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COAL MINING IN SOCIOECONOMIC ASPECT

Arguments in support of the article. It is undoubtedly true that the crisis of the Ukrainian coal industry has become a permanent phenomenon and today it is unrealistic to explain it only with technological or geological problems. Given the fact that the economy is not closed on itself the system, it is immersed in the society, its culture, its own system of relationships. Surely, there is certain autonomy of the economy, but it is incorrect and counterproductive to consider the economy as a system that develops freely. So, amid a significant increase in the level and quality of life in many countries of the world, coal industry, as a source of employment, is becoming increasingly unattractive. Virtually all the economically developed countries, with the exception of Australia and Taiwan, have already abandoned coal as the primary fuel. Much of what happens in economic systems, can be better explained by "external" phenomena.

Review of the literature. In modern conditions of globalization, the development of economy of one particular state can't be carried out separately. The world system sets vectors of development not only on policy but also the state economy as a whole, as well as on various branches. The scientific works devoted to studying of tendencies of changes in the world system of environmental management, technological development, the analysis of a condition the coal industry of Ukraine are written by A.Amosha, L.Starichenko, M.Ilyashov, D.Cherevatskyi, Yu.Yashenko, M.Soldak, A.Yanovskyi, V.Traud, , V.Lyashenko. Researches are dedicated to the influence of social aspects of development of an industrial economy, the region, state, formation of the human capital, socioeconomic identification of conditions of a sustainable development in the works of number of the other scientist

The purpose of the work is to conduct socioeconomic studies designed to reveal the ratio of the impact of economic and social factors on the development of coal mining on the example of the leading Ukrainian metallurgical Corporation "Metinvest", which has coal assets in the US and Ukraine.

Presentation of the main material. For a long time numerous works of domestic scholars with the aim to understand the causes of the degradation of the coal industry [1, 2, 3] and attempts to rectify the situa-

tion made at the government level, have not led to any meaningful results. Experts relate this to the complexity of the mining and geological conditions, deterioration of the mining Fund and the unattractiveness of the industry.

Certain economic relationships in the process of production and distribution, the nature of which every time corresponds to a specific socio-historical conditions, it is possible at the same time to say that these relationships, which are formed in a more or less stable and long-term trends, have no objective reasons to exist and cannot be determined as the laws of development [4, p.16].

Europe has seen a sequence of closures of the coal mines of Belgium in 1992, 1994 - Portugal, in 2005 - France, and the last German mine is expected to terminate its existence in 2018. During Soviet times, such a fate was awaited for Donbass also [5]. But there is an American coal paradox, which in marked contrast to that of the European experience based on the the mining and geological conditions of the national coal production, determines the turnout to be untenable. As expressed by the President and CEO of coal company's world-class Arch Coal, "some companies will leave the market, while others, such as Arch, will reduce the scale of their activities, in hope for improved market conditions" [6]. Mine is the "Maple" (West Virginia, United States, Appalachian basin), having a capacity of 720 thousand tons of coal per year 230 people statewide, is economically inefficient, whereas in Ukraine, such an enterprise would be served by no less than 1.5 thousand men. During the crisis in company Walter Energy the owner of the "Maple" mine was forced to reduce the time of operation of the mine by 30% [7]. And this takes place in a country with exemplary deposits of coal.

Having studied the problems of coal industry of Ukraine for a long time D. Cherevatskyi [8, p. 42] gave an interesting thought that "the domestic economy does not need mines, it needs coal. Coal as a raw material for the steel industry; coal as a fuel for energy. It is in Australia or South Africa, the coal industry is a major source of export, of filling the budget, macroeconomic support". This conclusion is based on the judgment of one of the leaders of the domestic steel busi-

ness I.Siroy, made in 2007: "Metinvest, and other companies with their own coke production, find it more profitable to purchase high-quality Australian coal for \$ 110/t FOB than to invest hundreds of million in the Ukrainian coal mining, which ultimately will cost \$ 90/t" [9].

