

O. A. Lagovska¹, Dr. Sc. (Econ.), Prof.,
orcid.org/0000-0001-9517-0499,
T. P. Nazarenko¹, Cand. Sc. (Econ.), Assoc. Prof.,
orcid.org/0000-0001-7702-8122,
I. V. Suprunova¹, Cand. Sc. (Econ.), Assoc. Prof.,
orcid.org/0000-0002-5800-3023,
V. Yu. Ilin², Dr. Sc. (Econ.), Assoc. Prof.,
orcid.org/0000-0002-4223-1865

1 – Zhytomyr State Technological University, Zhytomyr, Ukraine, e-mail: tatyana.nazarenko12@gmail.com
2 – Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine, e-mail: villin2015@gmail.com

STATE SUPPORT AS A TOOL FOR DEVELOPMENT OF ENTERPRISES OF COAL INDUSTRY: CURRENT SITUATION AND PROBLEMS

Purpose. To explore problems and prospects of Ukraine's coal industry functioning in crisis with the use of instruments of state support.

Methodology. There were used methods of analysis (analysis of policy documents and state financing), synthesis (systematic study of the influence of legal regulation and state funding on state operation of coal mines), monographs (the review of scientific views on problems of development of coal industry), research (identifying areas of use and the efficiency of budget expenditures) and the experiment (corrected the calculation of the amount of public funding, costs and losses of the coal industry).

Findings. Government support is the main form of supporting the operation of the coal industry. Analysis of policy documents and resolutions of the Cabinet of Ministers of Ukraine showed their declarative nature and lack of a systematic approach to reforming the coal industry. In terms of anti-terrorist operations, the loss of coal mining and the growth of accounts payable, finding an effective owner is a possible solution to this problem.

Originality. System study of State support of development of coal industry in terms of the directions of use of budget funds and the elements was conducted. Pricing and the effect on profitability of coal enterprises were investigated. The adjustment of the volume of public funding due to changes in exchange rate of the hryvnia to the American dollar was carried out.

Practical value. The research results can be used to improve the mechanism of the State support of enterprises of coal industry.

Keywords: *coal industry, coal enterprise, mine, state support, state expenditures, restructuring, loss-making, mine abandonment*

Introduction. For the present, the coal industry in Ukraine is one of the basic industries of the mining sector. It forms the country's energy security, providing power, combined heat and electricity plants, heating plants, and coke companies (blast furnaces), enterprises for the production of briquettes and other businesses with raw materials – coal of different brands.

According to official statistics, the production of coal and peat for 2007–2015 declined by almost 36 %, which is insufficient to meet the state's own needs. In the total primary energy supply for the period, the share of coal and peat did not change significantly and totaled 30.4 %, which indicates the lack of alternatives and diversification of sources of primary energy for its consumers.

The degree of physical depreciation for the extraction of coal and lignite in 2015 reached 66.4 %, which is one of the highest indicators among other activities. Capital investment in mining of coal and lignite in 2015 was 3396146 thousand UAH (1.2 % of total capital investment), which is clearly insufficient for the modernization and re-equipment of the industry with the latest standards and technologies.

The status of settlements on payments to employees of coal enterprises remains very unsatisfactory, the infrastructure of the territories in which mines are concentrated, is deteriorating due to low levels of investment, as a result of the deterioration of the level of socio-economic indicators of enterprise development and settlements.

The negative trend also includes the transition of the most effective companies in terms of production vol-

umes, performance, and logistics to private ownership. These operations are often accompanied by low valuation of integral property complex, which indicates corruption in the alienation of state property and the loss of significant financial resources in the budget revenues of the country.

In conditions of economic crisis and debt crisis before the coal mining enterprises of the sphere there is a need to reduce the amounts of receivables and payables, the level of loss of production, improve the environmental situation around the mines and settlements, to search for means to enhance the functioning, to introduce advanced research of science and technology in the production, to refocus on new technologies of coal production, to improve the quality of life of workers in this sector. To achieve these objectives is possible through the state stimulation of development of entire areas, which focus the activities of companies in the coal mining industry and individual companies with the aim of ensuring the needs of enterprises-consumers of coal. An important direction in the state work is to ensure the country's energy security and reducing dependence on external sources of coal supply.

Analysis of the recent research. The reform of the coal industry and its introduction to a new level of effective functioning is one of the priorities of the government of our country. Problems arising from the restructuring of the coal sector, areas for further reforms and state support of the coal industry are reflected in the scientific works by famous Ukrainian scientists, in particular: M. Barabash and Yu. Cherednichenko [1], N. Zhykalyak and V. Lukinova [2], V. Krasnyk [3], V. Snihur, D. Malashkevych, T. Vvedenska [4], and others.

On the basis of the conducted research, V. Krasnyk substantiates the necessity of formation of new state policy towards the coal industry and highlights its strategic role in ensuring the energy security of the country [3].

