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FINANCIAL AND CREDIT SUPPORT OF MARKET-ORIENTED MANAGEMENT OF TRANSPORT ENGINEERING ENTERPRISES

Purpose. To determine the priorities of the financial and credit support of transport machine building taking into consideration the needs of the national economy, state of marketing environment, and requirements of corporate management.

Methodology. The information basis of the study is represented by the statistic data formed according to the classification of economic activity types KVED-2010 in terms of section C "Processing industry", divisions 29 "Production of motor vehicles, trailers, and semitrailers" and 30 "Production of other transport means". The research methodology involves analysis of dynamics and structure of production volumes, net profit of the transport engineering enterprises, formalization of trends, evaluation of credit capacity of the industry, and marketing and financial diagnostics.

Findings. Key trends in the development of the transport machine-building market within the period of 2012–2020 are generalized: reduction of total production volumes and identification of subindustries-drivers of its growth. Structural shifts in the national economy owing to the growing specific weight of the production of motor vehicles, trailers, semitrailers in terms of prevalence of other transport means (first of all, railway and air ones) are identified. The priorities of financial and credit support of the transport machine building are specified taking into account the needs of civil national economy (railway locomotives and rolling stock, motor vehicles, air- and spacecraft, accompanying facilities) and military economy (military vehicles). To evaluate the objects of credit support, it is proposed to use a concept of credit capacity of an enterprise as its ability of accumulating banking credits on its balances in terms of certain currencies, terms, designated purpose, interest rates etc. as well as their timely servicing and payment.

Originality. The scientific and methodological foundations of determining the priorities of financial and credit programme of the transport engineering enterprises are substantiated in the context of market-oriented corporate management, whose advantages are as follows (compared with the current ones): highlighting the time lags of production crisis and after-crisis renovation in the context of industries; determining structural shifts in the field of transport machine building, and identifying the economic activity types being leaders or outsiders in the sphere of financial and credit support of the expanded reproduction on this industry; defining polarization of business entities, being different in their size, according to the financial state and solvency with the focus on competitive advantages or crisis.

Practical value. Proposals as for restructuring the activities of the transport engineering enterprises are substantiated basing on marketing diagnostics of the state of their internal and external environment, threats and possibilities in terms of war time, Ukraine's getting a status of the member for the EU accession, and post-war renovation of the economy. In the framework of market-oriented management of the transport engineering enterprises, certain tendencies in the financial and credit support of their complex innovative development are substantiated.

Keywords: *financial and credit support, market-oriented management, transport engineering*

Introduction. Current stage of the national economy development in the context of war time actualizes the problems of transport engineering development. The national transport complex plays an important role for the segments of civil and war economy. However, its effective functioning is limited by high wear of motor and railway transport vehicles, air, marine, and river vessels as well as lack of military transport means. The needs for ensuring national safety in the defence and economic spheres require radical improvement of the management of manufacturing and economic system of transport machine building by orienting towards the market demands. Unfortunately, growing volumes of modern transport means are restrained by low production and financial potential of the machine-building complex. Its downswing reflects the overall tendencies of de-industrialization of Ukraine due to both unfavourable structural motions in the economy and military actions with the occupation of a part of its territory.

We agree with Stepanova Y. that a critical state of most machine-building enterprises requires immediate discussion of the problems and searching for the appropriate ways out of the crisis [1]. Special attention should be paid to the assessment of marketing positions of the transport engineering enterprises and competitiveness of their products. To implement successfully a programme for Ukraine's accession to the EU, one should deal with certain structural and functional changes in the machine-building field, determine their influence on the volumes of export and import of transport means, and define competitiveness of the transport engineering enterprises [2]. The following is important here: evaluation of the expected effects for the consumers of the products manufactured by this branch – transport enterprises, elaboration of the proposals for widening business partnerships in the sphere of implementation of target programmes of a machine-building complex, innovative-investment re-equipment of the transport engineering enterprises. It is necessary to intensify the marketing effect on the formation of market value of the transport engineering enterprises and form long-term sources of the financial and credit resources. Merging the production, financial, marketing, and intellectual capitals of the manufacturers of transport means and their operators will favour sustainable development of the enterprises of machine-building and transport complex.

