THE EFFECTS OF EVOLUTIONARY EMPLOYMENT RESTRUCTURING IN THE POLISH MINING ENTERPRISES IN THE CONTEXT OF SECTOR RISK

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Abstract

Background. Enterprise and industry restructuring is a multi-aspect and complex issue. Considering a large number of decisions accompanying restructuring and the variety of structural transformations, it is also a process burdened with numerous, often conjugate risk sources. The difficult situation of the Polish hard coal mining industry constitutes an additional application premise to undertake the subject study of the effects of employment restructuring in mining enterprises.

Research aims. The main purpose of this article is to determine the scale of achievement of the basic goals of employment restructuring in the two largest mining enterprises that consist of 24 hard coal mines.

Method. The research period includes the years 2005-2012 and encompasses the time when two subsequent government industrial restructuring programs were introduced: Reforms in the hard coal mining industry in the years 2003-2006 as well as Activity strategy of the hard coal mining industry in Poland in the years 2007-2015. Research concerning the level and efficiency changes was conducted individually for each mine that was part of the particular mining enterprises. When identifying the effects of the completed employment restructuring, a comparison was made related to the unit production costs in the individual mines, with the average purchase price of 1 GJ by the commercial power industry in the years 2005-2012, determining at the same time a group of mines that are periodically or permanently economically ineffective.

Key findings. The effects of evolutionary employment restructuring, in the form of efficiency and increased effectiveness, were obtained only in a few of the 24 hard coal mines examined. A failure of restructuring was induced by an ignorance of sector risk, connected with an inflow of cheaper and better quality imported coal under the European Union's, decarbonization policy, as well as a lack of flexibility in adjusting to changes in the environment, caused by a lack of understanding and acceptance of the necessity for employment restructuring among employees and trade unions.

Keywords: Effects of restructuring, Employment restructuring, Polish coal mining, Sector risk in mining

INTRODUCTION AND BACKGROUND

The Essence and Goals of Restructuring

Restructuring is a process of deep transformation in a company or industry (Borowiecki, 2003; Dorozik, 2006). Depending on the character, restructuring may be oriented towards growth or development (development restructuring), or to survival (repair restructuring)

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(Romanowska, 2001, Cyfert, 2006, Brandenburg, 2010, Kałowski & Wysocki, 2014). Taking into account the functional criteria, restructuring may concern a technical, organizational, marketing, financial or employment area. In practice, it often happens that the types of restructuring understood in such a way infiltrate each other, resulting in complex changes concerning the whole enterprise or industry.

The restructuring problem becomes more complicated in a situation when the whole industry is undergoing restructuring (Popovici, 2011, Kim et al., 2011, Arabi et al., 2014). At these times, the results of such restructuring are noticed not only in the restructured subjects but also in the whole region and economy (Mälkönena & Niinimäkib, 2012, Kristensena, 2012; Old & Rogers, 2012). The research conducted these days proves that industrial restructuring very often results in a partial or total failure. The reason for restructuring failure turns out to be the improper preparation of restructuring or its improper implementation (Ümarik et al., 2014), external factors (Kang et al., 2010) as well as a lack of restructuring monitoring and adequate systems of risk management (Inoue, 2008). The ownership form of the restructured companies in the industry is not without significance for the success of restructuring (Kam et al., 2008, Apostolov, 2013). The results of international research also show that restructuring in state-owned enterprises is hindered or impossible to conduct due to the political form of the decisions made, disturbances in the process of resource allocation or a lack of flexibility in activities and adjusting to changes in the environment (Bhattacharyya, 2007; Zhao, 2009, Apostolov, 2011).

According to the above, the restructuring processes still require modification and development, especially in an industrial depiction and in the economies of a relatively short free-market tradition (Ross, 2006, Lupu & Rotundu, 2011, Rachwał, 2011, Viciua, 2013). Therefore, in this article, the restructuring problem is raised concerning the Polish mining enterprises in the context of sector risk. Considering a large range of the issues connected with restructuring, the elaboration was limited to one of the functional areas of restructuring, which is employment restructuring. In the research part of the article, such restructuring is analyzed on the basis of two state-owned Polish mining enterprises in the period encompassing the years 2005-2012.