Barabash M. and Cherednichenko Yu. consider the issue of transformation of the form of ownership by the example of separate state companies – Pavlohrad-vuhillia. They also give basic directions of perfection of equipment and technology, improving the occupational health and safety, the implementation of investment projects in the sphere of environmental protection [1].

As a way forward to growth of the coal industry, N. Zhykalyak and V. Lukinov determine a sustainable system of fuel and energy resources of Ukraine for the period until 2030 taking into account the improvement of public rental policy, a balanced GDP growth, stimulation of technical and technological innovations, improving energy efficiency in industry and social sphere [2].

Snihur V., Malashkevych D. and Vvedenska T. explored the modern state of the coal mining industry, identified the root causes of low profitability of coal mining in the country and presented the perspectives of its development up to 2020 [4].

An important element of state assistance of coal industry development in the country is the legislative and regulatory support. During the years of independence, Ukraine have adopted 37 documents directly or indirectly related to coal-mining, 3 of which are the Laws of

Ukraine and 34 Decrees of the Cabinet of Ministers of Ukraine.

Thus, the methodical and software basis of the state transformation of the coal industry using the tools of the state support of their development has been formed.

Unsolved aspect of the problem. Changes in the legal field did not provide positive transformations in the activity of the coal industry. Despite the fundamental and applied areas of research conducted by Ukrainian scientists, the situation that has developed in the coal mining industry in connection with unprofitableness of their operation requires an additional study.

Objectives of the article. Research of a current state, problems and development of the coal industry for the future in terms of government support.

Presentation of the main research. The transient stagnation of the coal industry started after gaining the independence of Ukraine and continues to the present time. It is accompanied by a decrease in production volumes of coal, lower productivity, small size of subsidizing the industry, outdated technologies of extraction and enrichment of coal, the depreciation of industrial fixed assets, inefficient management, corruption and lack of transparency of use of budgetary funds for the intended purpose and the like. These and other issues are evidenced in particular by: the Decrees of the President of Ukraine, decrees of the Cabinet of Ministers of Ukraine, the Concept and the Energy Strategy and other legal documents related to the coal industry, research specialists and scientists.

According to the research by N. Zhykalyak and V. Lukinov, in recent years, in connection with the decline in industrial production, the phenomenon of the surplus consumption of domestic coal is artificially generated in terms of the territory of the open Donbass not controlled by the government of Ukraine. Most of the mines are unprofitable, i. e. their total cost of production of coal significantly exceeds its market value. So now the coal industry requires state subsidies for financial support to carry out deep restructuring, reform and technical modernization in order to improve and bring the industry out of crisis [2]. The crisis of the coal industry since 1996 until today shows the low efficiency of the restructuring processes, the lack of a systematic approach in implementation of political decisions.

Coal industry enterprises carry out their activities under the Mining law of Ukraine and the principles referred to in Article 7 [5].

State support for mining enterprises (V. 9) is made in the approved State budget of Ukraine for the current year [5].

The review of program documents on development of the coal industry allowed identifying objective and subjective factors of influence.

The objective factors include [6, 7]:

- 1) complexity of the geological conditions of coal mining;
- 2) extremely low volumes of capital investments in new construction and renewal of fixed assets of coal mines;
- 3) imperfection of the pricing and tariff policy depending on the energy value of coal products and non-transparency of the market;

- 4) limitations of capital investments in previous years for the restoration of fixed assets;
- 5) absence of a mechanism to stimulate the introduction of modern high-performance mining equipment;
- 6) absence of any real steps for the privatization of the mines;
- 7) stay of almost all of the company property under arrest or a tax lien;
- 8) imperfection of the pricing and tariff policy;
- 9) lack of alternative jobs in the coal regions;
- 10) loss of personnel potential of the coal industry due to falling of prestige of miners' work, lack of educational facilities and the level of inconsistency of employee training needs for innovative development of the coal-mining industry.

Subjective factors are associated with [6, 7]:

- 1) permanent structural changes in the industry, which have not always been sufficiently substantiated;
- 2) low level management of state enterprises of coal industry;
- 3) lack of workable funded programs for the development and restructuring of the sector and the necessary legislative support of its functioning.

Analysis of state budget expenditures by years (Table 1) shows that funds were spent on an ongoing basis in three programs, namely: restructuring the coal and peat industry mine rescue activities at coal mining enterprises and state support for coal mining enterprises for partial coverage of cost of finished marketable coal products. Let us note that prior to 2002, the allocation of the costs of the coal industry was not carried out, therefore, to analyze programs over the period 1990 to 2001 inclusive is not possible. Studies have shown that in 2006–2010 the state budget expenditures to support the coal mining industry were not planned.