Literature review. A problem of how to improve the management efficiency for the transport engineering enterprises

and increase the competitiveness of their products along with their financial results is the subject of numerous studies carried out by different scientists. The paper by Zaverkin A. V., Kuzmenko S. V. and Cherednychenko S. P. [3] generalizes the innovative trends in terms of optimization of transport services of the machine-building enterprises. The paper by Chobitok V. I. evaluates a level of the development of industrial enterprises of the railway transport machine building [4]. Similar problems are found in the publication by Dykan V., Kirdina O., Ovchynnikova V., Kalicheva N. and Obruch H. dealing with the scientific and applied problems of the formation and implementation of a universal and effective system of state control for the railway transport development [5]. The paper by Navrotska T. A. [6] substantiates the expert estimation of the state of functional subsystems for managing innovative activities of the transport engineering enterprises.

We agree with Gavrysh O. and Boiarynova K. as for the fact that diagnostics of the economic and functional state of the innovatively oriented machine-building enterprises should be carried out as follows: structuring the indices that determine the results of economic functioning; evaluating the level of technological modes; levelling the influence on the values of nonsystem event indices; and identifying a range of the recommended level of values [7].

The paper by Bachkir L. V. and Balycheva A. I. systematizes the theoretical grounds and assesses the state of innovative processes along with their effect on the business activities of the transport engineering enterprises [8]. The paper by Alkema V. G. and Kopytko M. I. develops a methodological approach to counteract the effects of destabilizing factors of the external environment of the transport engineering enterprises owing to the united efforts of the enterprises and state and social institutions [9]. Katerna O. has similar views; she proposes that the conceptual foundations of the integrated intellectual transport system in Ukraine would be based on the functional structure influencing considerably the political, economic, and social situation in Ukraine [10].

A team of authors consisting of Kosova T., Smerichevskyi S., Ivashchenko A., and Radchenko H. has improved the approaches to the financial-auditing and credit support of the market-oriented company management in terms of risk environment [11]. Attention should be paid to a substantiated methodological approach by Mnyh O. B. and Davidovych I. M. to assess the innovative potential of a transport engineering enterprise aimed at increasing the efficiency of costs for research and development as well as activity diversification [12].

Unsolved aspects of the problem. While valuing highly the scientific results of the aforementioned authors, we should emphasize the necessity of ensuring synthesis of the foundations of the financial-credit support and the instruments of market-oriented management of the transport engineering enterprises. We should define the priority trends in the development of transport in the national economy system basing on its provision with modern vehicles and corresponding infrastructure.

The purpose. The purpose of the paper is to determine the priorities of the financial-credit support for the manufacturing of transport means taking into account the needs of national economy, state of a marketing environment, and corporate management requirements.

Description of the methodology (structure, sequence). The information basis of the research is represented by the statistic data formed according to the classification data concerning the economic activity types KVED-2010 (Classifier of economic activities) in terms of section C "Processing industry", divisions 29 "Production of motor transport means, trailers, and semitrailers" and 30 "Production of other transport means". Division 29 includes the following groups: 29.1 "Production of motor transport means", 29.2 "Production of bodies for motor transport means, trailers, and semitrailers", 29.3 "Production of assemblies, parts, and devices for motor transport means". Division 30 includes following groups: 30.1 "Construction of vessels and boats", 30.2 "Production of railway locomotives and rolling stock", 30.3 "Production of air- and spacecraft, accompanying facilities", 30.4 "Production of military transport means", 30.9 "Production of transport means not belonging to other groups". The research methodology involves analysis of dynamics and structure of production volume, net profit of the transport engineering enterprises within the period of 2012–2020, formalization of trends, evaluation of credit capacity of the branch, and marketing and financial diagnostics.

Results. Considerable changes have been taken place on the transport machine-building market within the analyzed ten-year period (Table 1).