When particularizing the range of research conducted into the main research thread, it should be emphasized that employment restructuring is a process of changes in the structure of employment (Lachiewicz & Zakrzewska-Bielawska, 2005; Kożuch, 2010). As a result of the realization of this process, it is mostly expected to adjust the structure of employment to the current and future market needs and increased efficiency, triggering a rise in the effectiveness of performance (Gabrusiewicz & Galicki, 1995;

Borowiecki, 2010). A condition of the achievement of the attempts is determined in such a way to understand and accept the necessity of employment restructuring by employees and to propose realistic instruments of restructuring proceedings by the management (Zieliński, 2014).

Employment restructuring may have an evolutionary character and takes place in the form of stopping external recruitment of new employees, internal transfers and team changes, as well as natural employee reduction, mainly through early retirement (Zieliński, 2013). Employment restructuring may also have a radical character, induced by an urgent need to reduce employment and carried out by individual or group dismissals. In practice, it is also possible to use indirect instruments in the restructuring process such as the flexible adjustment of working hours to the production needs, reducing working hours or stopping wage increases or by wage reduction.

Restructuring of Mining Enterprises in Poland

The restructuring of the mining enterprises in Poland is an element of industrial restructuring that concerns the hard coal mining industry, which started at the beginning of the 1990's. Its course is synthetically illustrated in figure 1.

The restructuring processes conducted in the hard coal mining industry have a long-term and holistic character because they have lasted for more than twenty years and they include technical, organizational and financial restructuring as well as employment restructuring (Turek, 2007, 2011; Michalak, 2012). Moreover, considering the strategic character of the hard coal mining industry in the Silesian region to the energy security of Poland, the changes implemented in the frame of restructuring have had an evolutionary character for years. Radical actions could endanger the social priorities in the form of retention of workplaces and protection from region pauperization, which accompanies this type of restructuring (Stachowicz, 2001).

The main purpose of restructuring the hard coal mining industry in Poland is mostly the effective improvement of functioning of the mining enterprises (Karbownik & Turek, 2011). Achievement of this objective, according to the theoretical suggestions mentioned at the beginning, may be guaranteed by employment adjustment to a decreasing demand for hard coal and connected with the efficiency increase at the same time (Karbownik & Turek, 2006, Gumiński et al., 2008). An effective implementation of the aforementioned activities enables the unit production cost reduction, and which reflects in the improvement of financial results of the mining enterprises.
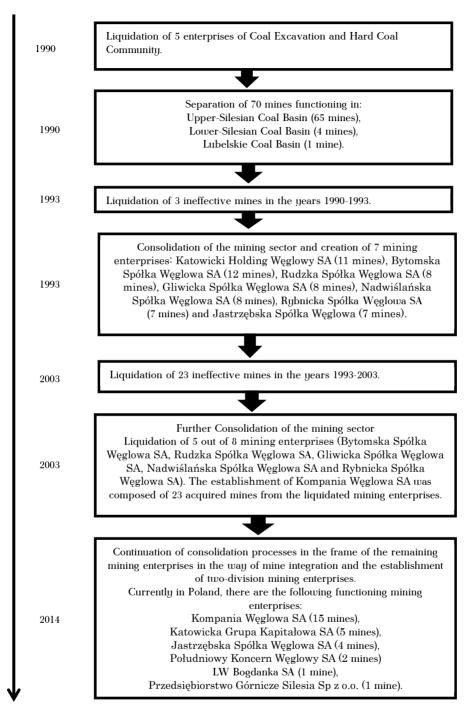
1990	Liquidation of 5 enterprises of Coal Excavation and Hard Coal Community.

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1990	Separation of 70 mines functioning in: Upper-Silesian Coal Basin (65 mines), Lower-Silesian Coal Basin (4 mines), Lubelskie Coal Basin (1 mine).

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1993	Liquidation of 3 ineffective mines in the years 1990-1993.

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1993	Consolidation of the mining sector and creation of 7 mining enterprises: Katowicki Holding Węglowy SA (11 mines), Bytomska Spółka Węglowa SA (12 mines), Rudzka Spółka Węglowa SA (8 mines), Gliwicka Spółka Węglowa SA (8 mines), Nadwiślańska Spółka Węglowa SA (8 mines), Rybnicka Spółka Węglowa SA (7 mines) and Jastrzębska Spółka Węglowa (7 mines).

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2003	Liquidation of 23 ineffective mines in the years 1993-2003.

