(2015–2020 .)*

	, r		, r
1 « (1) »		2 « (2) »	
-	0,653833183	-	0,833262721
	0,688871157	-	-0,403024052
-	0,652934923		0,827039776
	-0,359016572	-	0,348120139
3 « (A ₃) »		« »	0,945025253
-	0,650759382	-	0,85652545
-	0,729805425	-	0,88543395
1		1000 -	-0,26313543

	, r		, r
	0,073377806		0,806855129
-	0,338462589		-0,649967177
-	0,261390584	4 «	»
()	0,651848791	(4)	-0,196964404
-	0,777631659		-0,26312499
5 «	-	,	0,680030028
» (5)	0,077627281	-	0,266805922
-	-0,651373233	-	0,657862263
-	0,64815825	,	0,648514949
-	-0,651172431	()	-0,318130596
-	0,650344821	7 «	-
	-0,653804945	15-72	» -0,653065985
	0,712598701	()	-0,664640985
-	0,840860276	, 15-72	-0,160763456

	, r		, r
6 « » (6)	.	() -	0,764960785
,	0,775033147	1000 -	0,10860351
- - 1	0,64593054		-0,35591722
, 2 1	0,68042698	9 « » (9)	-
1000 -	0,690633461	(	-0,099312148
- 1000 -	-0,671487264	- -	0,714098343
, - -	-0,663407518	, () -	0,740353649
10000 ()	0,154850078	, -	0,167832573
8 « » (8)	-	10 « » (10)	-
	0,646908493		-0,025332753
-	0,214105758	-	0,646760318
	0,969832129	-	0,927589689
) (- , ,	-0,651521269	-	0,651035232
	-0,845910332		-0,454785473
	0,90793859		
-	0,068033652		
() -	0,891089484		

*

A_i (r) (.2).

2.

(A_i) (2015–2020 .)*

A _i										
1	1= 0,65?	1.1+0,69?	1.2+0,65?	1.3						
2	2= 0,83?	2.1+0,83?	2.3+0,95?	2.5+0,86?	2.6+0,89?	2.7++0,81?	2.9+0,65/	2.10		
3	3= 0,65?	3.1+0,73?	3.2+0,65?	3.7+0,78?	3.8					
4	4= 0,68?	4.3+ 0,66?	4.5+0,65?	4.6						
5	5= 0,65/	5.2+0,65?	5.3+0,65/	5.4+0,65?	5.5+0,65/	5.6+ 0,71?	5.7+0,84?	5.8		
6	6= 0,78?	6.1+0,65?	6.2+0,68?	6.3+0,69?	6.4+0,67/	6.5+0,66/	6.6			
7	7= 0,65/	7.1+0,66/	7.2+0,77?	7.4						
8	8= 0,65?	8.1+0,97?	8.3+0,65/	8.4+0,85/	8.5+0,9?	8.6+0,89?	8.8			
9	9= 0,71?	9.2+0,74?	9.3							
10	10= 0,65?	10.2+0,93?	10.3+0,65?	10.4						

*

A_i 2015–2020

(.3).

3.

(A_i) (2015–2020 .)*

A _i	2015	2016	2017	2018	2019	2020
1	1,54564	2,11980	1,41434	1,79024	1,74941	1,55728
2	5,63411	10,5014	7,91439	7,90059	5,77093	5,55411
3	3,47005	11,8472	5,45818	4,04031	3,13853	3,90960
4	1,34641	1,69397	1,59457	1,46455	2,05676	1,44389
5	5,60000	7,41278	5,78933	5,81996	5,38667	5,45817
6	3,99490	5,65537	4,24395	4,39484	4,69924	3,92801
7	2,46000	2,70811	2,44331	2,52628	2,41954	2,45438
8	4,59320	5,94520	5,70750	4,97231	5,06453	5,00673
9	1,55410	1,86681	1,63379	1,71448	1,72382	1,60099
10	2,22759	3,81317	2,22125	2,94246	2,95521	2,40644

*

()

3

« » (.4). 2015–2020 .(.2).

(

2015)
2015–2020 .(.3,4).

2015–2020 .,

, 2016

44 %

2015 .

2017

4.

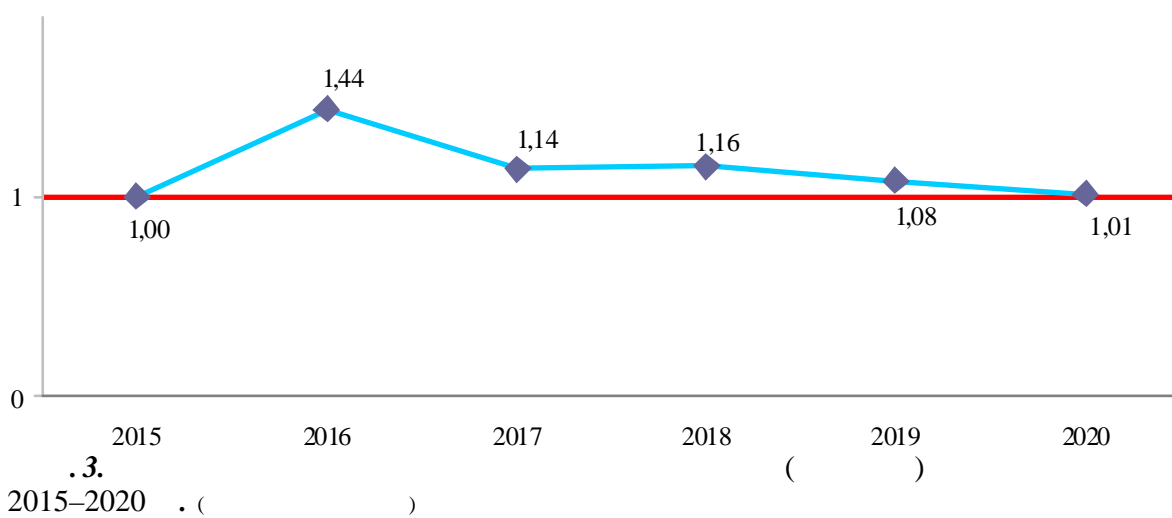
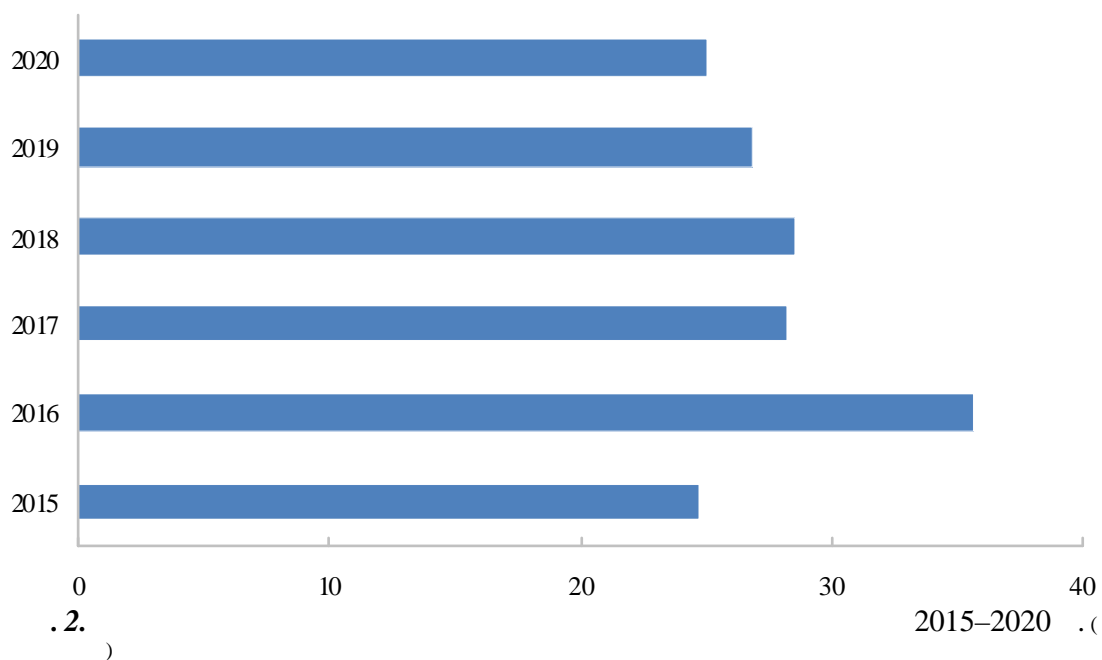
3 «

»

(2015–2020 .) *

	(w)
1	0,718641775
2	0,902058755
3	1
4	0,513942
5	0,983450285
6	0,850594262
7	0,923093018
8	0,826341959
9	0,770485501
10	0,753827

*



2015–2020 .

1. Abberger, K. Composite global indicators from survey data: the global economic barometers / K. Abberger, M. Graff, O.M. Iler, J-E. Sturm // *Review of World Economics*. — 2022. — Vol. 158. — P.917–945. — DOI 10.1007/s10290-021-00449-8.

2. Abramova, M. Transmission channels between financial deepening and economic growth: econometric analysis comprising monetary factors / M. Abramova, K. Krinichansky, D.Artemenko // *Mathematics*. — 2022. — Vol. 10. No 2. — 242. — DOI 10.3390/math10020242.

3. / . . . // : , , . — 2022. — 4(61). — .5–25. — EDNFGOKJL.

4. / . . . // : . — 2022. — 1(39). — .94-100. — DOI 10.17122/2541-8904-2022-1-39-94-100. — EDN BIRJLD.

5. / . . . // . — 2012. — 1-1(5). — .35-43. — EDN QZXLWR.

6. / . . . // . — 2021. — .11. 5. — .1105–1116. — DOI 10.18334/epp.11.5.112079. — EDN CDGWLW.

7. / . . . // : . — 2022. — .20. 1(496). — .111–130. — DOI 10.24891/re.20.1.111. — EDN DPHNAN.

8. / . . . // . — 2022. — .16. 1. — .77-92. — DOI 10.18334/ce.16.1.114097. — EDN ESRCFE.

