


# ANALYSIS THE DEVELOPMENT OF PENSIONS RELATED TO WORK IN THE MINING INDUSTRY IN POLAND

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***Abstract:** The article discusses retirement benefits related to employment in the mining industry in Poland. They are often referred to as social privileges. The nature of work and the constant dangers faced by miners since the beginning of this profession have led to solidarity not found in other industries. A manifestation of this solidarity was the emergence of institutions to provide funds for further existence, during also the time of incapacity for work due to age. As a result, it was in the mining industry that insurance was the first to develop. They were also modelled on when their common obligatory forms were later introduced. The aim of this article is to present the current solutions compared to the previous ones. The main goal is to organize the knowledge on the issue in question. Systematizing knowledge is to allow for a discussion about the rightness of solutions. The article describes the issues discussed in Poland*

***Key words:** mining, retirement benefits, insurance.*

***JEL codes:** L 70, J 00*

## **1. Introduction**

The risk of mining work is not limited only to the particularly exhausting effects of this work, but is also associated with a high degree of danger, which causes more frequent accidents than in other professions and deterioration of health. It must be remembered that mining work is often performed in extremely difficult conditions, which consist of the combined occurrence of many different hazards, depending of what type of work is performed. The most effective way to imagine is to depict the conditions of an underground mine. Increased temperature and the

composition of the mine atmosphere, which is poorer in the oxygen than atmospheric air, and may also contain harmful gases, which causes respiratory problems. In addition, the atmosphere in the mine is highly dusty, has high humidity and poor air flow. Another limitation is the lack of access of daylight, to which people are used to. The depth of exploitation, which increases with the depletion of shallower deposits, causes an increase in the air pressure and temperature. Work performed in the underground of mines is also associated with narrow passages and access to work stations, as well as the tightness of rooms due to the large number of installed machines (Matuszewska- Majcher, 2017, p. 197-198).

It is because of the special nature of mining work that people employed in the industry could count on specific benefits related to this work. Because care of the employee also manifests itself in concern for his health. And it was the difficulty of mining work that resulted in the establishment of the privilege, which is undoubtedly a mining pension. The origins of social welfare in the industry date back to the 12<sup>th</sup> century and by the 16<sup>th</sup> century it was already statutory. Hence, miners had disability protection prior to the development of universal social insurance covering workers in all industries. The aim of this article is to discuss the development of retirement benefits related to working in mining from the beginnings of mining to modern times. This applies to the discussed issues in Poland. This article is to indicate their distinctiveness and the fact that today's retirement benefits have a long tradition.

## **2. Establishment and development of insurance in the mining industry**

The first organizations of miners appeared in the form of self-help associations under the name of canned cash registers, brother's boxes or brotherhood funds, which over time transformed into public-legal institutions. The first attempt to organize mining relations in the field of mining activities and social security was the Ordunek Górny issued in 1528. The law contained 72 articles, and article 58 provided care for "the poor, the weak and the sick". This act, modelled on the Olkusz, Bytom and Frankonian customary laws already introduced in Upper Silesia, became the foundation and model for the later mining legislation and the beginning of the insurance law. The act changed the previously existing on a voluntary basis brotherhood funds into compulsory organizations. A similar fund for poor miners, the sick, the invalids, widows and orphans was introduced by the miners from Olkusz by the resolution of 13<sup>th</sup> February 1671. (Woźniczka, 1960, p. 1-2).

Further solutions can be found in the renewed commitment of miners to the Mining Office in Tarnowskie Góry to pay contributions to the brotherhood funds from 1868, and the general bill and the mining act of 1764, as well as the "Instruction" of 20<sup>th</sup> November 1769 (Woźniczka, 1949, p. 65-66).

The contributions paid by the workers were used to create Upper Silesian Brotherhood Company in Tarnowskie Góry (Popiołek, 1946, p. 25). Pszczyna Brotherhood Company ( 8<sup>th</sup> March 1861) with headquarters in Katowice was established separately.

