## THE RECONSTRUCTION OF POLISH INDUSTRY AFTER WORLD WAR I

## THE STATE OF DAMAGES CAUSED BY THE WAR

The area of the former Kingdom of Poland (under the Russian occupation) as well as Galicia (under the Austrian occupation) suffered most from the damages inflicted on industry on the Polish territory. It was the result not only of the war itself, but also of a deliberate devastation carried on by the occupying powers — Russia, Germany and Austria.

In the first period of the war, before leaving the territory of the Kingdom of Poland, the Russians had already carried off a large quantity of industrial equipment. After the occupation of this area by the army of the Central Powers, the German authorities started to put into life a planned operation of devastating the industry which had escaped evacuation. This devastation of the industry by the German authorities was mainly caused by the current war needs (e.g. the requisition of non-ferrous metals) but on the other hand it was the result of a deliberate action, the purpose of which was to destroy those branches of industry which might compete with Germany after the war. The textile industry of Łódź and the metallurgy of the Dąbrowa district were most heavily devastated.

On the whole, the industry of the Kingdom of Poland lost about 4250 electric motors and power engines, 3850 machine tools, 900 steam and Diesel engines. The occupational administrative authorities requisitioned about 50 thousand tons of textile raw materials, 413 thousand tons of raw materials for the metal and foundry industry, 94 thousand tons of iron and other metals, 98 thousand tons of different equipment, the largest part of conveyors, large quantities of raw and dressed hide, rags, etc.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> H. Gliwic, Przemysl i handel Polski [Polish Commerce and Industry], in: Polska w czasie wielkiej wojny 1914 - 1918 [Poland during the Great War 1914 - 1918], Warszawa 1936; S. Misztal, Warszawski Okręg Przemysłowy. Studium rozwoju i lokalizacji przemysłu [Warsaw Industrial District. A Study of the Development and the Localization of Industry], Warszawa 1962.

<sup>&</sup>lt;sup>2</sup> J. Bankiewicz, B. Domosławski, Zniszczenia i szkody wojenne [War Losses and Destructions], in: Polska w czasie wielkiej wojny..., p. 26; Zniszczenia wojenne i odbudowa Polski [War Destructions and the Reconstruction of Poland], Warszawa 1929; J. Kożuchowski, Wojna w życiu gospodarczym Polski [War in the Economic Life of Poland], in: Przemysl i handel 1918-1928 [Industry and Commerce 1918-1928], Warszawa 1929, p. 544.

In consequence, there occurred a tremendous loss of the capital that was invested in industry; the situation was further aggravated by the fact that even those factories which were able to continue production were subject to great limitations as regards an overhaul or running repairs. Therefore, at the end of the war, the state of industry in the Warsaw district with respect to its technical equipment, shrank to the level it occupied in the seventies of the 19th century.<sup>3</sup>

In Galicia, the greatest losses were caused by warfare. The agricultural, lumber and petroleum industries were the most affected. But the industrial situation in Galicia was better than in the Kingdom of Poland inasmuch as even during the war the authorities were trying to repair the destruction.

The industry in the area under the Prussian occupation took a completely different turn. This territory suffered no direct destruction caused by the war. The Prussian authorities, considering this area as an unquestionable part of the German empire, did not pursue a policy aimed at destroying its industry. Upper Silesia, for example, experienced a war boom, so that the profits of its industry swelled.<sup>4</sup> This was likewise the experience of the rather small metal industry of the Poznań district.<sup>5</sup> On the other hand, the situation in the food processing industry was more difficult.

Besides the direct losses, i.e., the devastation and destruction of a number of objects, the indirect losses were also significant. They were most heavily felt by the industry of the Kingdom of Poland, whose stituation in the wartime differed diametrically from that of the industry in the other countries engaged in the war, where this period gave rise to the necessity of developing and improving production. The needs of the army called for the enlargement of factories, establishment of new branches of production and improvement of manufacturing methods. The rise in output led to the rise in the profits, which facilated the renovation of productive property and new investments. The war period was a time of the increase and modernization of productive means. But the industry located in the Kingdom of Poland did not get the slightest benefit from this boom. The war brought it nothing but tremendous losses.