9. / . . . // . — 2020. — .15. 6. — .8-41. — DOI 10.18288/1994-5124-2020-6-8-41. — EDN JZQULE.

10. / . . . // . — 2017. — 1. — .33-48. — EDN YKWETP.

11. / . . . // . — 2015. — 3(87). — .26–37. — EDN UCLDTJ.

12. Mikheeva, N.N. Possible alternatives to the gross regional product indicator / N.N. Mikheeva // *Studies on Russian Economic Development*. — 2020. — Vol. 31. — 1. — P. 24-30. — DOI 10.1134/S1075700720010098.

13. Mueller, A.P. Financial cycles, business activity, and the stock market / A.P. Mueller // *The Quarterly Journal Austrian Economics*. — 2001. — 4. — P. 3–21. — DOI 10.1007/s12113-001-1000-5.

14. Nissen, V. The Role of IT-Management in the Digital Transformation of Russian Companies / V. Nissen, T. Lezina, A. Saltan // *Foresight and STI Governance*. — 2018. — Vol. 12. — 3. — PP. 53–61. — DOI 10.17323/2500-2597.2018.3.53.61.

15. Rusanov, M.A. On the approach to forecasting indicators of socio-economic development of the region based on indirect indicators / M.A. Rusanov, V.R. Abbazov, V.A. Baluev, V.V. Burlutsky, A.V. Melnikov // *Modeling, Optimization and Information Technology*. — 2022. — Vol. 10. — No 3(38). — P. 2–3. — DOI 10.26102/2310-6018/2022.38.3.004.

16. — 2022. — 5. — 26–50. — DOI 10.32609/0042-8736-2022-5-26-50. — EDN ZHBZDY.

17. — 2016. — 12. — 29–38. — EDN: XGSGFL.

18. Shakirova, A.I. Dynamic prediction of business activity and determination of the socioeconomic development prospects of a region (on the example of the Republic of Tatarstan) / A.I. Shakirova // *Studies on Russian Economic Development*. Dev. 23. — 2012. — P. 585–592. — DOI 10.1134/S1075700712060081.

19. Shirov, A.A. The system of short-term regional economic monitoring in Moscow / A.A. Shirov, V.V. Potapenko, K.M. Nikitin, Yu. Yu. Chaplina // *Studies on Russian Economic Development*. — 2022. — Vol. 33. — P. 301–310. — DOI 10.1134/S1075700722030145.

20. — 2022. — 1(45). — 218–225. — DOI 10.17213/2312-6469-2022-1-218-225. — EDN HUINBO.

21. — 2019. — 244. — EDN RHBRK.

СПИСОК ЛИТЕРАТУРЫ

1. Abberger, K. Composite global indicators from survey data: the global economic barometers / K. Abberger, M. Graff, O.M. Iler, J-E. Sturm // *Review of World Economics*. — 2022. — Vol. 158. — P.917–945. — DOI 10.1007/s10290-021-00449-8.

2. Abramova, M. Transmission channels between financial deepening and economic growth: econometric analysis comprising monetary factors / M. Abramova, K. Krinichansky, D.Artemenko // *Mathematics*. — 2022. — Vol. 10. No 2. — 242. — DOI 10.3390/math10020242.

3. Blazhevich, O.G. Formirovaniye sistemy otsenki effektivnosti deyatel'nosti predpriyatiy v Rossiyskoy Federatsii / O.G. Blazhevich, E.I. Vorobyova, S.E. Bekirova // *Nauchnyy vestnik: finansy, banki, investitsii*. — 2022. — 4(61). — S. 5–25. — EDN FGOKJL.

4. Blazhenkova, N.M. O problemakh provedeniya monitoringa sotsial'no-ekonomicheskogo razvitiya regiona v sovremennykh usloviyakh khozyaystvovaniya / N.M. Blazhenkova, F.F. Bayrushina // *Vestnik UGNTU. Nauka, obrazovaniye, ekonomika. Seriya: Ekonomika*. — 2022. — 1(39). — S. 94–100. — DOI 10.17122/2541-8904-2022-1-39-94-100. — EDN BIRJLD.

5. Vetrova, N.M. Otsenka delovoy aktivnosti regiona v sisteme regional'nogo upravleniya / N.M. Vetrova, G.A. Shtofer // *Byulleten' Mezhdunarodnogo Nobelevskogo ekonomicheskogo foruma*. — 2012. — 1-1(5). — S. 35–43. — EDN QZXLWR.

6. Glavatskiy, V.B. Razvitiye informatsionnogo obespecheniya upravleniya prostranstvenno-otraslevoy strukturoy regiona / V.B. Glavatskiy, S.A. Pytkina // *Ekonomika, predprinimatel'stvo i pravo*. — 2021. — T. 11. — 5. — S. 1105–1116. — DOI 10.18334/epp.11.5.112079. — EDN CDGWLX.

7. Yel'shin, L.A. Empiricheskaya otsenka vliyaniya delovoy aktivnosti na reputatsionny kapital regiona / L.A. Yel'shin, R.T. Burganov, A.A. Abdukayeva // *Regional'naya ekonomika: teoriya i praktika*. — 2022. — T. 20. 1(496). — S. 111–130. — DOI 10.24891/re.20.1.111. — EDN DPHNAN.

8. Yergin, S.M. Problemy i perspektivy informatsionnogo obespecheniya infrastruktury predprinimatel'skoy deyatel'nosti v usloviyakh tsifrovizatsii / S.M. Yergin, I.V. Kopayenko // *Kreativnaya ekonomika*. — 2022. — T. 16. 1. — S. 77–92. — DOI 10.18334/ce.16.1.114097. — EDN ESRCFE.

9. Kitrar, L. Analiz vzaimosvyazi indikatora ekonomicheskikh nastroyeniy i rosta VVP / L. Kitrar, T. Lipkind // *Ekonomicheskaya politika*. — 2020. — T. 15. — 6. — S. 8–41. — DOI 10.18288/1994-5124-2020-6-8-41. — EDN JZQULE.

10. Kubina, N.Ye. Metodologicheskii podkhod k otsenke sostoyaniya biznes-sredy kaliningradskoy oblasti: delovaya aktivnost' / N.Ye. Kubina, N. Yu. Luk'yanova, L. Yu. Shcherbinina // *Finansy i biznes*. — 2017. — 1. — S. 33–48. — EDN YKWETP.

11. Loseva, O.V. Delovaya aktivnost' kak operezhayushchiy indikator ekonomicheskogo razvitiya: zarubezhnyy i rossiyskiy opyt / O.V. Loseva, M.A. Fedotova, G.I. Khotinskaya // *Vestnik Finansovogo universiteta*. — 2015. — 3(87). — S. 26–37. — EDN UCLDTJ.

12. Mikheeva, N.N. Possible alternatives to the gross regional product indicator / N.N. Mikheeva // *Studies on Russian Economic Development*. — 2020. — Vol. 31. — 1. — P. 24–30. — DOI 10.1134/S1075700720010098.
13. Mueller, A.P. Financial cycles, business activity, and the stock market / A.P. Mueller // *The Quarterly Journal Austrian Economics*. — 2001. — 4. — P. 3–21. — DOI 10.1007/s12113-001-1000-5.
14. Nissen, V. The Role of IT-Management in the Digital Transformation of Russian Companies / V. Nissen, T. Lezina, A. Saltan // *Foresight and STI Governance*. — 2018. — Vol. 12. — 3. — PP. 53–61. — DOI 10.17323/2500-2597.2018.3.53.61.
15. Rusanov, M.A. On the approach to forecasting indicators of socio-economic development of the region based on indirect indicators / M.A. Rusanov, V.R. Abbasov, V.A. Baluev, V.V. Burlutsky, A.V. Melnikov // *Modeling, Optimization and Information Technology*. — 2022. — Vol. 10. — No 3(38). — P. 2–3. — DOI 10.26102/2310-6018/2022.38.3.004.
16. Smirnov, S.V. Monitoring rossiyskogo delovogo tsikla na osnove yezhednevnykh dannykh / S.V. Smirnov, S.S. Smirnov // *Voprosy ekonomiki*. — 2022. — 5. — S. 26–50. — DOI 10.32609/0042-8736-2022-5-26-50. — EDN ZHBZDY.
17. Smirnov, S.V. Indeksy regional'noy ekonomicheskoy aktivnosti / S.V. Smirnov, A.A. Frenkel', N.V. Kondrashov // *Voprosy statistiki*. — 2016. — 12. — S. 29–38. — EDN: XGSGFL.
18. Shakirova, A.I. Dynamic prediction of business activity and determination of the socioeconomic development prospects of a region (on the example of the Republic of Tatarstan) / A.I. Shakirova // *Studies on Russian Economic Development. Dev.* 23. — 2012. — P. 585–592. — DOI 10.1134/S1075700712060081.
19. Shirov, A.A. The system of short-term regional economic monitoring in Moscow / A.A. Shirov, V.V. Potapenko, K.M. Nikitin, Yu. Yu. Chaplina // *Studies on Russian Economic Development*. — 2022. — Vol. 33. — P. 301–310. — DOI 10.1134/S1075700722030145.
20. Shtofer, G.A. Osobennosti teorii analiza i prognozirovaniya ekonomicheskikh protsessov na mezourovne v tsifrovoy ekonomike / G.A. Shtofer, N.M. Vetrova, A.A. Gaysarova // *Drukerovskiy vestnik*. — 2022. — 1(45). — S. 218–225. — DOI 10.17213/2312-6469-2022-1-218-225. — EDN HUINBO.
21. Ekologo-ekonomicheskiye aspekty funktsionirovaniya regional'nykh sistem: monografiya / Pod obshchey red. d-ra tekhn. nauk, prof. N.M. Vetrovov. — Simferopol': IT «ARIAL», 2019. — 244 s. — EDN RHBRLK.