The final rules for the operation of brotherhood companies were sanctioned by the general mining law from 24<sup>th</sup> June 1865. Since then, the companies were under the supervision of the state mining authorities, and the funds of the companies came from contributions of miners and mine owners. The company was divided into two brotherhood companies: Lower Silesian and Upper Silesian (Wieniawa-Chmielewski, 1934, p. 532).

The insured members of the company were divided into full-fledged or permanent or non-permanent members. The division was of fundamental importance from the point of view of the right to benefits provided by the company ( non-permanent members did not have rights in the event of old age, among others). The aforementioned act from 24<sup>th</sup> June 1865 specified the minimum benefits, leaving their detailed interpretation to the statutes of companies.

Salary insurance was insurance against invalidity, death and old age. It provided cash benefits to members of the union and their families and covered funeral expenses (in the event of death due to an accident at work). The insurance costs were borne in half by the insured and the employers. The premiums varied, and so did the benefits, depending on the amount of the premium and the insurance period. The special brotherhood judiciary settled disputes between the insured and the brotherhood funds (Wanatowicz, 1999, p. 10-11). In the 1860s', Upper Silesian Brotherhood Company comprised miners of private coal, calamine, lead ore mines, state-owned hard coal and lead ore mines. The obligation to belong to the company was also imposed on the officials of the indicated entities earning less than 2500 marks a year (Jonca, 1966, p. 191-192).

In the eighties of the 19<sup>th</sup> century, apart from brotherly insurance, new insurance was established. Prussia was the country that on 22<sup>nd</sup> June 1889 issued the law on retirement insurance. The insurance was general and obligatory and was modelled on the brotherhood insurance. Since then, mining salary insurance has become an additional pension insurance, existing next to the general system. Obtaining benefits from the first was conditioned on incapacity to work in mining, while the second was due to age. The benefits from the

brotherhood insurance were higher than the benefits from the general insurance (Wanatowicz, 1999, p.11).

The mining law remained the legal basis for the operation of the brotherhoods funds. This state of affairs lasted until 1912, when, by virtue of the act from 17<sup>th</sup> June 1912, the provisions on mining fraternities were removed from the Mining Act and announced as a separate “ Mining Fraternities Act”. This act regulated the health insurance and the wage insurance of the brotherhood funds. The scope and size of benefits as well as the collection of contributions were specified (Wyżynikiewicz, Rzewski, 1936, p. 81). The act finally consolidated the system of separate, additional brotherhood insurance in the field of salary insurance. The entirety of relations in Upper Silesian Brotherhood Company was specified in the statute adopted on 13<sup>th</sup> October 1912 with four supplements issued in the years 1913-1919, while in the Pszczyna Mining Brotherhood – the statute of 17<sup>th</sup> December 1913 with six additions from 1913-1920. The correction of the brotherhood legislation was related to the actions of the First World War and the revolutionary situation in Germany in the years 1918-1920 (Wanatowicz, 1973, p. 20-22). The additions unified the statutes of both brotherhood funds and approximated the forms of action. The entire legal, political and organizational framework of the brotherhood insurance in Upper Silesia was based on the aforementioned legislation until the split of brotherhood companies, related to the regulations of the Geneva Convention of 15<sup>th</sup> May 1922.

In turn, in the Congress Kingdom, the development of brotherhood funds began with Stanisław Staszic as a head of the mining office, when, on the basis of the decree of 13<sup>th</sup> March 1817, then Main Mining Directorate issued a temporary organization requiring contributions to the fund of the Brotherhood Association. In 1898, there were 18 brotherhood funds ( at individual mines ). A retirement pension could be obtained on the condition of regular payment of contributions, after being disabled while working and after 40 years of uninterrupted work. One-sixth of the earnings were paid after 10 years, one-fourth after 20 years, one-third after 30 years and one-half after 40 years. A member of the credit union could be deprived of the right to an old-age pension if he voluntarily quit his job or was removed from the mining corps for an official crime (Marzec, 1987, p.14 ). Brotherhood funds also existed in the Austrian partition, for example, Brother’s Box operating at the mining and metallurgical plants in Zakopane, or the brotherhood fund at Jaworznicki Coal Management (Woźniczka, 1960, p.1-2).