Generally, the production volume in the sphere has increased by 0.7 %. A considerable growth (by 2.693 times) is seen in terms of manufacturing of motor vehicles, trailers, and semitrailers (division 29), i. e. the motor vehicle production (group 29.1) – by 1.434 times, production of bodies for motor vehicles, trailers, and semitrailers (group 29.2) – by 3.142 times, and production of assemblies, parts, and equipment for motor vehicles (group 29.3) – by 5.536 times. Production of other transport means (division 30) has decreased by 32.2 %, particularly because of manufacturing of railway locomotives and rolling stock (group 30.2) – by 65.4 %. The rest of sub-industries of the production of other transport means have demonstrated their growth: production of military transport means (group 30.4) – by 5.850 time, production of transport means not belonging to other groups (group 30.9) – by 4.301 times, construction of vessels and boats (group 30.1) – by 1.572 times, and production of air- and spacecraft and accompanying facilities (group 30.3) – by 1.049 times. The available contradicting tendencies of reduction and increase in the production volumes in different segments of transport means have stipulated considerable structural shifts. Specific weight of the production of motor vehicles, trailers, and semitrailers (division 29) has grown from 16.33 to 43.68 %; in case of other transport means, it has decreased from 83.67 to 56.32 %. On average, within the period under analysis the manufacturing of products for motor transport accounted for 30.74 %; other transport means accounted for 69.26 % including marine and river transport – 2.87 %, railway transport – 27.08 %, air transport – 32.29 %, and military transport – 6.15 %.

While evaluating structural dynamics in terms of certain subindustries of division 29, one should recognize its relative stability for the motor vehicle production (11.43 %), production of bodies for motor vehicles, trailers, and semitrailers (1.93 %); on the contrary, a share of production of assemblies, parts, and equipment for motor vehicles have risen greatly – from 4.70 to 25.83 % at the average value of 17.37 %. When assessing structural dynamics as for certain sub-industries of division 30, we should highlight its relative stability for the production of vessels and boats (2.87 %) as well as other transport means (0.87 %). However, a share of production of railway locomotives and rolling stock have reduced from 56.88 to 19.53 % at the average value of 27.08 %; in case of military transport means, the growth is from 1.34 to 7.78 % at the average value of 6.15 %. Dynamics of the specific weight of the production of air- and spacecraft as well as accompanying equipment is controversial as well. Within the period of 2012–2015 it has grown from 22.53 to 48.60 % with following reduction down to 23.49 % by the end of the analyzed period at the average value of 32.29 %.

To formalize the trends in the production volumes of the transport engineering enterprises, a timeline of 2012–2021 was used exclusive of the cases when sharp deterioration of the index was observed in 2020, and it was excluded from the calculations (Table 2).

At the level of transport machine building and its two subindustries as well as groups 29.1, 30.1 and 30.2, the production volume dynamics is described by the parabola with upward branches. It means that during the first part of the analyzed pe-

Table 1

Analysis of the dynamics and structure of production volumes of the transport engineering enterprises within the period of 2012–2021 [13]