28 2023

27 2023

Smetanko Aleksandr Vasilyevich,

Doctor of Economics, Associate Professor,
Head of the Department of Accounting, Analysis and Audit,
Institute of Economics and Management;
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Natarova Elena Vladimirovna,

Ph.D. in Economics, Associate Professor,
Associate Professor of Accounting, Analysis and Audit Department,
Institute of Economics and Management;
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

**OPTIMIZATION OF THE STRUCTURE OF THE EXECUTIVE AUTHORITIES
OF THE REPUBLIC OF CRIMEA**

Currently, transformational processes are taking place in the Russian Federation related to the constitutional reform of the unified system of public power carried out by the President and the Government of the Russian Federation, affecting the activities of government bodies, the principles of organization and functioning of interdepartmental interaction of executive authorities. The formed system of executive authorities, which has a multifunctional apparatus of authorities, allows solving various multi-level state tasks, as well as making decisions aimed at improving the efficiency of regional development. Nevertheless, there are many problems that have not been solved at the federal level, which together do not allow an effective system of interdepartmental interaction of executive authorities to be formed at the level of the constituent entities of the Russian Federation.

The methodology of the study involves a critical analysis of normative-legislative and legal acts regulating the constitutional and legal status of public authorities; identification of problems at the present stage of the formation of the structure of the executive authorities of the Republic of Crimea; the proposal of preventive measures to prevent conflicts of interest in the executive authorities.

The article examines the structure of the executive authorities of the Republic of Crimea and the powers of local self-government bodies; delineations are given between such concepts as: «the system of executive authorities», «the apparatus of public administration» and «the mechanism of executive power»; an approach to optimizing both the structure and the staffing of the executive authorities of the Republic of Crimea is proposed.

The conducted research indicates that under the conditions of sanctions pressure, the issue of optimization of republican executive authorities is quite acute. In our opinion, it is possible to consolidate the staff by enlarging departments and services, since the effectiveness of the management system depends not on the quantitative component, but on the qualitative component of the process of organizing the work of both individual elements of the system and the system as a whole.

Keywords: executive authorities, structure, state administration apparatus.

• 54- «

• »[10];

• 2 2014 25- «

»[11] .

.81 ,

,

.

, 01.10.2019

,

,

,

,

,

:

« , . . . , ; , »[12].

,

,

,

,

,

5%, , — 10%.

20 2021 .

,

,

().

,

,

,

,

1,5-2 , -

,

,

,

,

()

-
-
-
-
-
-
-

« ... ».

[21].

« ... ».

:« ... »

» [22].

« ... »

» [23].

» [24].

:« ... »

» [20].

6

»,

110

«

(10) .

.77

1 78

491 «

» [25, .2032].

2022

(), [120; 1220]:

- 18202 —
- 4455 —
- 5688 —

; ; —

28345
01.01.2022

8,27%.

01.01.2022 :

- 60 330 .—
- 59 136 .—
- 39 714 .—
- 56 005 .—

; ; —

— 1019 291 000

.(56 005 . 18 202).

— 33,02% (),

— 1 355 860 888,2

152

2023 — 800 100

(),

19 2018 68 «

» [28]

• ;

• —

•

1.

// 2. (—7 2014 — 14. 12.12.1993)(30.12.2008 N6- , 30.12.2008 N7- , 05.02.2014 N2- , 21.07.2014 N 11-)// —2014.— 31.

3. — 21 2014 .N6- (.—2014.— 12. 30 2020 .N9-)
//
4. , , , - ,25 2014 // :
URL: <http://szrf.km.duma.gov.ru/site.xp/052057124051057054.html?month=9&year=2013>.
5. 15 2014 .N2- (06 2021 . 174- /2021) //
—21 2014 .— 94.
6. 29 2014 5- (07 2020 . 61- /2020) //
—30 2014 .—N 103-104.
7. 2014 .N64- (06 2021 . 174- /2021) // 10 —
11 2014 .—N183.
8. N7- (06 2021 . 172- /2021) // 29 2014 .
2014 .—N 105-106.
9. 23 2020 . 148- /2020) // 29 2014 .N9- (—31 2014 .—
105-106.
10. N54- (02 2020 . 135- /2020) // 21 2014 .
28 2014 .—N172.
11. // .—4 2014 .—
12. / . . [] // -
13. : rk.gov.ru/rus/index.html/news/296605.htm (: 15.09.2023).
// XXV /
14. — : .—2013.— .86–88.
06.10.2003 131- (; . 30.12.2021)[] //
— « ».— : www.cossultat.ru/document/co
s_doc_LAW_44571/(: 15.09.2023).
15. 21.12.2021 414- () [] // —
« ».— : www.cossultat.ru/document/co_s_doc_LAW_404070/ (: 15.09.2023).
16. 2003 824// 2003–2004 : 23
—28 2003 .— 30.
17. / -
18. .— .,2006.—20 . (11 2014 .)
// —12 2014 .— 68.
19. 16 2014 . 51- [] //
.— : rk.gov.ru/ru/document/show/8350 (: 15.09.2023).
20. / — .,2015.—386 .
21. : — .: ,2001.—320 .
22. / , — .: .,1996.—729 .
23. : ./ . : .— .: ,1998.—432 .

24. , 1998. — 468 . / . . — . :
25. : 27 1993 491 // — 31 1993 . — 22.
26. : 15 2018 . 215 (. — 21 2018 . — 21. 21 2020 . 21) // -
27. : . — 25 21 2019 . N 68 // . — 8. 2019 . — 8.
28. , . -
29. : 19 2018 68- [] // : rk.gov.ru/ru/document/show/35413 (: 15.09.2023).
- // : — 2022. — 1 (58). — : fbi.cfuv.ru/%E2%84%96-1-58-2022-%D0%B3/(: 15.09.2023).

СПИСОК ЛИТЕРАТУРЫ

1. Dogovor mezhdru Rossiyskoy Federatsiyey i Respublikoy Krym o prinyatii v Rossiyskuyu Federatsiyu Respubliki Krym i obrazovanii v sostave Rossiyskoy Federatsii novykh sub'yektov (Moskva, 18 marta 2014 g.) // Sobraniye zakonodatel'stva Rossiyskoy Federatsii. — 7 aprelya 2014 g. — 14.
2. Konstitutsiya Rossiyskoy Federatsii (prinyata vsenarodnym golosovaniyem 12.12.1993) (s uchetom popravok, vnesennykh Zakonami RF popravkakh k Konstitutsii RF ot 30.12.2008 N 6-FKZ, ot 30.12.2008 N 7-FKZ, ot 05.02.2014 N 2-FKZ, ot 21.07.2014 N 11-FKZ) // Sobraniye zakonodatel'stva Rossiyskoy Federatsii. — 2014. — 31.
3. O prinyatii v Rossiyskuyu Federatsiyu Respubliki Krym i obrazovanii v sostave Rossiyskoy Federatsii novykh sub'yektov — Respubliki Krym i goroda federal'nogo znacheniya Sevastopolya: Federal'nyy konstitutsionnyy zakon ot 21 marta 2014 g. N 6-FKZ (s izmeneniyami i dopolneniyami ot 30 dekabrya 2020 g. N 9-FKZ) // Sobraniye zakonodatel'stva Rossiyskoy Federatsii. — 2014. — 12.
4. O zakonodatel'nom obespechenii mer po integratsii Respubliki Krym i goroda federal'nogo znacheniya Sevastopolya v pravovuyu, politicheskuyu, ekonomicheskuyu, sotsial'nyuyu i finansovuyu sistemu RF: Resheniye Soveta zakonodateley RF pri Federal'nom Sobranii RF. Sankt-Peterburg, 25 aprelya 2014 goda // Ofitsial'nyy sayt Soveta zakonodateley RF pri Federal'nom Sobranii RF. [Elektronnyy resurs]. Rezhim dostupa: URL: <http://szrf.km.duma.gov.ru/site.xp/052057124051057054.html?month=9&year=2013>.
5. O Gosudarstvennom Sovete Respubliki Krym — Parlamente Respubliki Krym: Zakon Respubliki Krym ot 15 maya 2014 g. N 2-ZRK (s izmeneniyami i dopolneniyami ot 06 aprelya 2021 g. 174-ZRK/2021) // Krymskiye izvestiya — 21 maya 2014 g. — 94.
6. O sisteme ispolnitel'nykh organov gosudarstvennoy vlasti Respubliki Krym: Zakon Respubliki Krym ot 29 maya 2014 goda 5-ZKR (s izmeneniyami i dopolneniyami ot 07 aprelya 2020 g. 61-ZRK/2020) // Krymskiye izvestiya — 30 maya 2014 g. — N 103-104.
7. O statuse deputata Gosudarstvennogo Soveta Respubliki Krym: Zakon Respubliki Krym ot 10 sentyabrya 2014 g. N 64-ZRK (s izmeneniyami i dopolneniyami ot 06 aprelya 2021 g. 174-ZRK/2021) // Krymskiye izvestiya — 11 sentyabrya 2014 g. — N 183.
8. O gosudarstvennoy grazhdanskoj sluzhbe Respubliki Krym: Zakon Respubliki Krym ot 29 maya 2014 g. N 7-ZRK (s izmeneniyami i dopolneniyami ot 06 aprelya 2021 g. 172-ZRK/2021) // Krymskiye izvestiya — 31 maya 2014 g. — N 105-106.
9. O gosudarstvennykh dolzhnostyakh Respubliki Krym: Zakon Respubliki Krym ot 29 maya 2014 g. N 9-ZRK (s izmeneniyami i dopolneniyami ot 23 dekabrya 2020 g. 148-ZRK/2020) // Krymskiye izvestiya — 31 maya 2014 g. — 105-106.
10. Ob osnovakh mestnogo samoupravleniya v Respublike Krym: Zakon Respubliki Krym ot 21 avgusta 2014 g. N 54-ZRK (s izmeneniyami i dopolneniyami ot 02 dekabrya 2020 g. 135-ZRK/2020) // Krymskiye izvestiya. — 28 avgusta 2014 g. — N 172.
11. Ob Upolnomochennom po pravam cheloveka v Respublike Krym // Krymskiye izvestiya. — 4 iyulya 2014 g. — 134.
12. Aksonov S.V. Krymu neobkhodimo sformirovat' effektivnyuyu sistemu organov gosudarstvennoy vlasti / S.V. Aksonov [Elektronnyy resurs] // Upravleniye informatsii i press-sluzhby Glavy Respubliki Krym. — Rezhim dostupa: rk.gov.ru/rus/index.html/news/296605.htm (data obrashcheniya: 15.09.2023).