At that time, the Dąbrowski Basin was the only Coal Basin in Europe without organized pension insurance for miners. Only the mining laws from 1893 allowed for the establishment of brotherhood funds on a voluntary basis in private mining industrial plants with the joint consent of the owners and workers. Under the act of 1903 on work in industry, they became mainly pension insurance institutions. The income consisted of workers' contributions, company contributions and property income. The retirement pension was granted to miners who were unable to work until they regained their ability to work or for life. Some credit unions' statutes provided for a waiting period of up to 10 years. The amount of the benefit was determined by the management of the brotherhood funds taking into account the period of work and the amount of earnings. The individual statutes of the credit unions contained tables of the amount of disability pensions or their minimum amounts. In exceptional cases, with the permission of the West Mining Authority, pensions could be converted into one-off financial severance payments, the receipt of which exhausted all claims against the fund (Mamrotowa, 1934, p. 309-310, Fischlowitz, 1935, p. 639).

### **3. Retirement insurance for miners in the interwar period**

After the war, double insurance was retained in Upper Silesia in Poland. Regardless of the brotherhood insurance, the miners were also subject to the worker in the event of invalidity, old age and death, which functioned in accordance with the German insurance law of 1911. The obligation to perform it in this area was imposed by Polish-German Upper Silesian Convention of 1922. In addition, the autonomous status of the Silesian Voivodeship made social insurance within the competence of the Silesian Parliament, which, by the Act of 31<sup>st</sup> January 1923 lowered the age of granting the old age pension to 60, thus increasing the scope of those entitled to these benefits. The expected and required period for the old age pension was simultaneously reduced six times from 1200 weekly contributions to 200 (Wyżnikiewicz, 1938, p. 26-27). The pension consisted of the part paid out of the insurance funds and the state supplement of 100 PLN paid from the Silesian Treasury. The average amount of the benefit was 34 PLN per month (Szymanko, 1932, p. 162).

Additionally, in Upper Silesia there was brotherhood insurance. After the annexation of part of Upper Silesia (only the area covered by the activities of Pszczyna Mining Brotherhood was incorporated into the Polish state, while the area of Upper Silesian Brotherhood Company was divided into Poland and Germany), the special Polish-German treaty of 26<sup>th</sup> August 1922 led to the division and creation of two institutions:

- Brotherhood Company in Tarnowskie Góry
- Oberschlesische Knappschaft in Gliwice.

Adaptation to the new socio-economic conditions was reflected in the reorganization of the insurance legislation. Favourable changes in the regulations were aimed at extending the rights and increasing the amount of benefits. There were clearly two periods in the development of brotherhood legislation. Until 1931, there was a tendency to extend benefits and liberalise the conditions for receiving them. However, from 1932, under the influence of growing economic crisis in Upper Silesia, there was a clear regression in the legislation of brotherhood funds which lasted until the end of the 1930s (Lechowicz, 1934, p. 525 and next). Contributions were collected according to the earnings class, in percentage to the earnings determined for a given class. These contributions were not always the same and ranged in the Brotherhood Company from 8% to 12% of the earnings of the given class, and in the Pszczyna Mining Brotherhood they reached up to 16,7% of earnings. Until 1939, the upper limit of earnings was 240 PLN per month (contributions exceeding this limit were not calculated). The contribution was paid by the employer and employee in different parts. The average amount of the salary benefit in the years 1924-1933 was 55,61 PLN, showing a downward trend from that time to 49,20 PLN in 1938. The economic importance of the brotherhood wage insurance was significant for miners because the level of benefits from brotherhood funds was on average about 30% higher than the benefits from the general pension insurance and they were granted on more lenient conditions (Woźniczka, 1949, p. 71-73). On average, the benefit was received from the age of 53. The amount of benefits paid by brotherhood funds depended on several factors, including: the category of invalidity, the length of the contribution period and the amount of contributions. It is also worth mentioning the longer significance for miners of the Polish-German social insurance agreement of 1<sup>st</sup> June 1931. This agreement counted the periods of insurance in Poland against insurance in Germany and vice versa. This limited the losses that miners had incurred until then when they switched from one country's insurance to another. It looked like a minor who worked 5 years in Germany and 5 years in Poland (10 years in total), German insurance paid him half and the full amount of gradations, and Polish also half the basic amount and the full amount of gradations (Szymanko, 1934, p. 138-139). Mining pension insurance in Małopolska was based on the Act of 28<sup>th</sup> July 1889 on the sanctioning of relations between mining brotherhoods according to the established ordinance of the President of the Republic of 22<sup>nd</sup> March 1928.