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2003	Further Consolidation of the mining sector Liquidation of 5 out of 8 mining enterprises (Bytomska Spółka Węglowa SA, Rudzka Spółka Węglowa SA, Gliwicka Spółka Węglowa SA, Nadwiślańska Spółka Węglowa SA and Rybnicka Spółka Węglowa SA). The establishment of Kompania Węglowa SA was composed of 23 acquired mines from the liquidated mining enterprises.

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2014	Continuation of consolidation processes in the frame of the remaining mining enterprises in the way of mine integration and the establishment of two-division mining enterprises. Currently in Poland, there are the following functioning mining enterprises: Kompania Węglowa SA (15 mines), Katowicka Grupa Kapitałowa SA (5 mines), Jastrzębska Spółka Węglowa SA (4 mines), Południowy Koncern Węglowy SA (2 mines) LW Bogdanka SA (1 mine), Przedsiębiorstwo Górnicze Silesia Sp z o.o. (1 mine).

Figure 1. Evolution of organizational changes in the Polish hard coal mining industry in the years 1990-2014

Source: own work.

METHOD

Considering the key character of employment restructuring in the Polish hard coal mining industry, the main purpose of this article is to determine the extent of meeting the basic goals of employee restructuring in the two largest mining enterprises, associating 24 hard coal mines in their structures. Additionally, in the context of the results achieved, the article raises the issue of the role of sector risk in meeting the goals of restructuring as well as the necessity of incorporating sector risk management into the process of restructuring the Polish mining enterprises.

The period of the research covers years 2005-2012 and corresponds to the implementation of the two following government industrial restructuring programs: *Reforms in the hard coal mining industry in the years 2003-2006* as well as *Activity strategy of the hard coal mining industry in Poland in the years 2007-2015.*

The research concerning the level and changes in efficiency was conducted individually in each of the mines that are a part of the given mining enterprises. Such an approach has never been used before and its main advantage is to make it possible to conduct internal comparisons for the mines as well as an assessment of the diversification of efficiency in the units constituting the mining enterprises examined. The approach to the assessment of efficiency in the Polish hard coal mining industry is also innovative. Up to this point, the main unit of measurement used in the assessment of efficiency was the annual level of mining production per employee, expressed in tons per capita per annum, and which enabled an assessment of the changes as the volume of efficiency, but did not allow to take into account the quality of the mined resource. Such quality, in the case of power coal, is determined by the calorific value expressed in gigajoules (GJ). The higher the calorific value per ton of mined resources, the higher the quality of the hard coal. It also needs to be added that 1 GJ is the main payment unit in contracts signed by the mining industry with the commercial power and heating industries. Therefore, in the assessment of efficiency, and in this article, not only was the volume of the coal extracted taken into consideration but also its calorific value; at the same time, it was made possible to consider the quality of the resources mined in the Polish mines.

While identifying the efficiency of the employment restructuring conducted, a comparison of unit production costs was made in the particular mines at the average purchase price of 1 GJ by the commercial power industry in Poland during the years 2005-2012, thereby determining the group of mines that were periodically or permanently economically inefficient.

In the conclusion, as a part of the discussion, the sources of the sector risk influencing the course of restructuring in the examined mining enterprises were presented, as well as a suggestion of a permanent incorporation of sector risk management into the restructuring process of those enterprises.

RESULTS

The Assessment of Efficiency Against the Background of Changes in the Employment and Production Level

The results of the assessment of efficiency in the hard coal mines examined are presented in Appendix A. During their calculation, a so-called ton of coal equivalent was used, which is a universal unit, making it possible to reduce the mining production in all the mines to a common denominator, and taking the volume and quality of mining production into account. A ton of coal equivalent has a calorific value equalling 29.302 GJ.

The values of the average change in efficiency during the years 2005-2012 allowed the determination that in only 10 out of the 24 examined hard coal mines, was a rise of efficiency noted. The variations of efficiency are very irregular in time. Causal analysis conducted through the use of the chain substitution method (Bednarski, 2001) indicates that a high amplitude of change in efficiency is caused mostly by changes in the volume of production. The employment level changes less rapidly. The synthetic average of the changes in the level of employment, mining production and efficiency in the years 2005-2012 are presented in Figures 2-4.
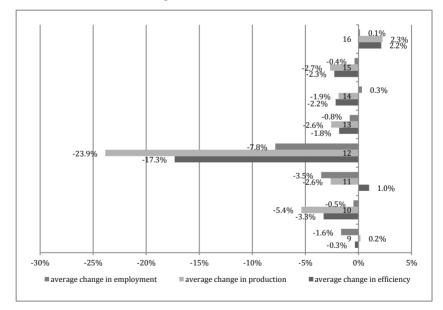
Figure 2. Average Change in Efficiency, Production and Employment in the Mines no. 1-8 in the years 2005-2012 (in %)

Source: own work based on the data from the examined hard coal mines.