13. Andreyeva L.A. Organy ispolnitel'noy vlasti sub'yekta Rossiyskoy Federatsii: sistema i struktura / L.A. Andreyeva // Voprosy sovremennoy yurisprudentsii. Sbornik statey po materialam XXV mezhdunarodnoy nauchno-prakticheskoy konferentsii — Novosibirsk: SibAK. — 2013. — S. 86–88.
14. Ob obshchikh printsipakh organizatsii mestnogo samoupravleniya v Rossiyskoy Federatsii: Federal'nyy zakon ot 06.10.2003 131–FZ (s izmeneniyami i dopolneniyami; red. ot 30.12.2021) [Elektronnyy resurs] // Spravochno-pravovaya sistema «Konsul'tant». — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_44571/ (data obrashcheniya: 15.09.2023).
15. Ob obshchikh printsipakh organizatsii publichnoy vlasti v sub'yektakh Rossiyskoy Federatsii: Federal'nyy zakon ot 21.12.2021 414–FZ (s izmeneniyami i dopolneniyami) [Elektronnyy resurs] // Spravochno-pravovaya sistema «Konsul'tant». — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_404070/ (data obrashcheniya: 15.09.2023).
16. O merakh po provedeniyu administrativnoy reformy v 2003–2004 godakh: Ukaz Prezidenta RF ot 23 iyulya 2003 goda 824 // Sobraniye zakonodatel'stva Rossiyskoy Federatsii. — 28 iyulya 2003 g. — 30.
17. Bondarenko A.A. Administrativno-pravovoy status organov ispolnitel'noy vlasti sub'yektov Rossiyskoy Federatsii v usloviyakh administrativnoy reformy: avtoref. dis. ... kand. yurid. nauk / Anton Alekseyevich Bondarenko. — M., 2006. — 20 s.
18. Konstitutsiya Respubliki Krym (prinyata Gosudarstvennym Sovetom Respubliki Krym 11 aprelya 2014 g.) // Krymskiye izvestiya — 12 aprelya 2014 g. — 68.
19. O strukture ispolnitel'nykh organov gosudarstvennoy vlasti Respubliki Krym: Ukaz Glavy Respubliki Krym ot 16 iyunya 2014 g. 51–U [Elektronnyy resurs] // Ofitsial'nyy sayt pravitel'stva Respubliki Krym. — Rezhim dostupa: rk.gov.ru/ru/document/show/8350 (data obrashcheniya: 15.09.2023).
20. Bratanovskiy S.N. Administrativnoye pravo: Uchebnik / pod red. S.N. Bratanovskogo. — M., 2015. — 386 s.
21. Chirkin V.Ye. Gosudarstvennoye upravleniye. Elementarnyy kurs: Uchebnik — M.: Yurist', 2001. — 320 s.
22. Sravnitel'noye konstitutsionnoye pravo / pod red. A.I. Kovlera, V.Ye. Chirkina, YU.A. Yudina. — M.: Manuskript, 1996. — 729 s.
23. Bachilo I.L. Ispolnitel'naya vlast' v Rossiyskoy Federatsii. Problemy razvitiya : Uchebnik. / Otv. red.: Bachilo I.L. — M.: Yurist', 1998. — 432 s.
24. Popova Yu.A. Kurs administrativnogo prava i administrativnyy protsess / Yu.A. Popova. — M.: Yurist', 1998. — 468 s.
25. O poryadke sozdaniya i deyatelnosti territorial'nykh organov ministerstv i vedomstv Rossiyskoy Federatsii: Postanovleniye Pravitel'stva RF ot 27 maya 1993 goda 491 // Sobraniye aktov Prezidenta i Pravitel'stva Rossiyskoy Federatsii — 31 maya 1993 g. — 22.
26. O strukture federal'nykh organov ispolnitel'noy vlasti: Ukaz Prezidenta RF ot 15 maya 2018 g. 215 (s izmeneniyami i dopolneniyami ot 21 yanvarya 2020 g. 21) // Sobraniye zakonodatel'stva Rossiyskoy Federatsii. — 21 maya 2018 g. — 21.
27. O professional'nom razvitiy gosudarstvennykh grazhdanskikh sluzhashchikh Rossiyskoy Federatsii: Ukaz Prezidenta RF ot 21 fevralya 2019 g. N 68 // Sobraniye zakonodatel'stva Rossiyskoy Federatsii. — 25 fevralya 2019 g. — 8.
28. Ob utverzhdenii vremennogo raspredeleniya funktsional'nykh obyazannostey mezhdru Glavoy RK, Predsedatelem SM RK, zamestitelyami Predsedatelya Soveta ministrov Respubliki Krym: Rasporyazheniye Glavy Respubliki Krym ot 19 fevralya 2018 goda 68–rg [Elektronnyy resurs] // Ofitsial'nyy sayt pravitel'stva Respubliki Krym. — Rezhim dostupa: rk.gov.ru/ru/document/show/35413 (data obrashcheniya: 15.09.2023).
29. Mal'tseva T.S. Sovremennyye tendentsii razvitiya organov ispolnitel'noy vlasti v kontekste reformirovaniya sistemy publichnoy vlasti sub'yektov Rossiyskoy Federatsii / T.S. Mal'tseva [Elektronnyy resurs] // Nauchnyy vestnik: finansy, banki, investitsii. — 2022. — 1 (58). — Rezhim dostupa: fbi.cfuv.ru/%E2%84%96-1-58-2022-%D0%B3/ (data obrashcheniya: 15.09.2023).

15 2023

27 2023

330.341.1(470-924.71)

« . . . »,

Glushko Yulia Vladimirovna,
Candidate of Economic Sciences, Associate Professor,
Associate Professor of the Department of State and Municipal Administration
Institute of Economics and Management
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

DEVELOPMENT OF INNOVATIVE TECHNOLOGIES IN THE REPUBLIC OF CRIMEA

The article discusses the concept and development of innovative technologies in the Republic of Crimea, institutes of innovative technologies, the main projects of the Republic in the field of innovation. The development and implementation of innovative technologies of the Republic of Crimea takes place through project management, where products, services and innovation technologies are installed, depending on the areas of activity that need to be developed, the calculation of current and projected indicators, the state of the sphere of implementation, goals, objectives, activities, risks, the amount of financial resources, the timing of implementation, as well as efficiency assessment is provided. implementation of state programs. On the basis of state programs, a project of the necessary technology, service or product of innovation is being developed in order to put it into operation, to increase the efficiency of a specific field of activity. Innovation infrastructure is an effective means of assisting innovation activities and supporting them during their implementation. In the Republic of Crimea, a developed network of entrepreneurship support infrastructure has been organized and operates, the purpose of which is to provide various types of state support for small and medium-sized businesses. innovative technologies of public administration in the field of entrepreneurship development, digitalize public services aimed at supporting small and medium-sized businesses. A system of providing comprehensive public services, open access of citizens to obtain the necessary information through information portals, the introduction of information courses on the development of entrepreneurship and a special tax regime for beginning entrepreneurs under the preferential lending system has been created.

Keywords: innovative technologies, public administration, state program, regional project.

», , .

-

», ,

»,

»,

»,

- « »;
- « »;
- « »;
- « ».

», , .

« », « ».

»,

2019

», .

« ».

() [11],
(business.rk.gov.ru).

- (),
- « »;
- (,);
- (« », « »);
- »),
- « »;

», ,

», ,

», ,

() / [14].

03.12.2021)

18.12.2020 817 (.

», 2«

» , , -

, , -

:

1. — , -

, -

2. — , -

3. « -

»— -

, (-

), , -

« », -

4. « (-

»— (), -

« », -

5. « » -

— , , -

6. « -

, , -

, »— -

, -

2 , -

• , ; -

• - ;

• 2, -

2, -

, -

, -

2, -

, -

, -

, , -

, -

, -

28.10.2016 528 «

»

[9].

«

»

•

•

•

•

•

•

215 «

19 2016

» [8]

«

» (

).

«

«

»,

•

•

•

•

• ;

• , ;

• « »

4 ,

1. « »—

2. « »—
()

3. « »—

4. « »—
()

« »

[12].

• - ;

• (,)

• () ,

« » ,

- cyberleninka.ru/article/n/problemy-razvitiya-malogo-i-srednego-predprinimatelstva-v-rossiyskoy-federatsii/viewer (data obrashcheniya: 09.09.2023).
12. []. — : crimea.fa.ru/#rec261137690 (data obrashcheniya: 24.08.2023).
13. « » []. — : www.kp.ru/best/crimea/crimea-future/#rec307735115 (data obrashcheniya: 25.07.2023).
14. []. — : rk.gov.ru/ru/fcp-object/list (data obrashcheniya: 24.08.2023).
15. « » // (XX . — . 200–206. 2024 : : www.economy.gov.ru/material/file/31429beea65c245f236332222e799dd7/fcp_krym_2025.pdf (data obrashcheniya: 24.07.2023)
17. / . — : , 2008. — 864 .