Year	Codes of the economic activity types										
	29 + 30	29	29.1	29.2	29.3	30	30.1	30.2	30.3	30.4	30.9
	UAH million										
2012	88825.8	14504.6	9662.5	669.5	4172.7	74321.1	2281.8	50521.5	20016.1	1189.0	312.7
2013	61090.0	11463.9	6782.0	590.6	4091.3	49626.1	2061.3	25857.5	19870.4	1576.0	260.9
2014	48049.3	12815.6	5859.6	1448.5	5507.4	35233.7	1872.1	11630.4	19909.9	1601.1	220.3
2015	50332.0	14707.7	5352.5	1032.6	8322.6	35624.3	955.1	6817.9	24461.1	3129.2	261.0
2016	54322.9	17126.3	5697.2	1265.0	10164.1	37196.7	1034.6	6081.4	24547.4	5060.5	472.7
2017	71210.0	23360.6	7893.5	1381.0	14086.2	47849.4	2307.5	11217.9	27035.4	6733.7	555.0
2018	82073.3	29846.3	9448.0	1514.3	18883.9	52227.0	1452.1	20842.0	22233.6	6706.6	992.8
2019	100272.5	34240.1	10161.9	2072.9	22005.4	66032.3	1928.1	37287.8	20623.8	5084.3	1108.4
2020	78725.1	29814.4	8534.5	1585.3	19694.7	48910.7	3270.9	19534.4	18473.9	6458.0	1173.5
2021	89419.4	39057.6	13854.7	2103.6	23099.3	50361.8	3587.4	17467.1	21006.3	6956.0	1345.0
Growth rate 2021/2012, times	1.007	2.693	1.434	3.142	5.536	0.678	1.572	0.346	1.049	5.850	4.301
	structure, %										
2012	100	16.33	10.88	0.75	4.70	83.67	2.57	56.88	22.53	1.34	0.35
2013	100	18.77	11.10	0.97	6.70	81.23	3.37	42.33	32.53	2.58	0.43
2014	100	26.67	12.19	3.01	11.46	73.33	3.90	24.21	41.44	3.33	0.46
2015	100	29.22	10.63	2.05	16.54	70.78	1.90	13.55	48.60	6.22	0.52
2016	100	31.53	10.49	2.33	18.71	68.47	1.90	11.19	45.19	9.32	0.87
2017	100	32.81	11.08	1.94	19.78	67.19	3.24	15.75	37.97	9.46	0.78
2018	100	36.37	11.51	1.85	23.01	63.63	1.77	25.39	27.09	8.17	1.21
2019	100	34.15	10.13	2.07	21.95	65.85	1.92	37.19	20.57	5.07	1.11
2020	100	37.87	10.84	2.01	25.02	62.13	4.15	24.81	23.47	8.20	1.49
2021	100	43.68	15.49	2.35	25.83	56.32	4.01	19.53	23.49	7.78	1.50
average	100	30.74	11.43	1.93	17.37	69.26	2.87	27.08	32.29	6.15	0.87

Table 2

Formalization of the trends in the production volumes of the transport engineering enterprises

Code of the economic activity type	Time lag for equation construction	Equation	Coefficient of multiple determination	Function shape	Direction of the parabola branches	Function type
29 + 30	2012–2019	$y = 3486.9x^2 - 28{,}304x + 107{,}976$	0.935	polynomial	upwards	–
29		$y = 683.48x^2 - 3007.1x + 15{,}861$	0.984	polynomial	upwards	–
29.1		$y = 348.17x^2 - 2856.5x + 11{,}583$	0.8839	polynomial	upwards	–
29.2		$y = 172.29x + 471.5$	0.7682	linear	–	growing
29.3		$y = 2694.9x - 1222.8$	0.9382	linear	–	growing
30		$y = 2803.4x^2 - 25{,}297x + 92{,}115$	0.9129	polynomial	upwards	–
30.1	2012–2021	$y = 87.285x^2 - 805.03x + 3168.2$	0.6458	polynomial	upwards	–
30.2	2012–2019	$y = 3144.8x^2 - 29{,}728x + 74{,}866$	0.9885	polynomial	upwards	–
30.3	2012–2021	$y = -370.52x^2 + 3760.4x + 14{,}839$	0.6529	polynomial	downwards	–
30.4		$y = 756.94x + 386.23$	0.7964	linear	–	growing
30.9		$y = 160.04e^{0.2233x}$	0.9137	exponential	–	growing

riod, a reduction of the index was observed with further growing. In terms of group 30.3, the production volume dynamics is described by the parabola with downward branches showing the opposition of the earlier defined trends, i.e. growth at the beginning of the period and reduction at the end of this period. The production volume dynamics in groups 29.2, 29.3 and 30.4 is described by the linear growing function; in case of group 30.9, it is described by the exponential one that demonstrates certain stability of the trends in the production volume expansion.

The availability of the required financial volumes at the expense of internal and external sources is the indispensable conditions of the expanded reproduction.

Amortization and net profit are among the internal ones. The average annual volume of net losses (Table 3) at the level of transport engineering industry within the period of 2012–2021 was UAH 324.1 million at the expense of motor vehicle, trailer, and semitrailer production (division 29) with the average annual negative financial result being UAH 1167.7 million. The average annual volume of net losses at the level of production of other transport means (division 30) was UAH 843.6 million though there were losses within the years of 2014–2016, 2020.