The war damages are approximately estimated as follows: according to the official statements, presented to the Indemnity Commission by the Polish Delegation to the Peace Conference at Versailles, the complete losses of industry amounted to some 10 mld. French francs.<sup>6</sup> 56% of the losses were caused by the German

<sup>&</sup>lt;sup>3</sup> Miszta, op. cit., p. 94.

<sup>&</sup>lt;sup>4</sup> J. Popkiewicz, F. Ryszka, Przemysł ciężki Górnego Śląska w gospodarce Polski międzywojennej [Heavy Industry of Upper Silesia in Polish Economy between the two World Wars], Opole 1959, p. 49.

<sup>&</sup>lt;sup>5</sup> W. Radkiewicz, Dzieje zakladów H. Cegielskiego w Poznaniu [The History of H. Cegielski's Establishment in Poznań], Poznań 1962.

<sup>&</sup>lt;sup>6</sup> W. Grabski, Wyjaśnienie dotyczące ratyfikacji traktatu pokojowego z Niemcami i umowy wielkich mocarstw z Polską przez delegata pelnomocnego Polski na kongresie pokojowym [Some Explanations about the Ratification of the Peace Treaty with Germany and the Agreement between the Great Powers and Poland by the Polish Empowered Delegate to the Congress of Peace], Paryż 1919, p. 22.

pillage, 22% by the Austrian pillage, 18% by the evacuation carried out by the Russians and only 4% were the direct losses caused by warfare.<sup>7</sup>

After recovering independence, the situation of the industry which was saved in the Kingdom of Poland, was further worsened. Complete organizational and political chaos reigned, which did not favour the normalization of the economy. The sudden rupture of co-operation between the industry in Poland and that in the countries of the former occupants of Poland led to serious difficulties. One of the most acute problems was the question of providing industry with coal and raw materials. Furthermore, the unstable internal situation and the growing revolutionary movement scared away both native and foreign capital from committing their capital to activate production. In this situation, the industrial production of the Kingdom of Poland in 1918 manifested a tendency to a decline.

## THE ATTITUDE OF THE GOVERNMENT POLICY TOWARDS INDUSTRY

The problem of mobilizing industry was one of the most important tasks of the Polish government after regaining independence in November 1918. The mobilization of industry was both an economical and a political problem, for industry could provide part of the equipment for the newly-formed army, and, what is still more important, could help to reduce the number of the unemployed and those who had no means of livelihood. In the government circles it was considered that in the circumstances, with the growing revolutionary movement, a reduction in the number of the unemployed would help to weaken communist influence. People without work were particularly critical towards the existing political situation. J. Iwanowski, Minister of Labour and Social Welfare, in his speech devoted to the problem of unemployment, at the session of the Council of Ministers on 6 June 1919 plainly stated — "if during the present summer season we do not manage to give work to half of them [the unemployed -Z.L.] we might have to face a catastrophe, since keeping peace and order among such a large number of dissatisfied people, ready for anything, will be impossible." 8 Consequently, for this emerging bourgeois state, setting industry on its feet was of primary significance. Diminishing unemployment to a considerable degree could largely determine the composition of political forces and decide on which side and to which social class the scale would tip in the fight for power.

The first government of a revived Poland, under the leadership of the socialist, J. Moraczewski, having no objective possibility of increasing employment, advanced the catchword of partial nationalization of industry. This formula, socialistic in its tendency, was to assure the government the support of the masses. In the pledge

<sup>&</sup>lt;sup>7</sup> J. Dabrowski, Straty poniesione wskutek wojny przez przemysł Królestwa Polskiego z uwzględnieniem polityki ekonomicznej Niemiec i Austrii [Losses Caused by the War in the Industry of the Kingdom of Poland in View of the Economic Policy of Germany and Austria], Manuscript in Archiwum Akt Nowych (The Archives of the New Documents in Warsaw — abbrev. AAN), collection KNP, vol. 691, p. 8.