СПИСОК ЛИТЕРАТУРЫ

1. Baybekova E.F. Analiz pravovogo obespecheniya innovatsionnoy deyatel'nosti v Rossiyskoy Federatsii na sovremennom etape / E.F. Baybekova // Gumanitarnyye issledovaniya. — 2017. — 3(63). — S. 170–177.
2. Balashova Ye.S. Problemy pravovogo regulirovaniya innovatsionnoy deyatel'nosti v Rossii / Ye.S. Balashova, O.I. Gnezdilova // Mezhdunarodnyy nauchnyy zhurnal «Innovatsionnaya nauka». — 2016. — 3. — S. 62–67.
3. Baldin, K.V. Innovatsii. Uchebnoye posobiye / K.V. Baldin. — M.: Dashkov, 2019. — 776 c.
4. Gambeyeva Yu.N. Sovershenstvovaniye klasternoy politiki v Respublike Krym / Yu.N. Gambeyeva, A.V. Glamazda // Ekonomika, predprinimatel'stvo i pravo. — 2020. — T. 10, 4. — S. 997–1008.
5. Iovchuk M.T. Plekhanov G.V. i yego trudy po istorii filosofii / M.T. Iovchuk. — M.: Izdatel'stvo sotsial'no-ekonomicheskoy literatury, 2019. — 316 c.
6. Kiril'chuk S.P. Napravleniya realizatsii klasternogo mekhanizma ekonomicheskogo razvitiya Respubliki Krym / S.P. Kiril'chuk, V.V. Koshkid'ko // Uchenyye zapiski Krymskogo federal'nogo universiteta im. V. I. Vernadskogo. Ekonomika i upravleniye. — 2017. — T. 3(89), 3. — S. 43–55.
7. O gosudarstvennom oboronnom zakaze ot 29 dekabrya 2012 g.: Federal'nyy zakon 275-FZ (v red. ot 28.06.2022) [Elektronnyy resurs] // Konsul'tant. — Rezhim dostupa: www.consultant.ru/document/cons_doc_LAW_140175/ (data obrashcheniya: 11.09.2023).
8. O gosudarstvennykh informatsionnykh sistemakh Respubliki Krym: Postanovleniye Soveta ministrov Respubliki Krym ot 19 maya 2016 goda 215.
9. O sozdanii avtomatizirovannoy sistemy oplaty proyezda na marshrutakh regul'yarnykh perevozok: Postanovleniye Soveta ministrov Respubliki Krym ot 28.10.2016 528.
10. O federal'noy programme «Reformirovaniye i razvitiye sistemy gosudarstvennoy sluzhby Rossiyskoy Federatsii (2009–2013 gody): Ukaz Prezidenta RF ot 10 marta 2009 g. N 261.
11. Rakhmanova M.S. Problemy razvitiya malogo i srednego predprinimatel'stva v Rossiyskoy Federatsii / M.S. Rakhmanova [Elektronnyy resurs] // Territoriya novykh vozmozhnostey. Vestnik VGUES. — 2021. — 3. — Rezhim dostupa: cyberleninka.ru/article/n/problemy-razvitiya-malogo-i-srednego-predprinimatelstva-v-rossiyskoy-federatsii/viewer (data obrashcheniya: 09.09.2023).
12. Podgotovka upravlencheskoy komandy Respubliki Krym: programma professional'noy perepodgotovki [Elektronnyy resurs]. — Rezhim dostupa: crimea.fa.ru/#rec261137690 (data obrashcheniya: 24.08.2023).
13. Poluoostrov, v kotorom nam ponravitsya zhit': spetsproyekt «Krym budushchego» [Elektronnyy resurs]. — Rezhim dostupa: www.kp.ru/best/crimea/crimea-future/#rec307735115 (data obrashcheniya: 25.07.2023).
14. Pravitel'stvo Respubliki Krym: ofitsial'nyy sayt [Elektronnyy resurs]. — Rezhim dostupa: rk.gov.ru/ru/fcp-object/list (data obrashcheniya: 24.08.2023).
15. Slepokurov A.S. Tekhnologicheskaya platforma «Ustoychivoye razvitiye Kryma» kak kommunikatsionnaya ploshchadka dlya razvitiya innovatsionnogo predprinimatel'stva v regione / A.S. Slepokurov // Problemy i perspektivy innovatsionnogo razvitiya ekonomiki: materialy nauchnogo foruma (XX mezhdun. nauchno-prakt. konf.). — Moskva: Izdatel'stvo: OOO «EkOnis-ekologicheski chistyye tekhnologii», 2016. — S. 200–206.
16. Sotsial'no-ekonomicheskoye razvitiye Respubliki Krym i g. Sevastopolya do 2024 goda: Federal'naya tselevaya programma [Elektronnyy resurs]. — Rezhim dostupa: www.economy.gov.ru/material/file/31429beea65c245f236332222e799dd7/fcp_krym_2025.pdf (data obrashcheniya: 24.07.2023)
17. Shumpeter Y.A. Teoriya ekonomicheskogo razvitiya. Kapitalizm, sotsializm i demokratiya / Y.A. Shumpeter; per. s nem. V.S. Avtonomova, M.S. Lyubskogo, A. Yu. Chepurenko i dr. — M.: Eksmo, 2008. — 864 s.

25 2023

27 2023

332.14:631.15

Erimizina Marina Ivanovna,

Ph.D. in Economics, Associate Professor,
Associate Professor Department of the Accounting, Analysis and Audit,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Voloshina Elena Ivanovna,

Ph.D. in Economics, Associate Professor,
Associate Professor Department of the Accounting, Analysis and Audit,
Institute of Economics and Management,
V.I. Vernadsky Crimean Federal University,
Simferopol, Russian Federation.

Erimizina Ekaterina Nikolaevna,

finance specialist,
LLC Russian Quantum Center,
Moscow, Russian Federation.

**ECONOMIC ASSESSMENT OF INDICATORS OF DEVELOPMENT OF THE
AGRARIAN SPHERE OF CRIMEA, EFFICIENCY OF IMPLEMENTATION OF STATE
MEASURES TO SUPPORT AGRICULTURE AND REGULATION OF
AGRICULTURAL MARKETS IN THE REGION**

, SWOT-

The development of the agrarian sphere of the region is aimed at solving an important national economic task — to provide the population of Crimea and enterprises of the processing industry with their own agricultural products. The extensive way of expanded reproduction has exhausted itself due to the limited land and labor resources. The priority is to ensure food and raw material security of the region through the effective use of material and technical base of the agro-industrial complex on the basis of new high-intensive technologies. The analysis carried out in the course of scientific work allowed to determine the main directions of development of the regional agro-industrial complex, advantages and disadvantages of the organization of agricultural production of Crimea, effective measures of state support of the agrarian sphere.

The State Program of Agriculture Development and Regulation of Markets of Agricultural Products, Raw Materials and Food of the Republic of Crimea is aimed at increasing self-sufficiency of the region with agricultural products and increasing the economic efficiency of agricultural production. The State Program defines the goals, objectives, main directions of agricultural development and regulation of the agro-food market in the Republic of Crimea, as well as financial support and mechanisms for the implementation of the envisaged activities, indicators of their effectiveness.

The purpose of the research is to substantiate effective measures of state support for agriculture and regulation of agricultural markets in the Republic of Crimea on the basis of economic evaluation of indicators of development of the agrarian sphere of the region and analysis of the efficiency of agricultural production intensification. In the course of the study, system analysis, methods of statistical and critical analysis were used to search for and select statistical data, methods of synthesis and deduction were used to summarize the results. In the research the economic assessment of the process of intensification of agricultural production was carried out, the factors influencing the level of provision of the Republic of Crimea with agricultural products were identified and systematized. Special attention in the course of the study was paid to the mechanism of ensuring food security of the Crimean region, which is formed under the influence of the market of agricultural products under the state support of agricultural producers, active social policy of the state and effective development strategy of economic entities. The problems of the first three years of implementation of the State program of agricultural development and regulation of markets of agricultural products, raw materials and foodstuffs of the Republic of Crimea are revealed.

Keywords: intensification, efficiency of the intensification process, SWOT-analysis of the factors of providing the region with agricultural products, financial support of the agricultural sector, directions of spending, indicators of agricultural development.

I.

*

	2017 .	2018 .	2019 .	2020 .	2021 .	2022 .
(	1398	2561	1876	2720	2254	3439
), . . .	1,88	3,41	2,43	3,57	2,86	4,25
1	875	856	806	1017	1150	/
(	280	283	270	353	383	/
), . . .	2,770	3,122	3,505	3,603	4,801	/
(	40,8	42,0	40,8	38,6	41,7	/
), . . .	/	2815	2676	2715	2738	2770
1-	/	107,7	108,1	140,8	115,7	119,6
1	/	231	242	244	242	238
), . . .	/	463	439	384	383	358
), . . .	/	427	460	530	547	519
1	/	36	28	34	37	37
), /	/	0,8	0,6	0,8	0,8	0,8
1	/	/	33,8	34,2	33,4	/
), . . .	744,6	751,1	770,5	762,5	787,3	809,1
), . . .	/	244,1	259,5	243,9	247,9	246,7

*

[4-12]

2022 .

— 244,1 . . .

2018

246,7 . . .

9126 ;