All those employed in the mining industry were obligatory subordinate to him. This insurance did not provide for an old age pension, but there was a tendency to grant it from the age of 55 (Szymanko, 1932, p. 174).

In turn, in Dąbrowskie Basin, the brotherhood funds survived the war, but wiped out all their property, which was taken to Russia. In the years 1926-1928 the district labour inspector reformed the brotherhood funds in the Dąbrowskie Basin. Most pension funds switched to the system of granting one-off, capitalized benefits, and resigned from salary and periodic benefits (Wanatowicz, 1973, p. 22). The amount of severance pay depended on the number of years of work in the enterprise. There was a specific rate for each year of work (Fischlowitz, 1935, p. 639). In 1930, the financial collapse of the Dąbrowa pension funds began. The reason was reduction in the number of crews, the destruction of the assets of the pension funds by employers working in the management board, and the commencement of the service activity significantly exceeding the possibilities (Marzec, 1987, p. 15).

The situation of miners in the Cracow Basin and Dąbrowski Basin was changed by the so-called Consolidation Act passed on 29<sup>th</sup> March 1933 which among other things, integrated and standardized retirement insurance. The situation of miners in these areas was regulated in the same way as in other insurance groups. The age limits were 65 (only in Upper Silesia, the status quo was maintained in this matter). However, the Consolidation Act recognized other rules of granting disability for people employed in mining industry. Work in mining is harder and more dangerous than in other industries, and therefore miners were to use special rights, but for a higher fee. Special entitlements concerned early retirement pension after reaching the age of 60, however, provided that he had worked in the mining or metallurgy for at least 15 years. The entitlements also related to incapacity to earn money, namely a miner was considered an invalid if he lost more than 50% of his earnings, but only on condition that he had worked in mining for at least 12 years, of which at least one year in the last three years before becoming disabled to earn money (Jarosz-Nojszewska, 2012, p. 278-279).

Additional mining insurance has been retained in Dąbrowskie Basin. This mining insurance was regulated by the ordinance of the Minister of Social Welfare of 27<sup>th</sup> August 1935 on brotherhood insurance in Będzin district. On its basis brotherhood funds were liquidated and a new institution was established in their place: The Brotherhood of the Dąbrowskie Basin. Only miners were covered by the insurance premium. In return for the payment of this contribution during the waiting period (24 component months), they acquired the right to severance pay if they became permanently incapable of work due to an accident at work, illness,

physical or mental disability, or as a result of a decline in physical or mental strength (Mamrotowa, 1935, p. 383). The severance pay was 100 PLN after 24 months, 400 PLN after 96 months, 604 PLN after 168 months, 900 PLN after 216 months, and 900 PLN after 300 months. Then, it was to increase by 100 PLN for each subsequent 12 contribution months (Fischlowitz, 1935, p. 644).

These benefits were lower than in the previous unions, but higher than those from the general pension system.

The insurance obligation covered all workers of the plants where the former credit unions were operating. It was also possible to join the insurance of workplaces of other mining and metallurgical enterprises, not only in the Będzin district. The insurance became an obligation for the worker of a given enterprise upon accession under the conditions specified under the ordinance. The credit union covered over 90% of the miners in the Dąbrowski Basin because there were two restrictions. The first was dictated by technical and insurance considerations, persons who were over 44 years of age at the time of taking up employment for the first time were not allowed to be insured. The second restriction excluded people who were employed for less than a week in a given calendar month (Mamrotowa, 1935, p. 383).