A high variation in mining production over time stems mainly from changes in the demand for hard coal in the commercial power industry. These changes were caused by three basic circumstances. The first is the demand for electricity in the economy varying over time, including a significant reduction of this demand in the year 2008 due to a general financial crisis. The second is the climatic changes in the particularly short and warm winters, limiting the need of the power industry (Dubiński & Turek, 2012). The third cause is an intensified price and quality competitiveness of the Polish hard coal (Michalak & Turek, 2009), resulting in the inflow of cheaper and better quality hard coal from imports, particularly intensive in the last two years of the analysed period (Olkuski, 2013).

According to the above, in the conditions of a variable, but with systematically decreasing mining production, the evolutionary employment restructuring was not enough to provide a permanent increase of efficiency in an eight-year perspective in the majority of the examined hard coal mines. In the years 2009-2010, due to a post-crisis increase in demand for energy and the rise in price for this resource on the global market, the demand and mining production in the Polish mines periodically rises (Papież & Śmiech, 2013). A temporary improvement of financial results occurs, which is to a large degree consumed by the increase of salaries forced by the trade unions.
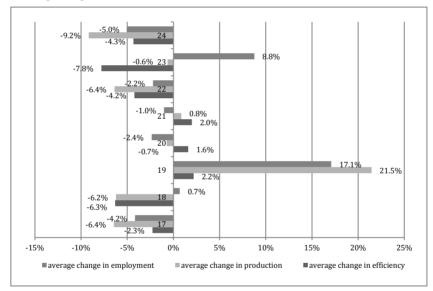

Figure 3. Average Change in Efficiency, Production and Employment in the Mines no. 9-16 in the years 2005-2012 (in %)

Source: own work based on the data from the examined hard coal mines.

The years 2011-2012 brought another downturn to the hard coal market, reflecting a significant decrease in the price of this resource. The Polish mining enterprises were unable to deal with this negative price trend. A reduction of the unit production cost, necessary in such circumstances, is blocked by the introduced pay rise and inability to implement the radical changes in the employment structure, stemming from the opposition of trade unions (Turek, 2013).

The data presented in table 1 and in figures 2-4 also make it possible to observe a significant diversification in the efficiency of mines functioning in the structures of the examined mining enterprises, and resulting mostly from the diverse geological and mining conditions that have an influence on the continuity and volume of mining production in these particular mines. The observed changes are also a result of a systematic reduction of the mining production in inefficient mines, which were accompanied by less radical changes in the employment that served for workplace protection.

Figure 4. Average Change in Efficiency, Production and Employment in the Mines no. 17-24 in the years 2005-2012 (in %)

Source: own work based on the data from the examined hard coal mines.

The efficiency effects of the consolidation of hard coal mines, used as an instrument of employment restructuring, are also worth noting. In the period analysed, the combining of mines 4 with 6, 10 with 12, 18 with 23 and 19 with 20 was performed. The efficiency increased only in mines no. 19+20. In case of other consolidations in the perspective of 2-3 years, there was a significant decrease of efficiency in relation to a significant increase

in the employment level. It is also worth adding that in a longer time horizon, the mines no. 4+6 managed to achieve an increase of efficiency. In this case, it is proof of the delayed effects of consolidation (Jonek-Kowalska, 2013).

Consequences of Evolutionary Employment Restructuring Concerning Effectiveness

Perhaps the evolutionary employment restructuring, in the form of using natural employee outflow, could be sufficient for the survival of the mining enterprises examined if there were no radical transformations in their environment, which are manifested with the changes of demand for electricity, or if there were no rapid price fluctuations of hard coal on the global markets that were not accompanied by flexible activities oriented at the reduction of the unit production cost, and in this way, at increasing price competitiveness. The effective consequences of only partially efficient restructuring are presented in table 2, and which include the price comparison of 1 GJ in the commercial power industry with the costs of 1 GJ production in the hard coal mines examined.