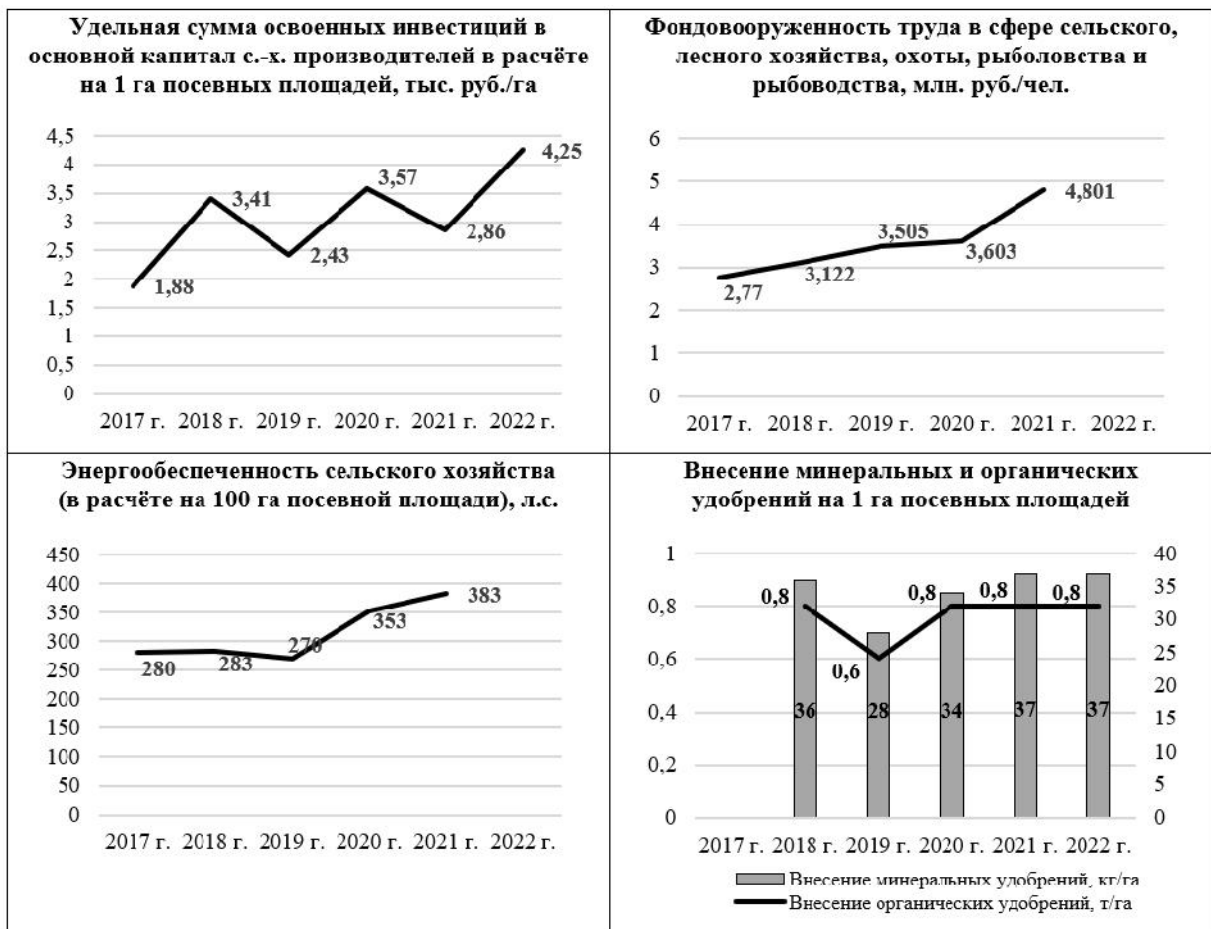
. 2022

— 312 . . .

1

33,4 . . . / . . . 2021 .

33,8 . . . / . . . 2019



.I.

2017–2022 . (

[4–12])

;

;

, 2021 — 910 , 23,8%, 2019 , 2021

, 23,3% 2019 , 10,5% 2020 (.2).

2019–2021 . 1444

618 . .,

2.

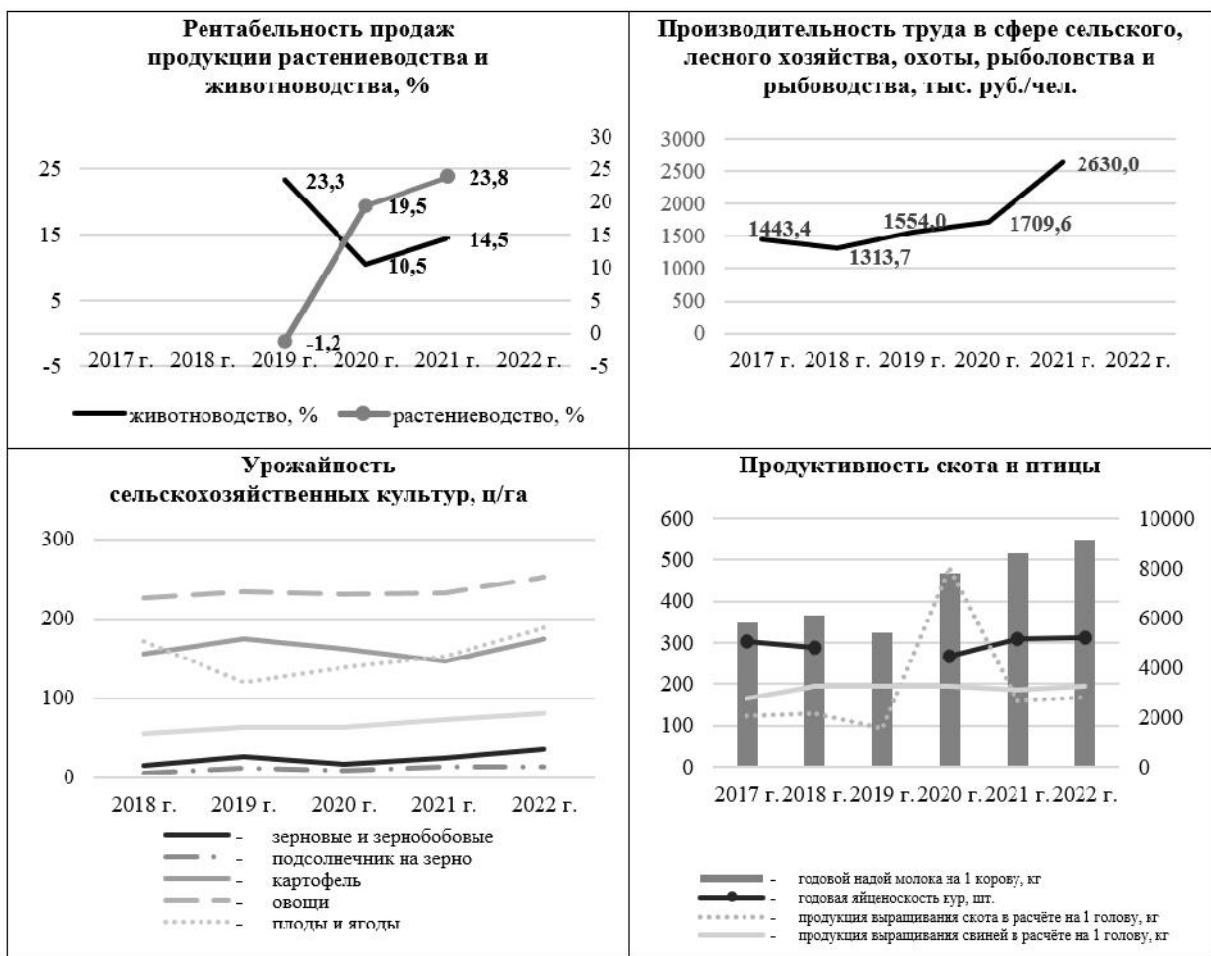
*

	2017 .	2018 .	2019 .	2020 .	2021 .	2022 .
1 .	33,83	17,12	29,32	19,28	32,41	25,18
1	/	/	30,670	29,241	40,732	/
(	1443,4	1313,7	1554,0	1709,6	2630,0	/
	/	/	- 218	902	910	/
, %	/	/	- 1,2	+ 19,5	+ 23,8	/
	/	/	1444	1192	618	/
, %	/	/	+ 23,3	+ 10,5	+ 14,5	/
	/	462	1346	2043	1712	1610
(	/	58,1	69,0	76,9	79,4	71,0
, %	/	15,0	26,6	16,4	25,1	36,3
/	/	6,5	12,1	8,7	14,3	14,3
/	/	156,4	174,4	161,8	147,1	173,9
, /	/	226,5	233,7	230,1	232,8	252,5
, /	/	170,7	120,0	137,9	152,2	189,2
, /	/	55,3	64,2	63,6	73,5	80,8
:	5806	6101	5414	7800	8599	9126
,	303	288	/	266	309	312
1	123	128	92	483	158	167
1	165	195	195	195	187	194

*

[6-12]

(.3).



.2.

2017–2022 . (

[6–12])

13.12.2019 732.

4.

13.12.2019 . 732.

- 2020 3,05 . . 2020 . 4,50 .
- 20 — 941 . . 43 . .
- 16 . . 13 — 220 .

3. SWOT-

*

Факторы	Сильные стороны	Слабые стороны	Возможности	Угрозы
Квалификация, структура, достаточность и текущая кадров сельскохозяйств-венных товарпроизводителей, их сотрудничество с ВУЗами, ведущими подготовку кадров для АПК, меры повышения квалификации специалистов	Функционирование системы подготовки, переподготовки и повышения квалификации сельских кадров обеспечивается Министерством сельского хозяйства Республики Крым и Институтом «Агротехнологическая академия», являющегося структурным подразделением Крымского Федерального университета им. В.И. Вернадского.	Сокращение сельского хозяйства крымского региона, относительно низкий уровень заработной платы, неудовлетворительное состояние социальной инфраструктуры снижают мотивацию труда и ведут к дефициту кадров в сельском хозяйстве. Институт «Агротехнологическая академия» осуществляет приём абитуриентов не самостоятельно, а только в рамках работы приёмной комиссии всего федерального вуза, что не позволяет институту активно влиять на сельскую молодежь в качестве целевой аудитории приёма. В результате множественности выбора и активной рекламной компании представителей других специальностей ВУЗа — выпускники сельских школ при поступлении подают документы за специальностями, не связанными с сельским хозяйством.	Повышение престижности сельских профессий, преодоление нежелания выпускников агротехнологической академии трудоустроиваться в сельскохозяйственных предприятиях. Предоставление грантов и финансовой поддержки молодым специалистам сел, применение денежных фондов мотивации работников, повышение социальных гарантий.	Ослабление кадрового потенциала, снижение спроса на квалифицированный труд. Число бюджетных мест при подготовке специалистов АПК в ВУЗах Крыма не соответствует реальным требованиям рынка труда.
Природно-климатические и почвенные ресурсы региона как фактор обеспечения продовольственной безопасности РК	Высокое содержание гумуса в почвах региона, относительно мягкий климат, разнообразие рельефа с преобладанием степей, т.о. форма и площадь полей позволяет применять индустриальные системы земледелия.	Потеря естественного плодородия, эродированность и различные формы деградации 90% пахотных земель. Одна из причин деградации почв — расширение площади посевов подсолнечника, который выращивается не в рамках севооборота, а несколько лет на одном участке — в качестве монокультуры.	Возможность применения индустриальных систем ведения земледелия, минимизация монокультур, применение научно-обоснованных севооборотов.	Недостаточная увлажненность почв, риск ранневесенних заморозков обуславливают необходимость дополнительных затрат на борьбу с неблагоприятными погодными условиями или компенсацию потерь.
Обеспеченность сельскохозяйственных предприятий основными производственными средствами, их состояние, уровень износа и обновления	Расширение материальной составляющей состава парка машин и механизмов, распространение лизинговых форм приобретения основных средств, увеличение затрат на сохранение и обслуживание техники.	Высокая степень износа основных производственных фондов. Низкая обеспеченность основными средствами производства приводит к росту трудоемкости и увеличению материальных затрат на производство продукции.	Высокая эффективность сельхозпроизводства при оптимальной обеспеченности хозяйствами производственными фондами. Расширение материально-вещественного состава и совершенствование структуры основных фондов, повышение рентабельности их использования.	Нехватка собственных и заемных средств, слабая государственная поддержка, рост цен на сельхозпродукцию, снижение фондовооруженности труда, снижение объемов инвестиций и ввода в действие основных фондов.