In 2002–2003, there were program expenditures on scientific and technological and applied research, which is not reflected in the State budget of the following years. For 2002–2005, the program expenditure was more detailed, indicating their focus, starting in 2011 the number of programs was reduced and made only four directions of state support in 2017.

Comparison of financing of state programs on development of the coal industry in the national currency is impractical, since it indicates the distortion data associated with considerable fluctuations of the dollar in the individual periods. Therefore, we assessed the dynamics of public support in American dollars (Table 2).

We can observe particular distortion of the data after the high level of devaluation of the national currency and increase in maintenance costs of the coal industry since 2011 and in the future. The peak curvature in the baseline method focuses in 2011–2014 and it ranges from 130 to 200 %, then (2015–2017) there is a decline – 60–70 %. The amplitude of oscillations in the chain way is lower as the expenses of the state budget of the previous years are taken into account. Comparing the trend of expenditures in US dollars in 2017 with previous periods, we note that the level of government support is the lowest compared to 2011–2014 (not to exceed 10 %), in 2002 and 2005 – from 10 to 17 % for 2015–2016 – 78–89 % (Fig. 1).

One of the defining reasons for the unsatisfactory condition of the coal enterprises, according to V. Krasnyk, is the lack of a systematic approach to the implementation of the state policy in the coal industry. Attempts to solve the problems connected with reduction of volumes of coal mining, loss-making at state-owned coal enterprises, low technological level of production and lack of investment funds without addressing the primary problems, which include the lack of an effective owner, the discrepancy of dynamics of prices for coal products and products that are used in the coal industry, as well as the lack of necessary volume of investments by this time made it impossible to overcome the crisis in the industry [3].

Some authors see a way out of the situation through the privatization of a greater part of the mines that remained in state ownership. Privatization, as a possible variant of increasing efficiency of functioning of coal-extracting enterprises is a promising direction for implementation of the state policy (this is stated in all legal acts, in particular [8, 9]) as well as the formation of a socially responsible owner. As an example, we present the privatization of state-owned coal company “Pavlohradvuhillia” in coal mining company – PJSC “DTEK Pavlohradvuhillia”. Since the privatization of the enterprise [1]:

- coal production increased from 10.2 to a record of 18.9 million tons;
- the volume of investment grew 10 – fold from 146 million UAH in 2004 to 1 million 479 UAH in 2014;
- secured repayment of wage arrears to employees of the enterprise, which at the time of conclusion of the contract of purchase and sale of the shares was \$ 61.047 million;
- secured repayment of the social debt (recourse) payment, which at the time of signing the contract of purchase and sale of shares were \$ 24.7 million;
- ensured timely payment of wages to employees (2 times a month);
- ensured timely payment of taxes, fees and other mandatory payments stipulated by the current legislation of Ukraine.

According to M. Zhykaliak and V. Lukinov optimization of taxation of rent (royalties) for the use of natural resources of the country is expedient. In particular, they note on the necessity of taxation of mining rents in the context of state ownership of mineral resources because these taxes in the absence and inappropriateness of large payments for the right to use mineral raw materials, especially fuel and energy resources (FER) prior to their extraction, make the price of these resources that is paid to the owner (state, society) [2]. They go on to caution that a significant positive effect will be achieved through the implementation of a system for determining payment for use of subsoil for the extraction of fuel and energy resources (royalties) as a percentage of adjusted income, the tax base shall be the gross income from the sale of fuel and energy products excluding the cost of its delivery to the consumer [2]. However, in terms of loss of functioning of the coal industry in state ownership, such steps are even more systematic investment attractiveness of enterprises and mines. If the government can