<sup>8</sup> AAN, The Minutes of the Council of Ministers, vol. 6, p. 629.

proclaimed by Moraczewski's cabinet there was talk about the nationalization of coal and salt mines, the petroleum industry, means of transport and other branches of industry "wherever it is possible to be done." 9 Nevertheless, there was no direct decree about nationalization. It was to be passed through the Seym, election to which was fixed for the end of January 1919. So this problem of nationalization was deliberately postponed, formally for some months but in reality ad calendas graecas. It was obvious that in view of the difficulties of achieving unanimity or even a majority in the Seym, the government party would have great difficulties to push nationalization through legally, and that it would be exceedingly complicated if at all possible. The chief purpose of proclaiming this slogan was to appease the masses and to counteract the spontaneous process of taking over industrial establishments by the Workers' Councils.

In 1918 the main problem of the Ministry of Industry and Commerce was, in the opinion of J. Iwanowski, to carry on production in the functioning establishments and to open those of the factories which were temporarily idle. The problem of reconstructing the destroyed establishments was not yet put forward. The Ministry planned "to control the industrial production and its distribution, leaving a large field to private enterprise, and specially to industrial co-operatives," 10 and announced that the occupation regulations concerning the sequestration of factories and limitation of goods traffic were temporarily kept in force. The application of the regulation regarding sequestration of factories had a decided political character for, in spite of the appearances, it was directed against the radical movement of workers and not against the proprietors. Sequestration was supposed to hinder the taking over of factories by the Workers' Councils that were rising on the tide of revolutionary upsurge. The resolution was passed.11

Under the influence of the revolutionary mood the Ministry of Industry and Commerce announced a number of democratic reforms, as for example, sanctioning the 8-hour working day, the development of trade unions, extending the scope of collective agreements, increasing the role of workers in the management of production. At the same time, however, the Ministry stressed the necessity of discipline in work and spoke up against workers interfering in administrative matters of factory managers. 12 On the whole the department of industry planned significant democratization in industrial relations, ensuring at the same time former owners a decisive influence in the administration of their establishments. Nevertheless, proprietors were not too eager to start production. The fear of the proclaimed nationalization, the revolutionary ferment in the country, the seizure of a number

<sup>&</sup>lt;sup>9</sup> E. K. [J. Moraczewski], Przewrót w Polsce. I: Rządy ludowe. Szkic wypadków z czasów wyzwolenia Polski do dn. 16 stycznia 1919 r. (Revolution in Poland. I: People's Rule. An Essay of the Events since the Liberation of Poland till 16th January 1919], Kraków 1919, p. 116.

<sup>&</sup>lt;sup>10</sup> Project of the exposé of J. Iwanowski, Minister of Industry and Commerce, AAN, *The Minutes of the Council of Ministers*, vol. 4, pp. 357 - 368.

<sup>&</sup>lt;sup>11</sup> AAN, The Minutes of the Council of Ministers, vol. 4, p. 324; Dziennik Praw Państwa Polskiego [The Journal of Law of the Polish State], 1918, No. 17, pos. 43; No. 21, pos. 67.

<sup>12</sup> The above mentioned project of J. Iwanowski's exposé.

of factories by the workers, frightened them from taking any steps towards opening their closed factories.

In the circumstances the government was obliged to start opening some of the factories under its own administration, which, among other things, gave rise to state control in the country. In this first period statism was in no sense the result of a theoretical concept or any kind of doctrinal assumption. It was, on the other hand, the direct result of passivity among industrialist. It was their attitude that forced the government to seek this way out.

I. Paderewski's cabinet, which assumed the reins of government on January 16, 1919, due to its conservative character was far from putting into life the "revolutionary" ideas of Moraczewski. Without oficially abandoning the project of nationalization — in view of the situation in the country this would have been tactically inexpedient - Paderewski ordered the industrialists to be informed that in reality nationalization would not take place. "The Prime Minister remarks that as far as he has heard industrialists have suspended steps to open their establishments, in apprehension of confiscation that could follow the declaration of the former government, and since in a country which is just starting to industrialize there can be no talk of such steps, the Prime Minister consequently requests the Minister of Industry and Commerce to reasure the industrialists." 13 Paderewski declared himself also against the sequestration of private factories, with the exception of those which belonged to subjects of the central powers. Abandoning nationalization as well as limiting the role of temporary sequestration, the government, or rather the Minister of Industry and Commerce nevertheless proposed some measures aimed at democratizing industrial relations.14