Факторы	Сильные стороны	Слабые стороны	Возможности	Угрозы
Обеспеченность сельскохозяйственных предприятий основными производственными средствами, их состояние, уровень износа и обновления	Расширение материально-вещного состава парка машин и механизмов, распространение лизинговых форм приобретения основных средств, увеличение затрат на сохранение и обслуживание техники.	Высокая степень износа основных производственных фондов. Низкая обеспеченность основными средствами производства приводит к росту трудоемкости и увеличению материальных затрат на производство продукции.	Высокая эффективность сельхозпроизводства при оптимальной замене средств, слабая обеспеченности хозяйств основными производственными фондами. Расширение материально-вещного состава и совершенствование структуры основных фондов, повышение рентабельности их использования.	Нехватка собственных средств, слабая государственная поддержка, рост цен на сельскохозяйственную продукцию, снижение производительности труда, снижение объемов инвестиций и ввода в действие основных фондов.
Эффективность использования привлеченных средств, специфика кредитования сельскохозяйственных товаропроизводителей	Расширение форм и методов привлечения средств. Частичная компенсация расходов сельхозтоваропроизводителей за счет государственного бюджета. Бизнес-планирование и контроль заемщика со стороны кредитного учреждения повышает эффективность использования привлеченных средств.	Ужесточение условий кредитования, повышение стоимости кредитов, неприивлекательность кредитования аграрной сферы для банковских учреждений из-за высоких предпринимательских рисков.	Более полное применение банковских услуг кредитного характера: лизинга, факторинга. Для преодоления «нежелания банков» кредитовать сельхозхозяйство государство должно выступить в роли координатора и гаранта возврата заемных средств. Предоставление государственного залога, создание эффективного механизма использования земельных ресурсов в качестве базовского залога, раз-работка механизма реализации участков при использовании этого залога.	Неоднозначность условий для сельскохозяйственных предприятий (при ком-пенсации затрат сель-ского хозяйства и роли координатора и гаранта возврата заемных средств. Предоставление государственного залога, создание эффективного механизма использования земельных ресурсов в качестве базовского залога, раз-работка механизма реализации участков при использовании этого залога.
Воздействие на самообеспеченность крымского региона государственного регулирования (льготное кредитование, льготное налогообложение, региональные программы развития, инвестиционные программы, программы развития отдельных отраслей с-х., программы развития сельскохозяйственной науки), племенной работы и селекции	Повышение инвестиционной привлекательности сельского хозяйства при условии эффективного государственного регулирования (сфинансирование социальных важных, но убыточных отраслей; субсидирование, льготное налогообложение).	Низкий уровень цен на аграрную продукцию. Риск нарушения принципов продовольственной безопасности региона из-за отсутствия надежных и эффективных программ содействия развития отечественного агропроизводства, ослабление материально-технического обеспечения агроформирований	Оптимальное сочетание рыночного и государственного регулирования позволит обеспечить стабильное развитие агропромышленного комплекса, повысить эффективность функционирования рынка и сель-скохозяйственной продукции.	Дефицит бюджета и нестабильность экономики курса являются основными угро-зами, которые не позво-лят в полном объеме осуществить финанси-рование уже принятых агропродовольственных программ и разработку новых инвестиционных проектов в сфере АПК.

Факторы	Сильные стороны	Слабые стороны	Возможности	Угрозы
Уровень сертификации и стандартизации агропродовольственной продукции, контроль качества и безопасности аграрной продукции	Разработаны отечественные стандарты в области безопасности и качества аграрной продукции. Разработана система законодательных актов по вопросам сертификации и стандартизации продукции, контроля качества и защите прав потребителей.	Неэффективная система контроля качества и безопасности пищевых продуктов. Отсутствие законодательной базы по вопросам организационного земледелия.	Повышение региональной продовольственной безопасности государства на основе наращивания производства качественных продуктов питания.	Рост погрешности качества и пищевого происхождения продукции. Процедуры стандартизации и сертификации проводятся недостаточно эффективно.
Уровень, организационная и мотивация труда в аграрных предприятиях. Формы, виды и уровень оплаты труда, ее соответствие напряженному труду в сельскохозяйственном производстве	Применение новых мотивационных подходов, которые основываются на учете и использовании экономических, социальных и социальных-психологических аспектов современного производства.	Нижий уровень заработной платы в сравнении с наиболее низкооплачиваемых работников, а также чувствительных категорий населения, работающих по найму в сельском хозяйстве.	Повышение уровня заработной платы позволит привлечь наиболее низкооплачиваемых работников, а также чувствительных категорий населения, работающих по найму в сельском хозяйстве.	Спад производительности труда в аграрных предприятиях. Низкий уровень мотивации персонала сельскохозяйственных предприятий, включая руководителей.
Структура национального потребления продуктов питания, оценка доли и качества импортной продукции, ее влияние на конкурентоспособность национальной продукции	Расширение ассортимента предлагаемых на рынке продовольственных товаров. Активное импортозамещение продовольственных товаров как естественная реакция на зарубежные санкции в отношении России и Крыма.	Нежесточность государственного регулирования производства и реализации, новых средств государственной поддержки, низкое качество сырья и вспомогательных материалов	Увеличение ассортимента. Модели экспорта продуктов питания позволят ограничить вывоз продукции региона (прежде всего зерновой продукции) для обеспечения собственных потребностей Крыма	Угроза усиления продовольственной зависимости Крыма. Уменьшение объемов производства сельскохозяйственной продукции, убыточность производства, неиспользование производственных мощностей перерабатывающих предприятий, низкая платежеспособность граждан.
Развитие современных технологий производства сельскохозяйственной продукции, перспективы их обновления на ресурсосберегающей основе	Использование новейших технологий сельскохозяйственного производства. Техническое перевооружение производства, ведущие к экономному использованию ресурсов, росту производительности труда, сокращению издержек производства.	Ухудшение возможностей расширения из-за нарушения ценовых соотношений, особенно роста цен на энергоносители, в том числе — бензин и дизельное топливо.	Внедрение более интенсивных технологических процессов и стремление получить более высокое качество продукции. Повышения техничности оснащенности сельского хозяйства.	Снижение государственной поддержки, нарушение паритета цен на промышленную и сельскохозяйственную продукцию, сокращение выпуска сельскохозяйственной техники, отсутствие контроля и бездумное применение удобрений, средств защиты растений.

*

Наименование показателя	2020 г.			2021 г.			2022 г.		
	Показатели	Детализация	Показатели	Детализация	Показатели	Детализация			
Расходы на реализацию подпрограммы 2: «Стимулирование инвестиционной деятельности АПК»	221 248,9 940 933,7 425,28	Евденс в действие 3 объекта агропромышленного комплекса, построенных и модернизированных в 2020 г.	0,0 0,0 0,0	Конкурсный отбор для компенсации затрат на строительство и модернизацию объектов АПК агрохолдинга «Сельхозтехника» Республики Крым — недостаточна для актуализации инвестиционной деятельности	38 798,2 43 215,5 111,39	Сумма расходов представляет собой компенсацию прямых понесенных затрат на строительство 2 площадок хранения, сумма в рамках Республики Крым — недостаточна для актуализации инвестиционной деятельности			
Расходы на реализацию подпрограммы 3: «Комплексное развитие сельских территорий»	218 200,7 220 846,2 101,24	94% (или 207,0 млн. руб.) расходов подпрограммы направлено на благоустройство сельских территорий. При этом: • на строительство жилья в сельской местности выделено 0 руб.; • на развитие инженерной инфраструктуры сельской местности — выделено 0 руб.; • на улучшение жилищных условий сельских жителей — 13,9 млн. руб., что соответствует приобретению жилья площадью 518 м ²	87 460,5 101 939,1 116,6	57% расходов подпрограммы направлено на благоустройство сельских территорий. При этом: • на строительство жилья в сельской местности выделено 0 руб.; • на развитие инженерной инфраструктуры сельской местности — выделено 0 руб.; • на улучшение жилищных условий сельских жителей — 3,0 млн. руб., что соответствует приобретению жилья площадью 93 м ²	16 051,4 16 742,4 104,31	Сумма на развитие сельских территорий недостаточна, основная её часть — 15 млн. руб. выделена на установку детских и спортивных площадок. При этом: • на строительство жилья в сельской местности выделено 0 руб.; • на развитие инженерной инфраструктуры сельской местности — выделено 0 руб.; • на улучшение жилищных условий сельских жителей — 1,79 млн. руб., что соответствует приобретению жилья площадью 53 м ² — на весь Крым			
Расходы на реализацию подпрограммы 4: «Эффективное вовлечение в оборот земель сельскохозяйственного назначения и развитие мелкоземельного комплекса Республики Крым»	460 331,0 780 765,5 159,61	Евденс в эксплуатацию 3,6 тыс. га мелиорируемых земель. За счет проведения культуртехнических мероприятий вовлечено в оборот 1 123,6 га вышедших сельскохозяйственных земель. Обеспечена защита и сохранение земель от ветровой эрозии и опустынивания за счет посадок лесотолос на площади 18,2 га	217 082,4 340 238,0 156,7	Поддержку получили 32 сельхозпроизводителя. Евденс в эксплуатацию 2,3 тыс. га мелиорируемых земель. Не проведены мероприятия по вовлечению в оборот земель сельскохозяйственного назначения	30 958,1 30 958,1 100,00	Поддержку в рамках подпрограммы за гидромелиоративные и -технические мероприятия получили только 7 товаропроизводителей Республики Крым, не предусмотрены расходы на агролесомелиоративные мероприятия			