Table 1

State support of development of enterprises of the coal mining industry

Budget expenditures	2002	2003	2004	2005	2011	2012	2013	2014	2015	2016	2017
Applied developments in the sphere of the coal industry development	5087.0	4204.1	-	-	-	-	-	-	-	-	-
State scientific and technical programs and scientific parts of the State target programs in the coal industry	1615.0	1615.0	-	-	-	-	-	-	-	-	-
The development of the most advanced technologies in the coal industry	140.0	240.0	-	-	-	-	-	-	-	-	-
Restructuring the coal and peat industries	850 000.0	654 089.1	784 044.1	797 444.1	888 002.1	1 149 298.5	1 290 980.1	405 408.7	1 093 880.5	305 580.6	847 101.6
Rescue activities at coal mines	75 000.0	75 000.0	157 066.4	185 659.1	384 321.1	417 600.0	434 238.1	311 038.2	238 384.0	290 000.0	290 000.0
State support of coal-mining enterprises for partial coverage of cost of finished marketable coal products	850 000.0	830 000.0	651 412.0	995 808.0	6 710 210.0	9 901 847.8	13 301 847.8	9 160 702.1	400 000.0	1 120 000.0	870 000.0
Events on labor protection and improvement of safety at coal mines, namely, equipping them with the latest control devices for parameters of mine atmosphere and the control of parameters of degassing	-	-	-	-	65 000.0	125 000.0	65 000.0	5000.0	-	-	-
State support for the construction of coal and peat enterprises, technical re-equipment of these enterprises	-	-	-	-	581 448.3	3 025 300.0	364 293.8	109 300.0	-	-	-
Technical re-equipment of the state coal and peat enterprises, including that through cheaper credits, and funding programs for the renovation of mining equipment	698 000.0	1 100 895.8	1 218 141.8	1 397 168.7	1 758 721.4	-	-	-	-	-	-
Occupational safety and health as well as safety improvements in coal mining and shaft contracting enterprises, including degassing of coal seams	80 000.0	80 000.0	55 000.0	65 505.0	-	-	-	-	-	-	-
Participation in the acquisition of highly productive energy saving compressor and electrical equipment for coal mines	-	21 000.0	24 000.0	21 000.0	-	-	-	-	-	-	-
The acquisition of experimental batch of nitrogen membrane stations for suppressing fires in coal mines	-	-	25 000.0	27 000.0	-	-	-	-	-	-	-
Partial covering of expenses on payment of arrears to miners on recourse actions and one-time assistance for loss of employability	73 000.0	-	54 000.0	-	-	-	-	-	-	-	-
The creation of a unified telecommunication system of dispatcher monitoring and automated control of mining machines and technological complexes at coal mines to improve safety	-	-	75 000.0	25 000.0	-	-	-	-	-	-	-

The dynamics of the growth rate of state support for coal mining enterprises

Method of comparison	2002	2003	2004	2005	2011	2012	2013	2014	2015	2016	2017
	USA										
Basic	100.0	105.1	149.4	141.3	265.5	371.4	392.6	181.7	21.2	18.7	16.6
Chain	100.0	105.1	142.1	94.5	188.0	139.9	105.7	46.3	11.7	88.2	88.6
	UAH										
Basic	100.0	105.1	148.3	133.8	395.6	556.7	588.6	380.5	81.2	88.2	82.1
Chain	100.0	105.1	141.1	90.2	295.6	140.7	105.7	64.6	21.3	108.6	93.2
	the distortion of the data										
Basic	0.0	0.0	-1.1	-7.4	130.0	185.3	196.0	198.8	60.0	69.4	65.5
Chain	0.0	0.0	-1.1	-4.3	107.6	0.9	0.0	18.4	9.6	20.4	4.5

generate proper conditions for arrival of a private owner (e.g., grace period), only then it will be possible to implement this approach.

At different stages of reforming the coal the following intermediaries were created and operate currently: GP “Incorporated Company “Ukrvuhlerestrukturyzatsia” (1996, the predecessors of SE “CC “Ukruglerestrukturyzatsia” SE “Donvuhlerestrukturyzatsia”, SOE “Central-Western Company “Vuhletorfrestrukturyzatsia” SE “Luganskuglerestrukturyzats’ia”), GP “Ukrshakhthydrozakhyst” (2003), SE “Coal of Ukraine” (2003). These companies perform services which companies are able to do by themselves.

So, just for 2014–2016 GP “OK “Ukrvuhlerestrukturyzatsia” caused damage to the state amounting 23 132.1 thousand UAH. The Prosecutor’s office opened a criminal case against the former heads of the enterprises.

The funds allocated by the budget for the maintenance of SE “Ukrshakhthydrozakhyst” and SE “Coal of Ukraine” would be appropriate to use for the current problems of the mines. GP “OK “Ukrvuhlerestrukturyzatsia” received 2.5 % of the funding for the restructuring and liquidation of unprofitable mines, that is, for 2014–2016 the costs of the company amounted to 5.6 million UAH of budgetary funds.

A big obstacle to the development of the coal mining industry is price regulation for the coal. According to N. Volynets, Chairman of the Independent trade Union of miners of Ukraine: “the price should be fair ... and taking into account the contributions to state enterpris-

es-intermediaries, state coal mines get paid peanuts, and cannot even cover the cost” [10]. Other researchers have noted that in Ukraine coal is sold under direct contracts with the mining companies and consumers or with the state enterprise “Coal of Ukraine” as a wholesale market operator [4].

Many pointed out that the price of coal is formed at the level of the “Rotterdam +”. On this occasion, the National Commission, which carries out State regulation in the fields of energy and utilities (NKREKP), finds it necessary [11]:

- to refute information about incorporation of the NKREKP current prices of coal at the level “Rotterdam +”;

- to emphasize the fact of taking into account NKREKP in existing tariffs on electricity price of coal at the ultimate level of 1730 USD/ton, significantly lower than 2500 USD/ton on current quotations index API2 with regard to logistics to ensure imported coal;

- to inform on the application by the Ministry of Energy and Coal Industry of a separate order of determination of the price of coal by State mines, which is based on the coal exchange in Poland (PSCMI1 and PSCMI2) and meets the 1700 UAH/t, which is also significantly lower than 2500 UAH/t on current quotations index API2 with regard to logistics to ensure imported coal.