According to the results presented in table 2, in the period examined as a whole, a large number of the mines examined are periodically or permanently inefficient. The cost of 1 GJ production in these mines exceeds the purchase price of 1 GJ in the power industry. This situation has significantly deteriorated in the last two years. At that time, excavation was profitable only in the mines no. 7-8. An internal reason for such a state of affairs is an increase in production costs triggered by economic and irreversible pay rises in the years 2009-2010, when the demand for energy and its price increased.
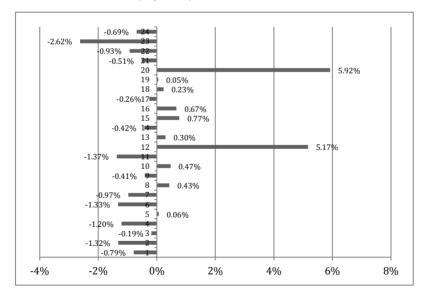
Table 2. Comparison of the Cost of 1 GJ Production with 1 GJ Purchase Price in the Commercial Power Industry in the Hard Coal Mines Examined in the years 2005-2012 (in PLN/GJ)
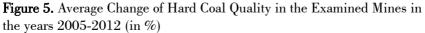
Specification	Years							
	2005	2006	2007	2008	2009	2010	2011	2012
PRICE IN THE POWER INDUSTRY	6.1	6.3	6.6	8.4	10.6	10.0	10.2	11.0
Mine no. 1	6.8	6.6	7.9	8.0	10.1	9.8	12.2	12.2
Mine no. 2	6.2	6.7	8.0	10.3	11.9	12.4	14.7	14.8
Mine no. 3	6.1	5.4	5.4	5.9	7.7	7.1	7.6	10.4
Mine no. 4	5.5	5.7	6.3	7.0	8.6	8.4	9.8	10.8
Mine no. 5	6.2	6.5	6.4	7.6	9.4	9.7	11.7	10.7
Mine no. 6	5.6	6.3	7.7	10.5	9.6	11.3	Combined with the mine no. 4.	
Mine no. 7	6.1	6.2	8.1	10.3	13.3	12.8	12.2	15.6
Mine no. 8	5.9	6.2	5.8	7.8	8.5	8.5	10.2	10.6
Mine no. 9	4.9	5.2	5.4	6.0	7.7	7.4	8.7	9.3

Specification	Years							
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Mine no. 10	5.8	6.3	8.8	12.0	12.8	15.2	12.7	12.9
Mine no. 11	8.2	5.9	7.1	7.1	9.5	11.1	12.0	13.3
Mine no. 12	6.3	7.9	Combined with the mine no. 9.					
Mine no. 13	6.3	6.5	6.7	8.3	7.8	11.0	11.8	12.9
Mine no. 14	5.4	5.7	6.2	7.6	8.5	8.4	9.4	9.6
Mine no. 15	5.2	5.1	5.5	7.9	8.1	7.4	9.4	9.5
Mine no. 16	5.4	5.1	5.6	6.0	7.2	6.5	7.6	7.6
Mine no. 17	6.4	7.0	7.9	9.0	11.2	10.5	12.2	11.8
Mine no. 18	5.9	7.4	7.3	8.8	11.7	Combined with the mine no. 23.		
Mine no. 19	6.9	8.1	7.5	9.6	10.8	10.5	9.9	10.8
Mine no. 20	6.2	6.4	Combined with the mine no. 19.					
Mine no. 21	8.1	6.8	7.5	8.0	9.6	10.0	10.4	12.6
Mine no. 22	6.5	6.3	6.9	7.9	10.2	11.0	10.5	14.1
Mine no. 23	5.0	5.8	6.6	7.9	9.6	11.6	11.4	14.3
Mine no. 24	6.2	6.6	6.8	8.6	10.5	12.5	11.4	13.4

Grey means ineffective mines.

Source: own work based on the data from the examined hard coal mines.

Also, a systematic quality decrease of the resources mined in the Polish mines is not without significance. In the examined period, only 10 out of the 24 examined mines were able to improve the calorific value of hard coal, but only in the case of 2 mines, can this quality increase be considered as relevant (Figure 5).