K. Hacia, the new Minister of Industry and Commerce, was known to be an advocate of a gradual return to a free trade economy, breaking with the system of control and legal restrictions introduced during the war. His credo was: "It may be taken for granted that society will reconstruct its industry by way of private enterprise as the only competent means, and not by government action." The ministry realized, however, that such a move would need some time, during which the state would continue to play an important role in economy. In the Minister's opinion the state ought to help private industry by providing treasury credit for starting production and by placing orders for the finished goods. The business of financing industry should be entrusted to a specially organized governmental institution.

In the action of reconstructing industry the Ministry wanted to assure industrial independence to the country. Hacia announced that "to obtain this result it is

<sup>13</sup> AAN, The Minutes of the Council of Ministers, vol. 5, p. 251.

<sup>&</sup>lt;sup>14</sup> Z. Landau, Węzlowe problemy odbudowy przemysłu polskiego po pierwszej wojnie światowej [Main Problems of Polish Industrial Reconstruction after the First World War], "Przegląd Historyczny," 1965, No. 4.

<sup>15</sup> Report — W sprawie uruchomienia przemysłu [On the Revitalization of Industry], AAN, The Minutes of the Council of Ministers, vol. 6, p. 632,

necessary to change our industrial system, heretofore calculated only on export." <sup>16</sup> He put forth a proposal for achieving industrial self-sufficiency although he clearly counted on a full development of trade with Russia.

But the main obstacle to a return to a policy of free trade, aside from objective difficulties (lack of coal and raw materials — which compelled the government to maintain the system of controls), was the attitude of the industrialists who continued to force the government to intervene in all economic matters. In June 1919, Hacia stated that private enterprise did not want to commit itself to any industrial operations "because of the uncertain general economic situation." <sup>17</sup> The same ideas were expressed by S. Wojciechowski, Minister of Home Affairs, in his formal report of October 1919. <sup>18</sup>

In spite of certain elements for democratizing industrial relations in his program, the main trends of Hacia's policy agreed with the demands of big industry in the Kingdom of Poland. There were three main points presented to the Council of Ministers in March 1919; 1) the government would help private industrialists to get foreign currency for which they could import the necessary raw materials and equipment, 2) the government would pay industrialists indemnities for the war losses, 3) the government would gradually introduce the policy of free trade, both in home and foreign relations.<sup>19</sup>

Hacia favoured a low-rate credit of 200 million Polish marks, as government help to private industry. Thanks to his initiative the state gave guarantees for foreign loans taken by Polish textile industry.<sup>20</sup>

The second step in support of industry was to be the placing of orders in private factories. For this purpose the Ministry of Industry also requested a special credit. It was characteristic, that in the arguments for initiating this credit, the only thing accentuated was the necessity of keeping the factories going and not the government's real need for specific industrial articles. The credits were to enable the factories to produce stock as well as to guarantee them against possible losses.<sup>21</sup> In June 1919 the department of industry worked out a special program of government orders, defining the share of separate ministries in this task.<sup>22</sup> In this document Hacia clearly abandoned his former projects for some governmental participation in industrial establishments. A thesis was even put forward for the first time that the state should completely withdraw from all direct industrial production and any factories already possessed by it should be turned over to private owners. It was a further unmistakable step toward substantiating the claims of private indus-

<sup>&</sup>lt;sup>16</sup> AAN, The Minutes of the Council of Ministers, vol. 5, pp. 1061 - 1062.

<sup>17</sup> The above mentioned report — On the Revitalization of Industry.

<sup>18</sup> Shorthand report of the 85th session of the Seym ou the 1st October 1919, col. 11.

<sup>19</sup> AAN, The Minutes of the Council of Ministers, vol. 5, pp. 1061 - 1062.

<sup>&</sup>lt;sup>20</sup> AAN, The Minutes of the Council of Ministers, vol. 5, p. 822, Dziennik Praw Państwa Polskiego, 1919, No. 14, pos. 196, No. 44, pos. 313 and 314, No. 41, pos. 297.