Consistently pursuing the policy, Metinvest acquired West Virginia coal company called United Coal Company (UCC) which was composed of 4 mines and quarry for the extraction of thermal and coking coal. One of the list is the Affinity Mine, a coal mine founded in 1910-ies but in the last quarter-century was conserved due to unprofitability. "I couldn't imagine it, - said Danny Bar, Mayor of the city of Sofia (where the mine is located), - that will ever see the Affinity mine working again. But once there was a talk of reopening, a burst of activity began. Now there's a housing boom, and you will not find a vacant land available for rent" [10].

The capacity of restored mine with a newly constructed processing factory is 1.4 million tonnes of coking coal premium class per year. The acquisition of the mine at a cost of Metinvest 900 thousand dollars, whereas investment in the revival of the mine amounted to 115 million dollars. The economic efficiency of a coal project in UCC immediately turned out to be negative. It should be mentioned that by wage rates American miners are a leading category of "Metinvest" (almost \$132 thousand per person per year), which closely follows the Swiss company Metinvest International SA (\$211 thousand/year), but nearly 12 times exceeding the salary of the staff in Ukrainian Mining Division "Metinvest" (about \$11 thousand/year) [11].

In 2012, due to the market conditions, UCC had to reduce the volume of coal production by 4 times from 2 million tonnes to 507 thousand and lay off 325 workers - every fifth employee of an American company, moreover in 2013 halt the production that has already caused massive layoffs [12].

Metinvest as a vertically integrated structure has withstood the economic failures of links located at the base of the pyramid so far. A more difficult situation is in the Russian Corporation Severstal - sale of North American coal business, which may return no more than 40% of its funds invested a few years earlier. It is a vital measure to take for the sake of the holding. The world steel market has up to 500 million tonnes of overcapacity today as the result of the rapid development of industry in the first decade of this century. The serious consequences of the crisis have affected Mechel, the holding company that owns the controlling shares of metallurgical, coal energy companies and ports located in 11 regions of Russia, the United States, Lithuania and Ukraine. It is also the world leader in coking coal production, and the second holder of world coking coal resources. Having said that, purchasing

and active development of Elgin field has not only brought to the bankruptcy carbon but the metallurgical business group too [13].

Another turning issue for Metinvest mines is industrial injuries. Since the ceremonial commissioning of the Affinity complex 16 miners have been injured or killed. Since the beginning of 2013, the Office of labor protection and industrial hygiene in mining USA (MSHA) has found out that 66 cases of security breaches at the mine belonged Metinvest. The Affinity was rendered 68 warnings and imposed a fine of 126 thousand dollars just over one year period.

However, the matter of security at Affinity has always been an issue. In early January 2006 the major accident occurred in the same West Virginia, 13 miners was trapped underground by the explosion of methane. Only one of them managed to survive [14]; April 6, 2010 as the result of the largest explosion at the mine since 1984 in 50 km to the South from Charleston USA 25 people were killed [15], etc. Even the undoubted achievements of American management in the field of safety in the coal industry are not in the strength to completely eliminate the effects of natural and human factors that significantly reduce the attractiveness of the coal business.

In fact, it seems that social processes inherent in the present will further complicate the situation in the coal industry. According to A.Gal'chinskyi "new layers of untapped human energy are not idling in the plain of the new cycle of system's integration and unification, as this is continuously insisted by some politicians and scientists, but on the opposite flank of the vast expanses of the individual, in the identification of freedom as the impersonation of the real personality. In accordance with this the capacity of large economic groups who typically were placed in the "symbols" of industrialism are weakening. The era of dominance of the "massive" remains in the past" [16, p.8]. This is more than true for coal mine production method which is lifethrening and physically strenuous, far from creativity. The thing that people are now willing to work in underground conditions for the salary they are given (which is 12 times less than that of the miners' in America), is Path Dependence.

According to one of the residents of the village at the mine in the Central region of Donbass: "Our life is predetermined here: the guys go to the mine, and the girls - to "Styrole" (Ukraine's largest plant for the production of organic fertilizers). Rarely does anyone manage to follow another path." Such a way of living in the settlements surrounding mines has formed by generations.

However, in the large cities, the propensity to "social comfort", in the words of F.Borodkin, famous Russian socioeconomist, increasingly deters the people from working at the mine. "Until the mid-late twentieth

century the society and mutual relationship among people had always been the tools of economic activity, from families up to the global industrial corporations and States. But then, throughout the lifetime of almost one generation, management became a driver to a comfortable lifestyle" [17, p. 122; 18, p. 145].