Figure 5. Average Change of Hard Coal Quality in the Examined Mines in the years 2005-2012 (in %)

Source: own work based on the data from the examined hard coal mines

An external reason for the profitability decrease of the Polish mines production is an inflow of better quality coal from imports, mostly from Russia but also such remote places as the United States, where the prices of hard coal have drastically decreased due to the revolutionary excavation of shale gas. In result, since 2008, hard coal imports have exceeded the amount exported for the first time in the history of Poland (Figure 6).
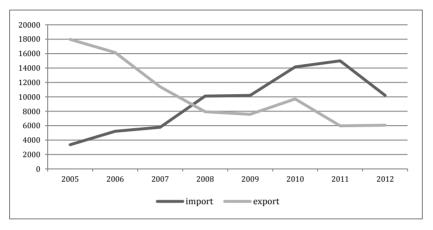

Figure 6. Hard Coal Import and Export in the years 2005-2012 (in thousands of tons)

Source: own work based on the data from the Ministry of Economy.

Another reason is an increasing use of renewable energy sources in the power industry, also including biomass, which is co-combustible in the coal fired units. A decrease of demand for hard coal in the power industry was also caused by the efficiency increase of electricity production and the necessity to reduce carbon dioxide, sulfur and nitrate emission.

DISCUSSION AND CONCLUSIONS

New sources of sector risk have appeared in the recent years in the sector environment of the mining enterprises examined. Among the most important, the EU decarbonization policy may be indicated. It generates a decrease of demand for hard coal. The risk sources are also intensified by advancing globalization and the co-dependence of energy resource markets. These markets have been characterized by greater price fluctuations and the increasing occurrence of incidental supply booms in the last ten years. In the conditions of decreasing demand for hard coal, fierce competition among the European and global hard coal producers has become a serious threat to the Polish mining enterprises. This situation has been additionally complicated by the deposit exhaustion in Polish

mines and the consequent necessity for deeper excavation, which increases the costs of production.

The intensity and large number of new sources of sector risk require a flexible and quick adjustment to the changes taking place in the environment. Such ability is very important in the mining industry because the enterprises functioning within it do not have any possibility to diversify their activity, and they are practically dependent on a strictly defined group of buyers that are composed of the power industry and heat engineering. In this situation, the only effective strategy is to gain a price advantage and/or quality advantage, resulting in the exclusion of competitors from the market.

However, in light of the results presented in the article, qualitative and price advantages decrease in the enterprises examined. Despite the restructuring activities planned, efficiency and effectiveness do not improve. The workplace protection of prior characters in connection with pay rises caused by conjunctural economic improvement, and forced by trade unions have caused dramatic effects. The enterprises examined have ignored an increasing sector risk and are faced with further deepening losses.

In light of the above, it should be stated that the evolutionary employment restructuring conducted in the years 2005-2012 did not bring the expected results, and the only possible action to minimize the effects of the existing threats is radical employment restructuring that would guarantee further functioning of the industry. Nevertheless, having returned to the success condition of each employment restructuring mentioned at the beginning, it should be emphasized that without the understanding and acceptance of the need to restructure by the employees and trade unions, there is no success.

The activities in the area of employment restructuring should be embedded in the process of sector risk management in the mining industry. A schematic depiction of this process is presented in figure 7.

Figure 7. The Scheme of Sector Risk Management in the Restructured Mining Enterprise

Source: own work.

At present, the sector risk is ignored by the mining enterprises examined. Apart from a lack of restructuring effects and a lack of adaptation to the economic changes, they are also confirmed by a survey carried out among the middle-level managers in the mines of the largest examined mining enterprise (16 mines), in which the respondents, indicated as the only vital risk source, the natural risk hazards typical for underground mining activity (Jonek & Turek, 2011). The respondents assigned an influence of 10% for operating results to the risks connected to making managerial decisions (in 13 out of 16 examined hard coal mines).

The effects of such risk perception, in connection with a lack of understanding and acceptance of activities in the area of restructuring, showed that the examined mining enterprises not only did not reach the

planned restructuring results but also faced a danger of bankruptcy. In such circumstances, confronting the sector risk means to undertake radical actions aimed at survival, which includes the immediate adjustment of production, employment level and structure to the market needs, the liquidation of mines that are permanently ineffective and tightening relationships with the power industry through cooperation or activity concentration.