<sup>&</sup>lt;sup>21</sup> AAN, The Minutes of the Council of Ministers, vol. 6, pp. 179 - 180.

<sup>&</sup>lt;sup>22</sup> Report of the Ministry of Industry and Commerce about the program of government orders of June, 6. 1919, AAN, The Minutes of the Council of Ministers, vol. 6, pp. 636 - 638.

trialists — liquidation of state competition and a simultaneous large increase of long-term state orders, placed with private factories.

In the light of the above remarks a problem obviously arises how to explain the fact that the government wished to revive industry, when there was no market for the goods produced that had to be manufactured largely for stock. It was due to the fear of revolution, which could, first of all, break out among the unemployed industrial proletariat. Putting factories to work was treated as an effective countermeasure to the growing revolutionary mood. In spite of its attempts, Hacia's department of industry could not solve this key problem.

Abandoning — except in isolated cases — the government's direct concern with putting life into factories, the Ministry of Industry and Commerce could not work out, at the same time, any kind of a full plan for ensuring output by private producers. Granting low-rate credits and placing orders were not always sufficient stimuli to start production. In this situation a special meeting of the Council of Ministers, called in June 1919, considered the government's economic policy. At the meeting the report on the achievements and plans of the department of industry was presented by Hacia. It was, however, so general that the government could form no opinion about this ministry's specific designs for revivifying the separate branches of industry.<sup>23</sup> As a result, Wojciechowski sent a private letter to Prime Minister Paderewski in which he concluded — "the problem of revivifying industry has not moved an inch," and proposed recalling Hacia from his post "as each week's delay is a delay in making this ministry [Industry and Commerce — Z. L.] rise to the occasion." <sup>24</sup>

In July Hacia's policy was strongly criticized by the left wing of the Scym. He was accused of having no leading idea for the work of this ministry, of creating a system of preferential treatment, of giving privileges to one-sided interests of businessmen, often in collision with the actual needs of starting the wheels of industry turning.<sup>25</sup> On the other hand, industrialists also did not consider Hacia as the representative of their interests and they attacked him in their confidential correspondence with Paderewski. Attacked on all sides — by his own colleagues in the government, by the Seym and the industrialists, Hacia resigned in August 12, 1919. The vacant post was taken over by a colourless engineer, J. Szczeniowski, who, on the whole, continued the course of activity of his predecessor, and failed to work up a full plan for reviving industry. Only the speeding up of preparations for war with Revolutionary Russia caused a certain material turn in the industrial policy. There was a return to the idea that the state itself should develop industry. In the branches of production connected with the needs of the army, the military authorities ignoring private enterprise, started immediate production on their own. But even in this period state control was treated as a necessary evil, caused by temporary military difficulties.

<sup>23</sup> AAN, The Minutes of the Council of Ministers, vol. 6, pp. 592 and 629 - 630.

<sup>&</sup>lt;sup>24</sup> Private letter written by S. Wojciechowski, Minister of Home Affairs, to Prime Minister I. Paderewski on 11th June 1919, AAN, *Paderewski's collection*, vol. 518, p. 26.

<sup>&</sup>lt;sup>25</sup> Shorthand report of the 71th session of the Seym on 17th July, 1919, col. 95.

From the preceding observations it follows that in 1919 anti-state tendencies dominated in government programs of industrial policy. Along with the Ministers of Industry and Commerce the consecutive Ministers of Finance were likwise advocates of these tendencies. But there was not the slightest consistency in this antistatism. Although the state itself was not directly engaged in the production, it nevertheless financed it indirectly, assuming all the risk connected with turnover, wherever, because of deficit in some kinds of goods, it was considered a temporary necessity. In spite of all that, treating the economic policy of the Polish government during Hącia's and Szczeniowski's ministries as unilateral statism, would amount to oversimplification. The year 1919 was rather a period of inconsistent attempts to discard the statism that had been introduced during the war by the occupying powers.