The motor vehicle production (group 29.1) has the worst conditions for reproduction at the expense of internal sources as within the whole analyzed period there were losses with the average annual value of UAH 1776.0 million. The second type in terms of the average annual volume of losses is the production of railway locomotives and rolling stock showing UAH (740.7) million; in this context, four periods were profitable, and six periods were unprofitable.

The best net profit indices were demonstrated by the production of air- and spacecraft and accompanying facilities (group 30.3); no unprofitable period is found here, and average net profit is UAH 1528.2 million, being maximal among all the values in Table 3. In terms of the group rating, the second result as for the volume of the index under consideration belongs to 29.3 "Production of assemblies, parts, and devices for motor vehicles" with the average annual value of UAH 582.7 million irrespective of the four unprofitable periods. A break-even activity during the analyzed period was demonstrated by group 29.2 "Production of bodies of motor vehicles, trailers, and semitrailers"; one year of unprofitable operation was shown by group 30.9 "Production of transport means not belonging to other groups"; and three years of loss-making activity was demonstrated by group 30.4 "Production of military transport means". However, despite that, the average annual indices in terms of the two latter groups are positive.

A system-based nature of the unprofitable activity results in unrecovered losses in the summary balance of the transport engineering enterprises and even in negativeness of the owned capital (Table 4).

After a long period of reduction of owned capital from UAH 29,998.7 million in 2013 down to UAH 6204.8 million in 2016, a reverse tendency formed, and in 2021 its value was UAH 38,815.8 million. The main cost of capital is concentrated on the balances of large enterprises. Other companies have negative value of their owned capital: medium ones – during five years, small ones – within 2019–2021, and micro-companies – in 2020. The main cause of the described situation is unrecovered loss. Within the period of 2014–2017, they were at the level of the industry in general; within the analyzed period – on the balance sheets of medium, small, and micro-enterprises. Large business entities had unrecovered losses in 2014; during the following periods one can observe clear tendency to the undistributed profit increase.

In terms of limited volume of the internal financial resources, credits of banking institutions are gaining great importance. As of 01.06.2022, their volume obtained by the business entities of transport machine building was only UAH 3433.5 million or about 10 % of the owned capital volume (Table 5).

Relying on the data from Table 5, a "credit capacity" has been evaluated – a theoretical concept proposed by the authors based on the synthesis of adjective "credit" and noun "capacity". The concept "capacity" is used actively in physics and technology; however, despite the variety of interpretations, it means the object's capability to concentrate, accumulate, and store something. We understand credit capacity of an enterprise as the capability to accumulate bank credits on its balances in terms of certain currencies, terms, designated purpose, interest rates etc. as well as their timely servicing and payment.

The main share of credits for the transport engineering enterprises is originated in foreign currency 54.76 %; its majority (47.46 %) is obtained by large business entities manufacturing other transport means. A considerable volume of credits in the national currency is given to medium enterprises – 24.94 % in terms of division 29 and 7.65 % in terms of division 30. Thus, large transport engineering companies have greater financial competitiveness while small and microenterprises are characterized by worse financial state and more complicated access to the external financing. The limited volume of bank crediting for the transport engineering enterprises is determined not only by objective factors of their economic situation but also by subjective factors of the assessment of their solvency by the banking institutions by establishing steep demands and unfavourable crediting conditions. We agree with Kuzmin O. Ye. and Melnyk O. G. concerning the formation of an endless circle when the national financial and credit institutions give credits to machine-building enterprises, which really need them, upon very disadvantageous terms; that deteriorates the borrowers' financial state even more [17]. It is necessary to develop a universal and clear indicator and criterion base for diagnosing their solvency to eliminate the problems of subjectivity, bias, and incoordination in this sphere along with the formation of concrete substantiated criteria for determining credit ratings of the national enterprises of transport machine building.