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Appendix A: Efficiency and its changes in the examined mines in the years 2005-2012

Specification	Years								Average
	2005	2006	2007	2008	2009	2010	2011	2012	
Mine no. 1									
Efficiency [tce/person/year]	528	564	495	509	502	563	525	522	526
Change in comparison with the previous yr [%]	-	6.82	-12.23	2.83	-1.35	12.12	-6.75	-0.57	0.12↑
Mine no. 2									
Efficiency [tce/person/year]	559	549	474	410	386	405	343	375	438
Change in comparison with the previous yr [%]	-	-1.79	-13.66	-13.42	-5.94	4.92	-15.31	9.33	-5.12↓
Mine no. 3									
Efficiency [tce/person/year]	633	744	752	794	680	727	747	669	718
Change in comparison with the previous yr [%]	-	17.54	1.08	5.58	-14.36	6.91	2.75	-10.44	1.29↑
Mine no. 4									
Efficiency [tce/person/year]	736	707	685	705	631	656	611	508	655
Change in comparison with the previous yr [%]	-	-3.94	-3.11	2.88	-10.47	3.96	-6.86	-16.86	4.91↑
Mine no. 5									
Efficiency [tce/person/year]	661	673	716	672	565	534	514	573	614
Change in comparison with the previous yr [%]	-	1.82	6.39	-6.11	-15.96	-5.49	-3.75	11.48	7.07↑
Mine no. 6									
Efficiency [tce/person/year]	715	649	570	482	541	481	Combined with the mine		573

Specification	Years								Average
	2005	2006	2007	2008	2009	2010	2011	2012	
Change in comparison with the previous yr [%]	-	-9.23	-12.17	-15.46	12.27	-11.09	no. 4.		-8.56↓
Mine no. 7									
Efficiency [tce/person/year]	532	543	439	411	368	365	447	393	437
Change in comparison with the previous yr [%]		2.07	-19.15	-6.39	-10.45	-0.82	22.47	-12.08	-3.48↓
Mine no. 8									
Efficiency [tce/person/year]	563	542	585	541	561	575	557	570	562
Change in comparison with the previous yr [%]		-3.73	7.93	-7.46	3.63	2.50	-3.13	2.33	0.30↑
Mine no. 9									
Efficiency [tce/person/year]	698	686	704	773	653	651	657	669	686
Change in comparison with the previous yr [%]		-1.72	2.62	9.77	-15.50	-0.31	0.92	1.83	-0.34↓
Mine no. 10									
Efficiency [tce/person/year]	606	577	445	390	374	300	368	435	437
Change in comparison with the previous yr [%]		-4.79	-22.88	-12.31	-4.15	-19.79	22.67	18.21	-3.29↓
Mine no. 11									
Efficiency [tce/person/year]	470	632	546	636	512	460	479	456	524
Change in comparison with the previous yr [%]		34.47	-13.61	16.48	-19.49	-10.16	4.13	-4.80	1.00↑
Mine no. 12									
Efficiency [tce/person/year]	566	468							517
Change in comparison with the previous yr [%]	-	-17.31	Combined with the mine no. 10.						-17.31↓
Mine no. 13									
Efficiency [tce/person/year]	587	603	706	583	671	490	493	474	576
Change in comparison with the previous yr [%]	-	2.73	17.08	-17.42	15.09	-26.97	0.61	-3.85	-1.82↓

Specification	Years								Average
	2005	2006	2007	2008	2009	2010	2011	2012	
Mine no. 14									
Efficiency [tce/person/year]	659	630	641	645	597	584	581	564	613
Change in comparison with the previous yr [%]	-	-4.40	1.75	0.65	-7.47	-2.18	-0.51	-2.93	-2.16↓
Mine no. 15									
Efficiency [tce/person/year]	775	773	778	625	660	678	627	643	695
Change in comparison with the previous yr [%]	-	-0.26	0.65	-19.70	5.64	2.73	-7.52	2.55	-2.27↓
Mine no. 16									
Efficiency [tce/person/year]	696	752	763	835	749	774	798	798	771
Change in comparison with the previous yr [%]	-	8.05	1.46	9.44	-10.30	3.34	3.10	0.00	2.15↑
Mine no. 17									
Efficiency [tce/person/year]	553	506	463	496	430	446	442	462	475
Change in comparison with the previous yr [%]	-	-8.50	-8.50	7.15	-13.33	3.72	-0.90	4.52	-2.26↓
Mine no. 18									
Efficiency [tce/person/year]	632	535	534	557	479				547
Change in comparison with the previous yr [%]	-	-15.35	-0.19	4.31	-14.00	Combined with the mine no. 23.			-6.31↓
Mine no. 19									
Efficiency [tce/person/year]	538	505	562	490	504	536	601	611	543
Change in comparison with the previous yr [%]		-6.13	11.29	-12.81	2.86	6.35	12.13	1.66	2.19↑
Mine no. 20									
Efficiency [tce/person/year]	689	700							695
Change in comparison with the previous yr [%]	-	1.60	Combined with the mine no. 19.						1.60↑
Mine no. 21									
Efficiency [tce/person/year]	522	661	603	594	583	595	604	579	593