## **REVIVING INDUSTRY IN 1918-1919**

The accumulation of many objective and subjective circumstances were the causes for the very slow development of industry at the end of 1918 and the first part of 1919. This operation began to move somewhat faster in the second half of 1919.

The objective factors for the difficulties in getting production to move was, besides its severe destruction, a catastrophic lack of coal and raw material. Among the subjective factors were, as mentioned above the reluctance of private capital to commit their financial resources to building industry as well as the shilly-shallying of the Ministry of Industry and Commerce.

The lack of coal was the chief difficulty in 1919. Before World War I the consumption of coal in the Kingdom of Poland, Galicia, and Poznań district amounted to 16 mln tons.<sup>26</sup> Half of the required coal was provided by the mines of the Kingdom of Poland and Galicia, the rest by Upper Silesia. In 1919 the output of coal mines in the Dabrowa and Cracow coal basins fell from about 9 mln tons as noted in 1913, to 5.9 mln tons, and deliveries from Upper Silesia were interrupted altogether until September. By virtue of decisions of the inter-allied missions some small supplies of coke and lignite were coming irregularly from abroad (Cieszyn Silesia).<sup>27</sup> On the whole, however, in comparison with 1913 only 30 to 40% of the full requirement of coal in 1919 could be covered. In addition, the main difficulty was that not all the customers could have their supplies reduced in like degree. For example the needs of the railways and the army had to be covered almost in full. In consequence the population and industry received a proportionally smaller per cent. The industry of the Kingdom of Poland, which consumed an estimated 140 thousand tons monthly in the first half of 1919, could only get 55 thousand tons in the second half of the year, i.e., only 35%.28 In this situation those branches of industry, which required larger quantities of fuel, were in no condition to start

<sup>&</sup>lt;sup>26</sup> Report of the Fuel Commission, Legislative, print No. 1634; Shorthand report of the 67th and 71th session of the Seym on the 10th and 17th July, 1919, col. 37 and 42.

<sup>&</sup>lt;sup>27</sup> K. Czerski, Kryzys węglowy w Polsce 1919 r. [Coal Crisis in Poland in 1919], "Ekonomista," 1920, vol. II, p. 98.

<sup>28</sup> Shorthand report of the 71th session of Seym — as above, col. 8.

production; e.g. brick works got only 13% of the required coal in spite of the high demand for building materials.<sup>29</sup> The work of the foundries was made impossible because of lack of coke. The deficit in coal was not the same in all the parts of the country. The Kingdom of Poland was relatively better supplied; Galicia came second, while Great Poland suffered the largest deficit, having had her coal supplied before the war from the Upper Silesian coal mines. It was calculated that had there been no shortage of coal, the industry of the Kingdom of Poland would have been able, already in 1919, to give employement to a good many additional thousands of workers and thus double the number of the employed.<sup>30</sup>

At the end of 1919, with the coming of winter and the increased demand for coal by the railway and the army, and with the growing number of active factories, the fuel difficulties became still more accute. Requirements for the entire year were covered by only 32.5%, whereas for the first half of the year 35% of the required amounts were supplied.<sup>31</sup> A number of factories which had already been opened had to close again.

The catastrophic coal situation was intensified by the shortage of rolling stock. There were periods when mines reduced their output — in spite of the enormous demands as they had no facilities for storing the excavated coal.

The second factor which prevented the prompt operation of industry was a complete lack of raw materials for its most important branch in the Kingdom of Poland, i.e., the textile industry. The Germans had taken away not only industrial equipment, but also all the wool, cotton and jute supplies, belonging to this industry. The assurance of importing raw materials was an indispensable condition for starting textile production. But there was no currency. Getting textiles moving depended on obtaining foreign credit. This was a difficult matter since Poland was not considered a good risk on the world credit markets. The United States and Great Britain refused to supply raw materials on credit until the peace treaty was signed.<sup>32</sup> Only in July 1919, Łódź received the first shipment of cotton (5,500,000 t.), which enabled about 40% of the less damaged cotton mills to start work.<sup>33</sup> A little later there was a delivery of wool, bought like the cotton by the Polish government on account of the relief credit. Along with this, the textile industrialists purchased wool and some additional materials for the sum of 20 million francs, on the basis of a state bank credit guarantee of 20 million pounds sterling.<sup>34</sup>

There were difficulties in obtaining raw materials not only in textile. It was also impossible to start production in the few steel works that had survived the war, because of lack of rather small quantities of ferromanganese. Tanneries had

<sup>&</sup>lt;sup>29</sup> Ibidem.