Table 3

Analysis of the net profit dynamics of the transport engineering enterprise within the years of 2010–2021, UAH million [14]

Year	Codes of the economic activity type										
	29 + 30	29	29.1	29.2	29.3	30	30.1	30.2	30.3	30.4	30.9
2012	6393.6	–510.3	–442.6	12.7	–80.4	6903.9	–123.9	4956.4	2121	–61.3	11.7
2013	1303.1	–140	–145.2	8.5	–3.4	1443.2	23.1	277.1	1104.2	24.3	14.4
2014	–11,501.5	–5066.5	–4675.1	23.1	–414.5	–6435	–814.5	–5875	331.2	–4.4	–72.4
2015	–7961.2	–2728.5	–2885	21.2	135.2	–5232.7	–586.4	–7175.2	2422.9	103.2	2.8
2016	–2149.9	–545.1	–1021.1	59.3	416.8	–1604.8	157.9	–4242.5	2423.8	24.9	31
2017	3440.5	–30.2	–164.3	58.9	75.2	3470.7	111.8	–974.9	3707.7	516.1	110
2018	701.5	–2851.8	–4465.6	3.4	1610.4	3553.3	131.6	907.2	1746.5	675.8	92.2
2019	9842.6	3634.3	–356.4	7.1	3983.6	6208.3	84.4	6553.7	229.3	–841.7	182.7
2020	–4799.5	–3984.4	–3601.7	2.7	–385.4	–815.1	180.7	–1737.6	400.8	238.6	102.3
2021	1490.0	546.0	–3.3	60.0	489.3	944.0	153.9	–96.3	794.5	–18.4	110.4
average	–324.1	–1167.7	–1776.0	25.7	582.7	843.6	–68.1	–740.7	1528.2	65.7	58.5

Table 4

Dynamics of the owned capital and undistributed profit of the transport engineering enterprises, UAH thousand [15]

Year	Total	including business entities			
		large	medium	small	micro
	owned capital				
2013	29,998.7	20,752.4	8443.9	802.4	441.1
2014	17,341.8	10,682.6	6410.0	249.3	74.2
2015	6906.8	10,861.7	–4438.8	483.9	7.5
2016	6204.8	16,045.8	–10,301.7	460.7	123.3
2017	17,435.8	23,221.7	–6363.0	577.2	478.1
2018	19,149.6	21,800.2	–3311.3	660.8	359.6
2019	27,219.8	22,507.8	5920.3	–1208.3	200.3
2020	31,132.0	36,714.0	–4250.2	–1331.7	–1922.9
2021	38,815.8	30,743.7	8576.8	–504.7	536.9
	undistributed profit (unrecovered loss)				
2013	6017.7	9707.9	–3536.8	–153.4	–196.5
2014	–5554.6	–73.5	–4995.6	–485.5	–315.8
2015	–13,426.9	3886.2	–16,908.6	–404.6	–388.6
2016	–12,644.7	9744.8	–22,334.8	–54.7	–78.6
2017	–2291.6	18,427.7	–20,216.3	–503.0	–47.8
2018	41.2	11,727.3	–11,540.1	–146.0	–26.0
2019	6415.4	13,247.4	–4890.1	–1941.8	–46.8
2020	8156.0	28,091.0	–17,590.6	–2344.5	–2428.4
2021	15,143.3	23,379.7	–6257.2	–1979.2	–248.0

The majority of medium, small, and microenterprises of transport engineering are in crisis now. To overcome the crisis, it is necessary to implement market-oriented management for the transport machine-building enterprises; in particular, it is required to restructure the activity on the basis of marketing analysis, thorough evaluation of risks and possibilities, factors of internal and external order, and obtaining synergy from their effective interaction. The main internal factors that should be considered are as follows: specialization while manufacturing one or another transport means; organizational and legal form, enterprise size; level or material, energy, and labour intensity of the production; staff qualification; peculiarities of cooperation and integration with other business entities; specifics of marketing and sales activities; available individual orders, mass or/and high-volume outputs of final products, etc. [18]. The main external factors to be taken into account while elaborating a development strategy for the transport machine-building enterprises are as follows: military situation, instability, loss of production potential within the occupied territories and due to hostile firing; violation of the traditional logistic networks; unprotected property rights etc. There are the following threats for the functioning of the transport engineering enterprises: available unclaimed facilities due to their moral and physical obsolescence; ineffective use of production factors; loss of sales markets, sources of raw materials, equipment, and energy carriers; complex access to the external financial sources; low level of investment. There are the following prospects for the functioning of the transport engineering enterprises: increasing investment attractiveness under conditions of completed military situation and military actions, improving the level of the external competitiveness of products and finding new sales markets under conditions of Ukraine's getting a status of candidate for the EU accession; modernization of the material and technical base at the expense of international grants and funds allocated for the post-war renovation of economy; increasing production of military transport means; use of different credit programmes of banking and other financial institutions. Economic security of the transport machine-building enterprises of Ukraine under current conditions is the pledge of the national and economic security [19].