The war also interrupted the activity of additional mining institutions. They were incorporated into the German mining insurance system represented by The Reich Mining Brotherhood. In addition to the invalidity allowance, an old age salary was introduced, granted to an insurance person without a medical examination at the age of 50 and having completed 300 premium months under the wage insurance (Woźniczka, 1988, p. 63-64).

#### **4. Retirement benefits of miners during the People's Republic of Poland**

After the war, the brotherhood insurance operated until the 1950s. The special importance of mining for the economy and the hardships of hard work introduced separate insurance regulations for this group after the liquidation of brotherly insurance. The legal act underlying these differences was the resolution of the Council of Ministers from 30<sup>th</sup> November 1930 of special privileges for miners in coal mining, known as the Miner's Charter. In the following three years, the privileges were extended to mining workers of all Polish mining departments employed underground (Woźniczka, 1954, p. 331). Following the Miner's Charter, the Government Presidium defined detailed rules for acquiring old age pension benefits by miners (Resolution No. 15 of the Government Presidium of 10<sup>th</sup> January 1951). On this basis, the miners acquired the right to the old age pension, which was granted to people from the age of



55 who worked at least 25 years underground or in equivalent work. The miners' old age pension was from 700 PLN to 1000 PLN per month, which was accompanied by additions and increases. The average amount of the mining pension significantly exceeded the level of universal benefits (Woźniczka, 1960, p. 3-4). Initially, privileges were granted to mining workers employed underground and to workers performing so-called equivalent work on the surface, usually resulting from the previous long-term work in the underground and constituting an extension of this underground work (Woźniczka, 1966, p. 26). Gradually, however, these privileges were extended to other branches and to certain groups of workers not employed underground. It started on 1<sup>st</sup> April 1957, when the Act of 28<sup>th</sup> May 1957 on pensions for miners and their families entered into force (Journal of Laws 1957 No. 32 item 139).

On its basis, the right to a minor pension was conditioned on having at least 25 years of work in mining, equal and credited. It was also dependent on reaching the age of 55 in the period of performing work in mining or an equivalent work. An employee who, at the time of reaching 55 years of age, did not have the required seniority, acquired the right to a mining retirement pension after completing the missing period. Miners' retirement pension, together with the increase due to the suitable seniority in mining, also increased by 15%, (the so-called mining preference) (Jeż, 1970, p. 14-16 ). If, on the other hand, an accident in employment or an occupational disease caused the employee's disability, he was entitled to a disability pension regardless of the period of hard work or an equivalent period of work (Wasilkowski, 1959, p. 105). Mining benefits were higher than those of other employees, for example in 1966 the average pension was 914 PLN, while the mining pension was 1599 PLN (Jarosz, 2013, p. 79). Only deserving persons and uniformed services were entitled to higher retirement benefits. Further changes were introduced by the Act of 1<sup>st</sup> February 1983 on retirement provision for miners and their families (Journal of Laws 1983 No. 5 item 32). On its basis, a mining pension was due to a person who jointly met the following conditions:

- is 55 years old,
- at the time of reaching age, he was working in mining or an equivalent job, or was receiving sickness benefit from social insurance for this work,
- had a period of mining work, including periods of equivalent work and periods included in mining work, at least 20 years for women and 25 years for men, including at least 5 years of mining work (Zgryzek, 1987, p. 62).

Lowering the retirement age for miners was one of the postulates included in the Jastrzębska agreements of 1980. Therefore, until 31<sup>st</sup> December 1985, the act gradually

lowered the retirement age. From 1<sup>st</sup> January 1986, the retirement age for miners was set at 50, and the right to mining retirement due to the reduced age were entitled to persons who:

- they reached lowered retirement age while performing mining work or work equivalent to mining work, or due to receiving sickness benefit from social insurance for such work,
- had a total of at least 25 years of mining work with periods of work equivalent to mining work and periods included in the work of mining. The period should include at least 15 years of work in mining (Zgryzek, 1987, p.63).

Miners who worked underground on a permanent and full-time basis for at least 25 years were entitled to a mining retirement pension, regardless of their age and position ( Article 10 of the Act of 1<sup>st</sup> February 1983 on pensions for miners and their families ). These activities contributed to the fact that in the nineties of the twentieth century there appeared a significant number of miners who acquired pension rights at the age of 43-45.