<sup>30</sup> Shorthand report of the 92nd session of the Seym on 28th October, 1919, col. 11 - 12.

<sup>&</sup>lt;sup>31</sup> E. Rose. Bilans gospodarczy trzech lat niepodległości [Economic Ballance of Three Years of Independence], Warszawa 1922, p. 32.

<sup>32</sup> Shorthand report of the 71th session of the Seym, as above, col. 87.

<sup>33</sup> Ibidem.

<sup>&</sup>lt;sup>34</sup> Dziesięciolecie intendentury polskiej sily zbrojnej 1918 - 1928 [Ten Years of the Supply Department in the Polish Armed Forces], Warszawa 1929, p. 155.

not all the necessary tanning agents; sugar plants were in need of limestone. The chemical industry was short of many important intermediate products.

Because of insufficient data it is almost impossible to compare the state of the Polish working industry in 1919 with its state at the end of the war. For 1918 we have only some fragmentary information, which is presented in Tables 1 and 2. It would be a mistake in method to draw any general conclusions from this information. Nevertheless one can state that in some branches of industry employment in 1919 grew in comparison with 1918 (e.g. in the metal or chemical industry or those branches of the food industry which were based on cattle breeding). It is better to compare the state of industrial activity in 1919 with its state just before the war. This comparison will help to realise the enormous difficulties with which Poland had to struggle at the dawn of its independence.

We can draw indirect conclusions, about the state of production from the data on employment in the industry on the territory of the former Kingdom of Poland. In analysing this it is necessary to remember that the figures given for 1918 and 1919 are only an estimation, and can be treated as only partly representative. (Table 1.)

Table 1. The state of employment on the territory of the former Kingdom of Poland in 1918 and in 1919 as compared to 1913

Sources: For 1913 — "Statistical Year-book for the Kingdom of Poland," 1914, Warszawa 1915, pp. 113-114; for 1918 — AAN, Paderewski's collection, vol. 518, b. 2; for 1919 — the speech of J. Iwanowski, Minister of Labour and Social Welfare, on 17th July, 1919, The Shorthand Report of the 71st Session of the Seym, col. 46. Employment in building industry, as well as food and timber industry in 1919 — S. Czarnowski, Chronicle of Industry, "The Economist," vol. 111-1V, 1919, pp. 220-221; for the end of 1919 — S. Janicki, Industrial Reconstruction in Poland, London 1920, p. 3

Branch of Industry	Employment before the war	Per cent of the employed in 1918 as compared to 1913	Employment at the end of the first half of 1919	Per cent of the employed in the first half of 1919 as compared to 1913	Employment at the end of 1919	Per cent of the employed at the end of 1919 as compared to 1913
Textile industry	150 305	3	3 000	2	38 900	25
Food industry	42 458		14 300	33	14 370	34
Mining Foundry	45 697		37 600	82	42 350	92
Metal industry	62 027	2	6 400	10	7 151	12
Mineral industry	23 075	35	6 500	26	12 200	53
Chemical industry	9 153	5	1 000	11	3 220	35
Animal industry	7 034	10	3 000	43	2 614	37
Timber industry	17 259	20	2 000	12	•	! .
Paper and printing	15 402	25	1 500a	10	4 000	26
Ready-made clothes	25 438		5 000	19	•	
Various	3 074	2			•	.
Building industry	250 000	•	10 000	4	•	•
Total	650 927	•	90 300	14	124 805	19

aOnly paper industry, as for printing there are no data.