In the frameworks of market-oriented management of the transport engineering enterprises, an approach is proposed for financial and credit support of their complex innovative development that will help accelerate modernization of the main means and improve international competitiveness of the industry. Its signs are as follows: orientation of the production programme and qualitative characteristics of the products to the consumers' needs; implementation of product innovations; harmonization of financial flows as for the financing sources and financing objects; control of designated purpose and effective use of financial and credit resources. A production programme of the transport machine-building enterprises should be formed with the focus on market needs and determined by the consumer demand for the finished product. There are following stages of its development: market surveying to define a list of new-generation transport vehicles or the ones being absent on the market but requiring their replacement; analysis of technical and technological possibilities of

Table 5

Distribution of the credits extended to the business entities in the national and foreign currencies in terms of business entity sizes and transport engineering types as of June 1, 2022 [16]

Size of business entities	KVED code	Credit fund balance in terms of currencies, UAH million			Structure in terms of currencies, %		
		total	national	foreign	total	national	foreign
large	29	41.0	–	41.0	1.19	0.00	1.19
	30	1629.7	0.1	1629.6	47.47	0.00	47.46
medium	29	862.4	856.4	6.0	25.12	24.94	0.17
	30	309.7	262.8	46.9	9.02	7.65	1.37
small	29	141.1	141.1	–	4.11	4.11	0.00
	30	73.4	61.3	12.1	2.14	1.79	0.35
micro-	29	29.7	29.7	–	0.86	0.86	0.00
	30	16.0	16.0	–	0.47	0.47	0.00
other	29	39.1	29.6	9.5	1.14	0.86	0.28
	30	291.4	156.2	135.2	8.49	4.55	3.94
Total	–	3433.5	1553.3	1880.2	100.00	45.24	54.76

the enterprises as for the innovative product manufacturing; calculation of the needs in financial and credit resources to organize a production programme. The development of transport machine building means state support (institutional, innovative, financial, and credit) that is stipulated by the importance of the development of this subindustry for civil and military economy of Ukraine. There are the following objects of the financial and credit support of the market-oriented management of the transport machine-building enterprises: firstly, developing the innovative products; secondly, purchasing the production methods and technology to increase technological possibilities for innovative product manufacturing.

Conclusions.

1. Key trends in the development of transport machine-building market within the ten-year period of 2012–2021 have been generalized: reduction of the main production volumes; identification of subindustries-drivers of its growth; bodies for the motor vehicles, trailers, and semitrailers; assemblies, parts, and devices for motor vehicles; military transport means and the vehicles not belonging to any other groups; vessels and boats.

2. The priorities of financial and credit support of the transport means production have been determined with the consideration of the needs of civil national economy (railway locomotives and rolling stocks, motor vehicles, air- and spacecraft, accompanying facilities) and military economy (military transport means).

3. Structural shifts in the national economy are connected with the increasing specific weight of the production of motor vehicles, trailers, and semitrailers in terms of prevalence of other transport means, first of all railway and air ones. Certain trends in the volumes of transport machine-building production have been formalized; the trends have demonstrated the development of crisis phenomena during the first sub-period and their overcoming during the second one apart from the production of air- and spacecraft, accompanying facilities and subindustries-drivers.