This is reflected in increased requirements to the wage rates, working conditions (mechanization), which is the effect of the mythical Ouroboros -Snake that bites itself in the tail: the higher the salary, the more complex and more expensive equipment is, and the stricter security requirements are set, the more expensive coal mining becomes. The social component suppresses the economic one, embosses commercial ground from under the coal business. The same pattern is true for Germany where the highest social and environmental standards drove a German mine to unrecoverable loss. Even the unthinkable high productivity and safe secure technology, is not a lever of economic efficiency, and if it hadn't been for the intervention of the state, the German coal industry would have gone into oblivion long ago.

The inconsistency of Ukrainian coal mining governance has resulted, in society putting "a blind eye" on the phenomenon of "kopanky". A primitive technology, which disregards safety and sanitation, evades tax, paltry salaries, becomes a regular occurrence in depressed regions.

In scientific-academic hearings held in February 2013, Institute of industrial economics of the National Academy of Sciences of Ukraine [19], a famous Collier, doctor of technical Sciences, professor, MP Yuhym Zvyahilskyi emotionally and categorically called 'kopanky' a state-level crime on a large scale. "Somebody carries this coal by the state rail, not on wheelbarrows or cart, -Y.Zvyahilskyi expressed his indignation,- someone sells it by wholesale that someone buys and uses as an energy source, while legal coal has no marketing". The MP expressed the hope that the government is aware of the need to take emergency measures, because the industry is dying. "Kopanky and imports are destroying the domestic coal market."

On the other hand, metallurgists, as mentioned above, do not think and perceive Coal imports only. There are many similarities to the arrangement of the mining settlements in the traditional coal mining regions in Ukraine and the USA. The so-called Coal Camps around American mines is a school, a church, a shop, a theater, a modest accommodation. The same is in Ukraine - only until recent times churches were not apart of it, and the theater was called the culture centre.

With the onset of the crisis in the coal industry and mine closure villages get deserted in both countries. The closer the mine is to the large city, the more houses are abandoned. Some of them turn into ruins. Whole areas become zones of environmental neglect

and man-made disasters. Such situations are a common feature of old-industrial region of Ukraine, not only in the Donbas.

Conclusion. The relevance of these studies is to expand the American coal paradox, important for understanding the essence of the development of coal mining industries at the present stage of the global economy. The submissions of research carried out on the example Corporation "Metinvest", which has coal assets in the Donbas and in the Appalachian (United States), indicate that the social factor in the progress of negative processes is greater than the natural conditions of the fields. The economy cannot withstand the social burden and resolving this contradiction should be the central objective of socio-economic studies of the immediate future.

References

1. **Державна підтримка та перспективи інноваційного розвитку і структурних перетворень вугільної промисловості України: моногр.** / О.І. Амоша та ін. – Донецьк, ІЕП НАН України, 2009. – 325 с. 2. **Стариченко Л.Л.** Актуальні питання державної політики щодо вугільної промисловості / Л.Л. Стариченко // Уголь України. – 2012. – № 10. – С. 3-7. 3. **Формування та реалізація державної політики стосовно вугільної промисловості з урахуванням інтеграції України у світову економіку** / О.І. Амоша та ін. – Донецьк, ІЕП НАН України, 2013. – 196 с. 4. **Vuzni A. M.** A New Approach to Human Society Development in Global World / A. M. Vuzni // Економічний вісник Донбасу. – 2013. – № 4. – С. 15-17. 5. **Стьрикович М.А.** Исследования дальних перспектив развития энергетики / М.А. Стьрикович, Ю.В. Синяк // Вести Академии наук СССР. – 1986. – № 4. – С. 46-54. 6. **Состояние угольной промышленности США** // Коул интернэшнл. – 2012. – № 2. – С. 8-9. 7. **Walter Energy Inc.** "ожидает" неутешительных результатов I кв. 2012 г., несмотря на увеличение производства угля // Уголь. – 2012. – № 6. – С. 92. 8. **Череватский Д.Ю.** Промышленная политика для угольной промышленности / Д.Ю. Череватский // Економіка промисловості. – 2012. – С. 39-49. 9. **Карпенко Г.** "Павлоградуголь": сначала энергетика, потом металлургия // ugmk.info, бизнес-портал о реальном секторе экономики. – 18.04.2007. – [Электронный ресурс]. – Режим доступа: <http://www.ugmk.info/print.php?art=1176812484>. 10. **Откуда уголек?** // [Электронный ресурс]. – Режим доступа: <http://shu.prupu.org/post/9438>. 11. **Зарплата на американских шахтах Рината Ахметова в 12 раз выше, чем на украинских** // [Электронный ресурс]. – Режим доступа: http://ukrudprom.ua/news/Zarplata_na_amerikanskih_shahtah_Rinata_Ahmetova_vishe_chem_na_u.html.