The table shows that the general employment fell in the first half of 1919 to 14% of the figures shown in 1913, and employment in industry (except building) to 20%. At the end of the year employment in industry (except building) reached 31%. In drawing conclusions with regard to the stage of activity of different branches of industry, we must remember that the variation in the number of employed workers was in no sense proportional to the changes in the volume of production. In consequence, the great decline in productivity — due to the deterioration of technical equipment, the undernourishment of employees, the legal reduction of the work day to 8 hours, as well as to the frequency of strikes — the decline in production was, as a rule, greater than that of employment. (Table 2.)

Table 2. Comparison of the volume of employment with the volume of productivity in 1918, taking 1913 as 100%

Sources: AAN, Paderewski's collection, vol. 518, b. 2

Branch of industry	Employment	Production	
Cotton industry	3	1.5	
Wool industry	3	1.5	
Textile industry (other branches)	4	2	
Paper industry	25	15	
Timber industry	20	10	
Metal industry	2	1	
Mineral industry	35	30	
Animal industry	10	7	
Chemical industry	5	4	
Various	2	1	
Iron and steel industry	4	0.5	

Returning to the analysis of the data in Table 1, it would be possible, on the basis of the volume of employment to formulate a thesis that the entire industrial production in the first half of 1919 did not exceed 15% of the pre-war level. It increased notably, however, in the second half of the year. To verify this hypothesis we must consult the comparison of the volume of production of selected items in the years 1919 and 1913 respectively. (Table 3.)

As we may gather from Table 3, containing, by the way, far from complete data, the degree to which production was set in motion varied for different branches of industry. The highest level, relatively, was reached by the mining industry. Here the decline of production was the least. In three cases (natural gas, potassium salts and lignite) there was even a certain increase of production. The situation in the processing industry was far from satisfactory. In iron smelting the production wavered around 3% of the 1913 production, in the food industry 11–15%, zinc – 22%, paper 24%, etc. In the second half of 1919 the production was nearly doubled in comparison to the first half and reached about 30% of 1913 production.<sup>35</sup>

<sup>35</sup> AAN, The Minutes of the Council of Ministers, vol. 6, p. 179.

Table 3. Comparison of the volume of industrial production of selected items in 1913 and 1919 of Polish territory (exclusive of Upper Silesia)

Sources: Z. Landau, Main Problems of Industrial Reconstruction in Poland after the First World War, "Przegląd Historyczny," 1965, No. 4, p. 641

Item	Unit of measure	1913	1919	%
Coal	thous. tons	8 987	5 962	66.3
Lignite		152	208	136.9
Petroleum		1 071	832	77.6
Ozocerite		1.6	0.3	18.7
Natural gas		200	470	235.0
Iron ore	4	311	93	29.9
Zinc ore	[]	81	68	83.9
Salt		187	169	90.3
Potassium salt	l li	2	2.5	125.0
Pig iron	1	418	15	3.6
Steel	thous, tons	589	18	2.9
Rolled products	1	466	16	3.5
Zinc		23	5	21.7
Lead	ļ <u> </u>	2	0.6	30.0
Sugar <sup>a</sup>	l li	652	96	14.7
Spirits	thous, hl	2 207	230	10.4
Cement		665	199	29.9
Paper	thous, tons	62	15	24.3

a Data for the sugar campaign 1913/1914 and 1919/1920.

This was connected, among other things, with getting over larger plants under way. In the first month of 1919 it was chiefly the small shops that functioned, since they had suffered relatively smaller destruction in the war years, and the hazards of getting them functionning again were not so great as in the case of big establishments.36 The relatively low activity in metallurgy and the metal industry had its additional source in the fear felt by industrialists, that, after the union of Upper Silesia with Poland, the heavy industry of the Kingdom would be unable to withstand this competition. Because of this, too, industrialists interested in those branches of manufacture delayed the activating and rebuilding of their establishments. In view of all this, the state authorities financed the reconstruction of Hantke's Foundry at Czestochowa, and bought the whole of its current production in order to set the metal industry on its feet. The iron from the foundry was delivered to metal factories on credit terms. Thanks to these measures the metal industry was gradually revived and formed a basis for a quicker development of other branches of industry. In this way the first decisive steps towards mobilizing industrial production were made in 1919 and their results were fully seen in the succeeding period.

(Translated by Ewa Tymowska)

<sup>36</sup> Ibidem.