Наименование показателя	2020 г.		2021 г.		2022 г.	
	Показатели	Детализация	Показатели	Детализация	Показатели	Детализация
Расходы на реализацию подпрограммы 5: «Развитие малых форм хозяйствования»	168 744,2 168 744,2 100,0	Государственную поддержку получили 21 КФХ и сельскохозяйственных. Создано 6 сельскохозяйственных кооперативов	38 182,9 38 182,9 100,0	Из 4-х мероприятий подпрограммы осуществилось финансирование только одного мероприятия. Отсутствует финансирование мероприятий: • «Создание системы поддержки фермеров и развитие сельской кооперации» • «Развитие сельскохозяйственной потребительской кооперации» • «Развитие сельского туризма»	47 521,0 47 521,0 100,00	2/3 всех средств подпрограммы выделено на реализацию регионального проекта «Акселерация субъектов малого и среднего предпринимательства»; при реализации подпрограммы не предусмотрены расходы на поддержку фермеров и развитие сельской кооперации
Расходы на мероприятия по обеспечению реализации Государственной программы, не вошедшие в подпрограммы	167 074,8 166 704,2 99,78	Из суммы расходов: • на руководство и управление в сфере сельского хозяйства РК использовано 111 млн. руб. (или 67%); • на поддержку и развитие кадрового потенциала агропромышленного комплекса — 22,3 млн. руб. (13%); • на приобретение технической средств и оборудования для осуществления контрольно-надзорных функций — 1,7 млн. руб. (1%).	173 088,0 171 346,1 99,0	Основная сумма расходов подпрограммы (67%) (115 млн. руб.) приходится на управление в сфере сельского хозяйства; 18% (30,7 млн. руб.) — на обеспечение подведомственных учреждений; это больше, чем суммарные расходы на подпрограммы 2, 3, 4 и 5. Не предусмотрены расходы на мониторинг с/х земель, это мероприятие проводилось в 2020 году, т. о. нет системы и регулярности в проведении мониторинга.	179 162,5 179 025,3 99,92	Из суммы расходов 64% (115 млн. руб.) приходится на управление в сфере сельского хозяйства; 17% (30,5 млн. руб.) — на обеспечение подведомственных учреждений; это больше, чем суммарные расходы на подпрограммы 2, 3, 4 и 5. Не предусмотрены расходы на мониторинг с/х земель, это мероприятие проводилось в 2020 году, т. о. нет системы и регулярности в проведении мониторинга.

5.

*

	2020 .	2021 .	2022 .
1.			
() (1	14 500,0	19 981,7	20 445,9
() ,	31 543,9	39 000,0	44 900,8
() , %	/	/	84,3
() , %	/	/	56,05
2.			
() ,	2,007	0,709	1,19
() ,	0,801	0,959	2,025
() ,	94,6	60,0	49,5
,		/	6,9
,	6,5	6,8	7,1
, %		4,6	4,3
,		4,86	
,	3	—	1
,	3 602,3	2 296,4	421,4
,	1 123,6	387,1	551,9
3.			
,	908,3	1 411,8	1 926,50
() ,	66,3	51,4	90,40
() ,	12,0	12,9	31,10
() ,	92,0	123,9	137,60
,	145,1	143,1	130,0
,	202,8	193,3	198,3
() ,	0,0808	0,081	0,081

	2020 .	2021 .	2022 .
	4 656,0	4 959,0	4 800,0
4.			
/ ()	12,5	12,6	6,0
, %	15,1	12,09	11,57
5.			
, %	99,99	99,9	99,994
-	2	2	1
-	95	94	95

* [1, 2, 3]

SWOT-

1. 2020
a26d-10c4ef4edb5d ([: 14.09.2023). — : msh.rk.gov.ru/structure/f3dc184f-7f69-4480-
2. 2021
8eb6-7cf6a0bb2fe0 ([: 14.09.2023). — : msh.rk.gov.ru/structure/9111c267-bfaa-46fe-
3. 2022
42d7-ae08-cee3b1b4a3fa ([: 14.09.2023). — : msh.rk.gov.ru/documents/3ee6ec42-b9c6-
4. () [] — : 82.rosstat.gov.ru/folder/275311 (: 14.09.2023).
5. [] — : 82.rosstat.gov.ru/folder/27520 (: 14.09.2023).
6. . 2020: . [] — : rosstat.gov.ru/bgd/regl/b20_14p/Main.htm (: 14.09.2023).
7. . 2021: . [] / — : rosstat.gov.ru/storage/mediabank/Region_Pokaz_2021.pdf (: 14.09.2023).
8. . 2022: . [] / — : rosstat.gov.ru/storage/mediabank/Region_Pokaz_2022.pdf (: 14.09.2023).
9. . 2019: . [] / — ., 2020 — 218 . — : 82.rosstat.gov.ru/storage/mediabank/ %20 %20 %20 .%202019 %20 .pdf (: 14.09.2023).
10. . 2020: . [] / — ., 2021 — 226 . — : 82.rosstat.gov.ru/storage/mediabank/ owk7CaUm/ %20 %20 %20 .%202020.pdf (: 14.09.2023).
11. . 2021: . [] / — ., 2021 — 202 . — : 82.rosstat.gov.ru/storage/mediabank/ %20 %20 .pdf (: 14.09.2023).
12. . 2022: . [] / — ., 2023 — 213 . — : 82.rosstat.gov.ru/storage/mediabank/ %20 %20 %20 .pdf (: 14.09.2023).

СПИСОК ЛИТЕРАТУРЫ

1. Godovoj otchet za 2020 god o hode realizatsii i otsenke effektivnosti Gosudarstvennoj programmy razvitija sel'skogo hozjajstva i regulirovanija rynkov sel'skohozjajstvennoj produkcii, syr'ja i prodovol'stviya Respubliki Krym [Elektronnyj resurs]. — Rezhim dostupa: msh.rk.gov.ru/structure/f3dc184f-7f69-4480-a26d-10c4ef4edb5d (data obraschenija: 14.09.2023).
2. Godovoj otchet za 2021 god o hode realizatsii i otsenke effektivnosti Gosudarstvennoj programmy razvitija sel'skogo hozjajstva i regulirovanija rynkov sel'skohozjajstvennoj produkcii, syr'ja i prodovol'stviya Respubliki Krym [Elektronnyj resurs]. — Rezhim dostupa: msh.rk.gov.ru/structure/9111c267-bfaa-46fe-8eb6-7cf6a0bb2fe0 (data obraschenija: 14.09.2023).
3. Godovoj otchet za 2022 god o hode realizatsii i otsenke effektivnosti Gosudarstvennoj programmy razvitija sel'skogo hozjajstva i regulirovanija rynkov sel'skohozjajstvennoj produkcii, syr'ja i prodovol'stviya Respubliki Krym [Elektronnyj resurs]. — Rezhim dostupa: msh.rk.gov.ru/documents/3ee6ec42-b9c6-42d7-ae08-cee3b1b4a3fa (data obraschenija: 14.09.2023).
4. Investitsii v osnovnoj kapital po Respublike Krym (bez sub»ektov malogo predprinimatel'stva i ob»joma investitsij, ne nabljudajemyh prjamymi statisticheskimi metodami) [Elektronnyj resurs]. — Rezhim dostupa: 82.rosstat.gov.ru/folder/275311 (data obraschenija: 14.09.2023).

5. Nalichie osnovnyh fondov po polnoj uchetnoj stoimosti na konets otchetnogo goda po vidam ekonomicheskoj dejatel'nosti [Elektronnyj resurs]. — Rezhim dostupa: 82.rosstat.gov.ru/folder/27520 (data obraschenija: 14.09.2023).

6. Regiony Rossii. Sotsial'no-ekonomicheskie pokazateli. 2020: Stat. sb. [Elektronnyj resurs]. — Rezhim dostupa: rosstat.gov.ru/bgd/regl/b20_14p/Main.htm (data obraschenija: 14.09.2023).

7. Regiony Rossii. Sotsial'no-ekonomicheskie pokazateli. 2021: Stat. sb. [Elektronnyj resurs] / Rosstat. — M., 2021. — 1112 s. — Rezhim dostupa: rosstat.gov.ru/storage/mediabank/Region_Pokaz_2021.pdf (data obraschenija: 14.09.2023).

8. Regiony Rossii. Sotsial'no-ekonomicheskie pokazateli. 2022: Stat. sb. [Elektronnyj resurs] / Rosstat. — M., 2022. — 1122 s. — Rezhim dostupa: rosstat.gov.ru/storage/mediabank/Region_Pokaz_2022.pdf (data obraschenija: 14.09.2023).

9. Respublika Krym v tsifrah. 2019: Krat.stat.sb. [Elektronnyj resurs] / Krymstat- S., 2020 — 218 s. — Rezhim dostupa: 82.rosstat.gov.ru/storage/mediabank/Respublika%20Krym%20v%20tsifrah.%202019%20SAJT.pdf (data obraschenija: 14.09.2023).

10. Respublika Krym v tsifrah. 2020: Krat.stat.sb. [Elektronnyj resurs] / Krymstat- S., 2021 — 226 s. — Rezhim dostupa: 82.rosstat.gov.ru/storage/mediabank/owk7CaUm/Respublika%20Krym%20v%20tsifrah.%202020.pdf (data obraschenija: 14.09.2023).

11. Respublika Krym v tsifrah. 2021: Krat.stat.sb. [Elektronnyj resurs] / Krymstat- S., 2021 — 202 s. — Rezhim dostupa: 82.rosstat.gov.ru/storage/mediabank/RK%20v%20tsifrah.pdf (data obraschenija: 14.09.2023).

12. Respublika Krym v tsifrah. 2022: Krat. stat. sb. [Elektronnyj resurs] / Krymstat — S., 2023 — 213 s. — Rezhim dostupa: 82.rosstat.gov.ru/storage/mediabank/Krym%20v%20tsifrah%20SAJT.pdf (data obraschenija: 14.09.2023).

20 2023

27 2023