In 2005 [9], it was noted that to ensure the balance of supply and demand for coal products, to optimize its price, long-term contracts between producers and consumers of coal products are considered. However, according to the research above, the situation has not improved, but, on the contrary, has worsened.

World tendencies of forming coal prices in 2011–2016 show the trend. Thus, the most expensive cost of this energy resource is in Japan, which dropped to 61 % in comparison with 2011 and made 89.4 \$/t in 2016. Therefore, the formation of prices at the level of 100 \$/t, as stated, is wrong, but in order to lead the field out of the crisis and to put it on the breakeven, it may be acceptable.

The dynamics of the state regulation of prices for coal for domestic coal are presented in Table 3. According to the data, the highest price level was in 2014, and higher than the rate of 2017, at 11 %, although in UAH

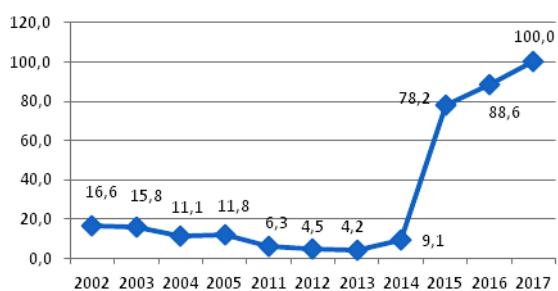


Fig. 1. The index of public spending on coal industry in 2017 relative to previous periods

Table 3

Dynamics of price regulation of coal for domestic coal enterprises

Indicators	2014	2015	2016o	2017
Coal price, UAH/t	800.00	1100.00	1390.00	1700.00
Exchange rate, UAH	11.16	20.37	25.08	26.36
Coal price, USA/t	71.68	54.00	55.42	64.49

equivalent situation is the opposite – the growth is 2.1 times.

Beginning from 2015, the Government made the decision to import coal from abroad, especially anthracite, production of which was concentrated in the region of Donbass. Moreover, currently the state mines' coal is purchased at a price which is significantly below its cost of production. Thus, the draft order of the Cabinet of Ministers "Certain issues of further functioning of the coal industry", shows that the cost per tonne of coal mines in the state is 2080 UAH, while the price of coal at mines on average for ten months of 2016 amounted to 1191 UAH/t. Only since early August the miners increased the purchase price to 1360 UAH/t. This price level is far from the real market, in which Ukraine now buys not only anthracite, but gas and coal as well [12].

The quality of domestic coal, excluding the territory of the anti-terrorist operation, is 66.5 %, which is extremely low. Accordingly, the cost of the final product will be higher than the base quality value (100 %) (Table 4). The accounting (2016) year showed the highest cost of 1 t of coal in PJSC "Lysychanskvuhillia" – 7215.5 UAH, but with the lowest volume production of "useful" coal of 90.2 thousand tons, this company received the highest amount of subsidies per 1 ton of products in the amount of UAH 2603.1.

Two enterprises with the best conditions of coal mining, do not receive subsidies from the state, and the cost of 1 t of coal is the lowest – DP "VC "Krasnoymanska" and PJSC "Shakhta Nadiia".

The Project of the Ministry of Energy and Coal Industry of Ukraine stipulates that in 2017, the largest contributor would be the GP "Krasnoarmiiskvuhillia", which will get 2292.0 UAH/t of coal. Among all enterprises GP "Toretskvuhillia" would have the highest production cost (5804.0 UAH/t), higher than in the previous period by 59.5 %. However, JSC "Lysychanskvuhillia" would be able to achieve cost reduction by 52.7 %. The data are more abstract in nature, as the mechanism of formation of the cost (except for the reference to the coal production) remains unclear as well as factors due which enterprises achieved the following results with limited government support.

Another problematic issue is the preparation of liquidation and physical closing of unprofitable mines and mines that have exhausted their resource. The implementation of these processes was adopted in 1997 for the liquidation of unprofitable coal-mining and coal-processing enterprises [11]. It provides an inefficient mechanism for preparation and liquidation of enterprises (mines), because it requires long time and significant

budget expenditures on the physical elimination of the mine or company.

Since 2002, and currently in the process of coal industry restructuring the state budget allocated 1139918.6 thousand dollars.

In 2014–2016 the actual volume of budget funding for the restructuring of the coal industry amounted to UAH 667.5 million (22.4 % of the original budget allocations defined by the budget laws). Financing of works on liquidation of coal mines in much smaller volumes from the targets of the projects, leads to increased time and cost for projects, and as a result, additional burden on the state budget and ineffective use of budget funds [13].