4. Studies on the financial and credit support of the expanded reproduction in the transport machine building have made it possible to single out the subindustries (production of air- and spacecraft, accompanying facilities; bodies for motor vehicles, trailers, and semitrailers; transport means not belonging to other groups) and subindustries-outsiders (production of motor vehicles). High financial competitiveness and solvency of large business entities as well as crisis state of the medium, small, and microenterprises of transport machine building have been diagnosed.

5. The proposals have been substantiated concerning restructuring of the activities of transport engineering enterprises based on marketing diagnostics of their internal and external environment, threats and possibilities in terms of military situation, Ukraine's getting the status of candidate for the EU accession, post-war recovery of the economy etc. Within the framework of market-oriented management for the transport engineering enterprises, trends in the financial and credit support of their complex innovative development have been substantiated.

The prospects of further studies include financial and marketing aspects of the development of machine-building enterprises manufacturing air- and spacecraft and accompanying facilities.

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Фінансово-кредитна підтримка маркетоорієнтованого управління підприємствами транспортного машинобудування

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Мета. Визначення пріоритетів фінансово-кредитної підтримки виробництва транспортних засобів з урахуванням потреб національної економіки, стану маркетингового середовища й вимог корпоративного управління.

Методика. Інформаційною основою дослідження є статистичні дані, що формуються за даними класифікації видів економічної діяльності КВЕД-2010 за секцією С «Переробна промисловість», розділами 29 «Виробництво автотранспортних засобів, причепів і напівпричепів» та 30 «Виробництво інших транспортних засобів». Методика дослідження передбачає аналіз динаміки та структури обсягів виробництва, чистого прибутку підприємств транспортного машинобудування, формалізацію трендів, оцінку кредитної ємності галузі, маркетингову й фінансову діагностику.

Результати. Узагальнені основні тренди розвитку ринку транспортного машинобудування протягом аналізованого дев'ятирічного періоду 2012–2020 років: скорочення загальних обсягів виробництва й виявлення підгалузей-драйверів його зростання. Виявлені структурні зрушення в національній економіці, пов'язані зі зростанням питомої ваги виробництва автотранспортних засобів, причепів і напівпричепів за привалювання інших видів транспорту, передусім залізничного та авіаційного. Визначені пріоритети фінансово-кредитної підтримки виробництва транспортних засобів з урахуванням потреб цивільної національної економіки (залізничні локомотиви й рухомий склад, автотранспортні засоби, повітряні й космічні літальні апарати, супутнє устаткування) та воєнної економіки (військові транспортні засоби). Для оцінки об'єктів кредитної підтримки запропоновані поняття кредитної ємності підприємств як їхньої здатності акумулювати на своїх балансах банківські кредити в розрізі певних валют, термінів, цільового призначення, процентних ставок тощо, своєчасно обслуговувати й погашати їх.

Наукова новизна. Обґрунтовані науково-методичні засади визначення пріоритетів фінансово-кредитної підтримки підприємств транспортного машинобудування в контексті маркет-орієнтованого корпоративного управління, перевагою котрих, порівняно з існуючими, є: виділення часових лагів кризи виробництва й післякризового відновлення за підгалузями; виявлення структурних зрушень у галузі транспортного машинобудування та встановлення видів економічної діяльності, що є лідерами або аутсайдерами у сфері фінансово-кредитної підтримки розширеного відтворення у цій галузі; виявлення поляризації різних за розміром суб'єктів господарювання за фінансовим станом і кредитоспроможністю з акцентом на конкурентні переваги або кризу.

Практична значимість. Обґрунтовані пропозиції щодо реструктуризації діяльності підприємств транспортного машинобудування на основі проведення маркетингової діагностики стану їхнього внутрішнього й зовнішнього середовища, загроз і можливостей в умовах воєнного стану, отримання Україною статусу кандидату на вступ до ЄС, післявоєнного відновлення економіки. У рамках маркет-орієнтованого управління підприємствами транспортного машинобудування обґрунтовані напрями фінансово-кредитної підтримки їхнього комплексного інноваційного розвитку.

Ключові слова: *фінансово-кредитна підтримка, маркет-орієнтоване управління, транспортне машинобудування*

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