## **5. Contemporary legal regulations in the field of mining pensions**

Contemporary legal regulations regarding the retirement age of miners have been subject to numerous changes. After the pension reform in 1999, the miners were included in general system, but with some separate privileges. As the only professional group within the general social security system, the miners retained special rights, regardless of the rules governing the functioning of other pensions from this system. These privileges undergone some changes. Currently, a miner's pension is granted to a miner who meets all of the following conditions:

- he is 55 years old,
- has a period of mining work, including periods of equivalent work, at least 20 years of work for women and 25 years of work for men, including at least 10 years of mining work (this is, for example, underground work in coal mines, ores, refractory raw materials, clays precious stones, kaolin, magnesite, gypsum, anhydrite, rock and potassium salt, phosphorites and barite; underground and in the sinking of shafts in the mine construction enterprises specified in point 1, and in underground enterprises and other entities performing mining works for these mines or in the construction of shafts; underground in assembly companies, mining machinery companies, repair plants and other entities performing underground construction and assembly works for mines,

repair of machines and implementation of new devices; employees employed in these enterprises, plants and other entities are considered mining work is the place of employment in which they worked underground at least half of their working days; as members of mine rescue teams; at the positions of hoist train drivers on shafts and as whistleblowers on the headlands of mine shafts; as vocational instructors in mining training fields underground and in sulfur and lignite mines, etc. ). Periods of mining work and work equivalent to mining work are taken into account if the work was performed at least half of the working time ( work equivalent to mining work includes, among others, employment in positions requiring the qualifications of an engineer or technician in the field of mining in mining offices, if the employment is related to the performance of inspection and technical activities in mines );

- did not join an open pension fund or applied for the transfer of funds accumulated on an account in an open pension fund, via the Social Insurance Institution, to the income of the state budget (Act of 17<sup>th</sup> December 1998 on pensions from the Social Insurance Fund).

The retirement age may be lowered to 50 years in the case of women with at least 20, and men at least 25 years of mining and equivalent work, including at least 15 years of mining work. In addition, the right to a mining pension, regardless of age and position held, is granted to employees who have worked continuously and full time for a period of at least 25 years (Act of 17<sup>th</sup> December 1998 on pensions from the Social Insurance Fund).

Miners employed underground can not only retire early. It is also possible for them to calculate more favourably each year of work. If a miner performs permanent and full-time work, each year of his work downstairs in the mine is increased by a factor 1,5 ( 12 months of a miner's work is included in the retirement pension as 18 months ). This applies to workers employed underground and in sulfur and lignite mines in the faces directly during the mining and loading of the excavated material and in other face works during the assembly, liquidation and transport of casings, mining, loading and transporting machines in the face as well as deepening shafts and shaft works, and in rescue teams. This also applies to employees of the operation supervision and management of the mining operations, who work underground for at least half of the working days a month in sulfur mines or brown coal mines. 1,4 is currently used to convert each year of full time work (for example, in shaft construction) partly above-ground and partly underground. Even more advantageously, using the conversion factor 1,8 the work of mine rescuers and people employed directly in the mining of coal in the face is

converted. There is also a conversion rate 1,2 for each year of work (for example, loading and transport of overburden and deposits, for measurements in the field of mining surveying and for the ongoing maintenance of aggregates and mining equipment) performed continuously and full-time on an open pit in a sulfur and coal mine lignite, in sulfur borehole mines and in enterprises and in other entities performing mining works for sulfur and lignite mines (Act of 17<sup>th</sup> December 1998 on pensions from the Social Insurance Fund).

The average pension in 2019 was 2,421 PLN, while in the mining industry 4,578 PLN.

## 6. Conclusions

Miners' pension insurance, as shown in the course of analysis of the regulations, have a long tradition. It finds its justification in the specific conditions of hot work. They prevent a miner from working in his profession as much as other workers. However, at certain times, these privileges were overly developed and benefits were granted to people who should not be entitled to them. However, this should not affect the negative perceptions of the miners' pension insurance, as it has become the basis for the development of these issues in other professions.

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