In 1998–1999 it was planned to close 49 of the mines, while in fact, 32 mines were eliminated. A similar situation is seen throughout the period of restructuring of the coal industry.

A list of works for 2014 for 84 projects of liquidation of mines was supposed by Finance works for a total amount of 218.55 million. However, in 2014, in connection with the anti-terrorist operation there were only 47 projects of liquidation of mines performed. During the year, GP "OK "Ukrvuhlerestrukturyzatsia" used 50.14 million for this work. A list of works for 2015 for 17 projects of liquidation of mining enterprises (mines), located on the territory controlled by the Ukrainian authorities, was supposed to Finance works for a total amount 185.2 million. In fact for the execution of works in 2015 115.8 million was used. A list of works in 2016 for 16 projects of liquidation of mining enterprises (mines) was supposed to Finance works for a total amount of 67.41 million. In 2016 56.39 million UAH of the state budget was actually used [13].

So, due to the lack of a systematic approach to energy planning costs for liquidation of mining enterprises (mines), lack of funds to finance the full project of elimination of the company within the time specified, their scheduling is not performed [13].

Conclusions and recommendations for further research. Studies have shown a large number of problems available in the functioning of the coal industry, namely:

- in 2017 the lowest amount of state support among all years of study was planned. Its level is lower than that in 2002 by 83.4 %, and in 2016 – by 11.4 %. The bulk of the money was used to partially cover the cost of the finished marketable coal production – 40.3 % and for restructuring the coal and peat industry – 39.3 %;

- data analysis showed a low level of efficiency of use of budgetary funds allocated for the restructuring of the coal industry. Part of the funds allocated for these purposes by SE "Ukrvuhlerestrukturyzatsia", was used for the target that caused damage to the state in 2014–2016 in the amount of 23.1 million UAH, another part of 47.3 million UAH was not generally used and was returned to the state budget;

- price regulation of coal precludes the efficient development of the coal industry and evidence of the opacity of schemes for the use of public funds. TES get super-profits, while coal enterprises make losses;

- the state reduces the amount of assistance and puts the coal industry on development, except for the cost of liquidation.

Table 4

Operating results of mining enterprises* [5]

The name of the enterprises	2016								2017						
	Coal price, UAH/t	The volume of commercial products (good coal), kt	The total volume of coal, thousand tonnes	The amount of State support to the coal production enterprises, UAH/t	The production cost of coal, UAH/t	Loss excluding subsidies	Damages taking into account subsidies	Price, UAH/t	The volume of marketable products ("useful" coal), thousand tonnes	The total volume of coal, thousand tonnes	The amount of State support to the coal production enterprises, UAH/t	The production cost of coal, UAH/t	Loss excluding subsidies	Damages taking into account subsidies	
SE "Mine named by M. S. Surhuy"		296.6	340.7	307.1	1835.9	138.8	445.9		307.1	320.0	229.1	2018.8	59.7	288.8	
SE "W/a "Pivdennodombaske No. 1"		296.9	497.9	336.4	1868.9	142.5	478.9		546.8	560.0	100.6	1281.2	-549.4	-448.8	
SE "Krasnoarmiiskvuhillia"		417.4	548.1	336.9	2463.6	736.7	1073.6		507.3	751.0	2292.0	2434.8	-1587.2	704.8	
SE "UK "Krasnolymanska"		223.5	443.4	0.0	1771.8	381.8	381.8		163.0	320.0	0.0	1830.0	100.0	100.0	
SE "Selydivuhillia"		880.6	1394.0	289.6	1848.8	169.2	458.8		622.0	1100.0	254.3	3103.3	1119.0	1373.3	
SE "Toretskvuhillia"	1390.0	231.1	279.4	587.5	3639.6	1662.1	2249.6	1730.0	167.2	265.0	800.7	5804.0	3273.3	4074.0	
State-owned enterprise Pervomaiskvuhillia		233.6	308.4	607.8	3157.6	1159.8	1767.6		259.0	330.0	495.3	4250.0	2024.7	2520.0	
PJSC "Lysychanskvuhillia"		90.2	196.5	2603.1	7215.5	3222.4	5825.5		357.3	660.0	353.0	3412.9	1329.9	1682.9	
SE "Lvivuhillia"		881.4	1401.8	202.0	1672.3	80.3	282.3		776.9	1440.0	136.7	2270.7	404.0	540.7	
PJSC "Mine Nadia"		181.1	186.4	0.0	1022.9	-367.1	-367.1		130.0	135.0	0.0	1426.2	-303.8	-303.8	
SE "Volynvuhillial"		111.5	185.4	438.7	2462.8	634.1	1072.8		242.0	340.0	80.9	1902.6	91.7	172.6	