Specification	Years								Average
	2005	2006	2007	2008	2009	2010	2011	2012	
Change in comparison with the previous yr [%]	-	26.63	-8.77	-1.49	-1.85	2.06	1.51	-4.14	1.99↑
Mine no. 22									
Efficiency [tce/person/year]	638	697	651	645	562	510	543	458	588
Change in comparison with the previous yr [%]	-	9.25	-6.60	-0.92	-12.87	-9.25	6.47	-15.65	-4.23↓
Mine no. 23									
Efficiency [tce/person/year]	818	785	685	604	562	473	509	454	611
Change in comparison with the previous yr [%]	-	-4.03	-12.74	-11.82	-6.95	-15.84	7.61	-10.81	-7.80↓
Mine no. 24									
Efficiency [tce/person/year]	400	382	399	359	319	281	319	285	343
Change in comparison with the previous yr [%]	-	-4.50	4.45	-10.03	-11.14	-11.91	13.52	-10.66	-4.32↓

Source: own work based on the data from the examined hard coal mines.

EFEKTY EWOLUCYJNEJ RESTRUKTURYZACJI ZATRUDNIENIA W POLSKICH PRZEDSIĘBIORSTWACH GÓRNICZYCH W KONTEKŚCIE RYZYKA SEKTOROWEGO

Abstrakt

Tło badań. Restrukturyzacja przedsiębiorstw i branż to zagadnienie wieloaspektowe i złożone. Z uwagi na wielość decyzji towarzyszących restrukturyzacji oraz różnorodność przeobrażeń strukturalnych jest to także proces obarczony licznymi, często sprzężonymi źródłami ryzyka. Okoliczności te implikują konieczność dalszego doskonalenia procesów restrukturyzacji w celu zwiększenia ich skuteczności i efektywności. Trudna sytuacja polskiego górnictwa węgla kamiennego stanowi dodatkową, aplikacyjną przesłankę podjęcia tematu efektów restrukturyzacji zatrudnienia w przedsiębiorstwach górniczych.

Cele badań. Głównym celem niniejszego artykułu jest określenie zakresu realizacji podstawowych celów restrukturyzacji zatrudnienia w dwóch największych przedsiębiorstwach górniczych, zrzeszających w swych strukturach 24 kopalnie węgla kamiennego.

Metodyka. Okres badań obejmuje lata 2005-2012 i przypada na wdrażanie dwóch kolejnych rządowych branżowych programów restrukturyzacyjnych Reformy górnictwa węgla kamiennego w Polsce w latach 2003-2006 oraz Strategii działalności górnictwa węgla kamiennego w Polsce w latach 2007 – 2015. Badania dotyczące poziomu i zmian wydajności przeprowadzono indywidualnie w każdej z kopalń wchodzących w skład poszczególnych przedsiębiorstw górniczych. Identyfikując efekty przeprowadzonej restrukturyzacji zatrudnienia przeprowadzono porównanie jednostkowych kosztów produkcji w poszczególnych kopalniach do średniej ceny zakupu 1 GJ przez energetykę zawodową w Polsce w latach 2005-2012, określając tym samym grupę kopalń okresowo lub permanentnie nieefektywnych ekonomicznie.

Kluczowe wnioski. Efekty ewolucyjnej restrukturyzacji zatrudnienia w postaci wzrostu wydajności i efektywności zostały zrealizowane jedynie w kilku z 24 badanych kopalń węgla kamiennego. Do niepowodzenia restrukturyzacji przyczyniła się ignorancja ryzyka sektorowego, związanego z napływem tańszego i lepszego węgla kamiennego z importu oraz unijną polityką dekarbonizacji, jak również brak elastyczności w dostosowywaniu się do zmian w otoczeniu, spowodowany brakiem zrozumienia i zaakceptowania konieczności restrukturyzacji zatrudnienia przez pracowników i związki zawodowe.

Słowa kluczowe: Efekty restrukturyzacji, restrukturyzacja zatrudnienia, polskie górnictwo, ryzyko sektorowe w górnictwie.