12. **Monkey business** Ахметова [Электронный ресурс]. – Режим доступа: http://ukrrudprom.ua/analyt-ics/Monkey_business_Ahmetova.html. 13. **Угольная пыль** [Электронный ресурс]. – Режим доступа: <http://lenta.ru/articles/2014/07/22/mechel/>. 14. **США**. В Западной Вирджинии проведут проверку безопасности на угольных шахтах [Электронный ресурс]. – Режим доступа: <http://geonews.com.ua/news/detail/ssha-v-zapadnoj-virdzhinii-provedut-10091>. 15. **Крупнейший с 1984 г. взрыв на шахте в США унес жизни 25 горняков** [Электронный ресурс]. – Режим доступа: <http://top.rbc.ru/incidents/06/04/2010/389803.shtml>. 16. **Гальчинский А.** Экономическое развитие: методология обновленной парадигмы / А. Гальчинский // Экономика Украины. 2012. – № 5. – С. 4-17. 17. **Бородкин Ф.М.** Социально-экономика. Статья 1. Путь к господству над хозяйством / Ф.М. Бородкин // Общественные науки и современность. – 2006. – № 4. – С. 122-136. 18. **Бородкин Ф.М.** Социально-экономика. Статья 2. После конца экономики / Ф.М. Бородкин // Общественные науки и современность. – 2006. – № 5. – С. 141-154. 19. **Стенограмма академічних слухань з проблем промислового розвитку на тему «Розвиток вугільної промисловості України: згорти нерезонно розвивати»** [Электронный ресурс]. – Режим доступа: http://iep.donetsk.ua/akadem_sl/sluhannya_po_ugolnoy_prom/Stenograma.pdf.

Залознова Ю. С. Вугледобуток у соціо-економічному аспекті

Розглянуто співвідношення економічних і соціальних факторів у розвитку вугледобутку на прикладі вертикально-інтегрованих компаній. Наведено відмінності вітчизняних та зарубіжних активів. Розкрито сутність процесів розвитку вугледобувних галузей на сучасному етапі існування світового економічного господарства. Оцінено

вплив соціо-економічних аспектів, що пояснюють американський вугільний парадокс.

Ключові слова: вугільний парадокс, соціальні процеси, криза, вугільна промисловість, вертикально-інтегрований холдинг, соціо-економіка.

Залознова Ю. С. Угледобыча в социоэкономическом аспекте

Рассмотрено соотношение экономических и социальных факторов в развитии угледобычи на примере вертикально-интегрированных компаний. Даются различия отечественных, и зарубежных активов. Раскрыта сущность процессов развития угледобывающих отраслей на современном этапе существования мирового экономического хозяйства. Оценено влияние социоэкономических аспектов объясняющих американский угольный парадокс.

Ключевые слова: угольный парадокс, социальные процессы, кризис, угольная промышленность, вертикально-интегрированный холдинг, социо-экономика.

Zaloznova Yu. S. Coal Mining in Socioeconomic Aspect

The article investigate the correlation of economic and social factors in the development of coal mining on example of vertically integrated companies with both domestic and foreign assets. The effect of socioeconomic aspects which have led to the American paradox of coal is studied to understand the essence of the coal mining industry at the present stage of the global economic management.

Keywords: coal paradox, social processes, the crisis, coal industry, vertically integrated holding company, socioeconomics.

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