* built and designed using the data Table 3

Analysis of legal field regulating the development and restructuring of the coal industry, in particular: On the progress of restructuring of coal industry (1997), the Program “Ukrainian coal” (2001), the concept of development of the coal industry (2005), On approval of the Procedure of usage in 2007 of the funds envisaged in the state budget to support enterprises producing coal, lignite (brown coal) and peat for the purpose of construction, technical retrofitting and major repair of mining equipment (2007), the Concept of reforming the coal industry (2008) The energy strategy of Ukraine till 2030, draft concept of the State target economic program of development of coal industry in 2011–2015, the draft Concept of the State target economic program of reforming the coal industry for the period until 2020 (updated), give evidence of declarative reforms and socio-economic problem-solving. These documents contain detailed calculations for solution of problems of the reform, environmental issues, creation of new jobs, including for laid-off workers, the construction of housing for workers of the mine construction enterprises, to improve the safety of mines, and others.

All this demonstrates the lack of a systematic approach to reforming the coal industry. Adopted and developed program documents and regulations are declarative in nature and do not determine the directions of solution of the indicated problems and calculations tools to solve them.

To solve these problems and reduce public expenditures, corrupt practices and misuse of funds, it is necessary to make appropriate changes in existing policy documents and regulations with detailed characteristics for what purpose to use, to develop: a program of modernization of the coal industry, coal industry restructuring, the transfer of objects socially-cultural appointment on the books of local councils, socio-economic development enterprises.

With the purpose of exiting the crisis, the coal industry requires changes in legislation regarding employment and the labor code, drafting and adoption of the draft laws “On the procedure of liquidation of mining enterprises and social protection of displaced workers”, “On optimization of expenses for liquidation of coal enterprises”, “On state support of the coal industry” and the like.

Laid-off workers should be allocated for retraining, supported in creating their own business (for example, the production of renewable energy, the organization of farms on the territory of the mine closure).

References.

1. Barabash, M. and Cherednichenko, Y., 2015. Transformation of MCC Pavlogradugol coal mining in a world-class company – PJSC “DTEK Pavlogradugol”. *Mining: Collection of Scientific papers*, 9, pp. 15–23.
2. Zhykalyak, N. and Lukinov, V., 2016. Improvement of state regulation of sustainable development of fuel and energy resources of Ukraine. *Mining: Collection of Scientific papers*, 10(2), pp. 97–105.
3. Krasnik, V. G., 2015. The Main directions of reforming of coal industry of Ukraine in the medium term. *Mining: Collection of Scientific papers*, 9, pp. 25–34.
4. Snihur, V., Malashkevych, D. and Vvedenska, T., 2016. Tendencies of coal industry development in Ukraine. *Mining: Collection of Scientific papers*, 10(2), pp. 1–8.

5. Verkhovna Rada of Ukraine, 1999. The mining law of Ukraine: Law of Ukraine of 06.10.1999 No. 1127–XIV with the subsequent changes. *Bulletin of the Verkhovna Rada of Ukraine*, 50, Article 433.

6. Ministry of Energy and Coal Industry of Ukraine, 2015. *The concept of the State target economic program of reforming the coal industry for 2015–2020* [online]. Available at: <http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245027382&cat_id=244916227> [Accessed 6 March 2017].

7. Ministry of Energy and Coal Industry of Ukraine, 2015. *The concept of the State target economic program of reforming the coal industry for the period till 2020* [online]. Available at: <http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245127741&cat_id=244916227> [Accessed 22 February 2017].

8. Cabinet of Ministers of Ukraine, 2008. *On approval of the Concept of reforming the coal industry: the Cabinet of Ministers of Ukraine of 14.05.2008 № 737-R* [online]. Available at: <<http://zakon2.rada.gov.ua/laws/show/737-2008-%D1%80>> [Accessed 22 February 2017].

9. Cabinet of Ministers of Ukraine, 2005. *On approval of the Concept of development of coal industry: the Cabinet of Ministers of Ukraine from 07.07.2005 No. 236-R* [online]. Available at: <http://zakon2.rada.gov.ua/laws/show/236-2005-%D1%80> [Accessed 16 February 2017].

10. 112 ua, 2017. *The real support of the coal industry in the state budget for 2017, and the increase of the coal price for the state mines, – experts* [online]. Available at: <<https://ua.112.ua/polityka/realna-pidtrymka-vuhilnoi-haluzi-ne-v-derzhbiudzheti-2017-a-pidvyschenia-tsiny-vuhillia-dlia-derzhshakht-eksperty-360874.html>> [Accessed 24 April 2017].

11. National Regulatory Commission on Energy and Utilities, 2017. *NKREKP denies of incorporation of coal current prices at “Rotterdam +” in the existing electricity tariffs* [online]. Available at: <<http://www.nerc.gov.ua/?news=5757>> [Accessed 28 March 2017].

12. Artyushenko, V., 2016. Coal dead end. *ZN.UA* [online]. Available at: <https://zn.ua/energy_market/ugolnyy-tupik-1-.html> [Accessed 28 March 2017].

13. Ministry of Energy and Coal Industry of Ukraine, 2017. *A report on the results of audit of efficiency of use of state budget funds provided for the Ministry of energy and coal industry of Ukraine restructuring of the coal industry Approved by decision of the court of accounts from 16.05.2017, No. 11–2*. Kyiv.

Державна підтримка як інструмент розвитку підприємств вугільної галузі: сучасний стан та проблеми

О. А. Лаговська¹, Т. П. Назаренко¹, І. В. Супрунова¹,
В. Ю. Ільїн²

1 – Житомирський державний технологічний університет, м. Житомир, Україна, e-mail: tatyana.nazarenko12@gmail.com

2 – Київський національний економічний університет імені Вадима Гетьмана, м. Київ, Україна, e-mail: villin2015@gmail.com

Мета. Визначити проблеми та перспективи функціонування вугільної промисловості України в умовах кризи з використанням інструменту державної підтримки.

Методика. Використані методи аналізу (аналізу програмних документів і обсягів державного фінансування), синтезу (системного вивчення впливу нормативно-правового регулювання й державного фінансування на стан функціонування вугледобувних підприємств), монографічний (розгляд наукових поглядів на проблеми розвитку вугільної промисловості), дослідження (визначення напрямів використання та ефективності бюджетних видатків) та експеримент (скорегований розрахунок обсягів державного фінансування, ціни та збитків підприємств вугільної галузі).

Результати. Державна підтримка є основною формою підтримки функціонування вугільної галузі. Аналіз програмних документів і Постанов Кабінету міністрів України показав їх декларативний характер і відсутність системного підходу до реформування вугільної галузі. В умовах антитерористичної операції, збитковості видобутку вугілля й зростання кредиторської заборгованості, пошук ефективного власника є можливим варіантом розв'язування даної проблеми.

Наукова новизна. Проведено системне вивчення державної підтримки розвитку вугільної галузі в розрізі напрямів використання бюджетних коштів і за елементами. Досліджено ціноутворення та вплив на збитковість вугільних підприємств. Проведено корегування обсягів державного фінансування у зв'язку зі зміною курсу гривні до американського долару.

Практична значимість. Результати досліджень можуть бути використані для удосконалення механізму державної підтримки підприємств вугільної галузі.

Ключові слова: *вугільна галузь, вугільне підприємство, шахта, державна підтримка, державні видатки, реструктуризація, збитковість, ліквідація шахт*

Государственная поддержка как инструмент развития предприятий угольной отрасли: современное состояние и проблемы

О. А. Лаговская¹, Т. П. Назаренко¹, И. В. Супрунова¹, В. Ю. Ильин²

1 – Житомирский государственный технологический университет, г. Житомир, Украина, e-mail: tatyana.nazarenko12@gmail.com

2 – Киевский национальный экономический университет имени Вадима Гетьмана, г. Киев, Украина, e-mail: villin2015@gmail.com

Цель. Определить проблемы и перспективы функционирования угольной промышленности Украины в условиях кризиса с использованием инструмента государственной поддержки.

Методика. Используются методы анализа (анализа программных документов и объемов государственного финансирования), синтеза (системного изучения влияния нормативно-правового регулирования и государственного финансирования на состояние функционирования угледобывающих предприятий), монографический (рассмотрение научных взглядов на проблемы развития угольной промышленности), исследования (определение направлений использования и эффективности бюджетных расходов) и эксперимент (скорректированный расчет объемов государственного финансирования, цены и убытков предприятий в угольной отрасли).

Результаты. Государственная поддержка является основной формой поддержки функционирования угольной отрасли. Анализ программных документов и постановлений Кабинета министров Украины показал их декларативный характер и отсутствие системного подхода к реформированию угольной отрасли. В условиях антитеррористической операции, убыточности добычи угля и роста кредиторской задолженности, поиск эффективного собственника является возможным вариантом решения данной проблемы.

Научная новизна. Проведено системное изучение государственной поддержки развития угольной отрасли в разрезе направлений использования бюджетных средств и по элементам. Исследовано ценообразование и влияние на убыточность угольных предприятий. Проведена корректировка объемов государственного финансирования в связи с изменением курса гривны к американскому доллару.

Практическая значимость. Результаты исследований могут быть использованы для совершенствования механизма государственной поддержки предприятий угольной отрасли.

Ключевые слова: *угольная отрасль, угольное предприятие, шахта, государственная поддержка, государственные расходы, реструктуризация, убыточность, ликвидация шахт*

Рекомендовано до публікації докт. екон. наук О. О. Єранкіним. Дата надходження рукопису 22.06.17.