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FOREIGN ENTREPRENEURS AND INDUSTRIALIZATION IN SOUTH RUSSIA IN THE LATE 19th AND EARLY 20th CENTURY

By the mid 1880s, the Russian Empire entered into a period of rapid industrial development. Industrialization led to a series of globally characteristic historical changes, such as mechanized production, urbanization, transformation of the urban landscape, revolution in the field of transport and infrastructure.¹ As an element in this development, a revolution took place also in the field of labor – with the appearance of professional workers – and in that of management. With the appearance of management as a new element in the system of labor relations, the *owner-worker* binary model of labor organization was replaced by the new model of *owner-manager-worker*, which meant the division of the capital and the management.

Foreign entrepreneurs mainly coming from the Western Europe played a prominent part in establishing the conditions of industrialization in Russia. This paper presents an analysis of their role as agents in importing the Western European ways of productive management, innovation, investment of capital, and the “spirit of capitalism”.²

The research is focused on the geographical area of South Russia called the Southern Industrial Region which was a crucial territory concerning the transfer of Western European models of industrial management by foreign industrialists. By the end of the 19th century – besides such centers as Moscow and Petersburg – this region became the main area and channel for the transfer and adaptation of Western European models of industrial production.

The activity of foreign entrepreneurs in Russia has repeatedly been addressed by scholarship, and their role has been interpreted from a wide range of perspectives. They were seen as the main driving force of industrialization promoting changes against the “relatively backward

Russians”³, and also as those who pushed Russia into a semi-colonial status, entirely dependent on foreign capital.⁴

Despite the constant attention paid to the problem in historiography, there still remained a number of questions that are not fully clarified. Such a debated question is whether foreign investment managed to integrate into the Russian economy. Can we consider foreign entrepreneurs as importers of experience, entrepreneurial spirit, energy and generally as bringing the manufacture culture in Russia up to European standards? What kind of relationships did they establish with the local society and authorities?

An answer will be given to these questions based on the analysis statistical data, memoirs, periodical publications and documents of the enterprises stored in the central archive in Saint-Petersburg and regional archives in Ukraine.

The Russian industrialization

By the late 1880s, the eve of the industrialization, Russia could be characterized as an economically backward agrarian country with poorly developed industry and transport infrastructure. The only relatively developed sectors were those of food processing and textile industry, and the demand for metal, coal and machinery was covered mainly by import. From the last years of the 1880s however, Russian industry experienced a rapid development. The growth rate in this period exceeded even that of the leading industrial countries (Table 1).

Table 1. Average annual rates of growth of industrial output (percent)⁵

<i>Period</i>	<i>United States</i>	<i>United Kingdom</i>	<i>Germany</i>	<i>Sweden</i>	<i>Russia</i>
1870-1884	4,7	2,0	4,2	6,2	
1885-1889	8,8	4,6	5,2	6,6	6,1
1890-1899	5,5	1,8	5,4	9,6	8,0
1907-1913	3,5	2,7	3,9	3,3	6,3
1885-1913	5,3	2,1	4,5	6,2	5,7

The increase in industrial production was particularly impressive in South Russia. The region became the main area of coal-mining and metallurgy in the Russian Empire, by early 20th century having outrun

the former metallurgical center, the Ural Region.⁶ On the eve of World War I, in 1913, the Russian Empire produced a total of 2.2 billion tons of coal. The share of the Donbass Region within that constituted 70.5%, while the share of the Kingdom of Poland was 22.4%, and that of the Urals only 3.3%.⁷

The amount of pig iron produced in the Russian Empire totaled 55 million poods in 1890. It increased to 176.8 million by 1900. These figures in South Russia counted 13.33 and 91 million poods respectively. In other words, the “imperial five-year plan” for 1895-1900 resulted in a growth of 35 % per year in South Russia. This was an even more rapid development than the one in the period of the Soviet forced industrialization. In 1898, a major journal in trade and industry wrote the following with a display of open admiration towards the development of the southern industry:

No example of such a rapid growth has been known from the entire world history. None of the countries can boast with a similar increase in the production of pig iron achieved within a decade.⁸

The role of foreign entrepreneurs in the industrial progress

Foreign entrepreneurs pursued economic activity in the Russian Empire before the Industrial Revolution as well.⁹ From the late 1880s however, we can talk about a movement of entrepreneurs, managers and workers to the Empire as a mass phenomenon. It is not a coincidence that during the late 19th and early 20th century Donbass was called “the tenth Belgian province”. “Foreigners are migrating to Russia with a huge capital! The Belgians are the main masters in South Russia!” – wrote Vladimir Gilyarovsky, journalist and writer, in his essay bearing the title “Iron Fever” in 1899.¹⁰

The broad participation of foreign entrepreneurs in the industrial development was not a randomly emerging phenomenon, but the result of the conscious policy of the Ministry of Finance. The government realized the necessity of developing a domestic industry, but Russian entrepreneurs did not possess the necessary capital and technologies.¹¹ The solution was found in the idea of involving foreign capital and foreign entrepreneurs. The main question was how to make them invest in Russia and transfer production there instead of importing the ready products. The solution lied in modifying the tariff policy of the state.¹² The government made a

move from the policy of free trade towards that of protectionism, in which the last step was constituted by the tariff in 1891 elaborated by Dmitry Mendeleev (Table 2).¹³.

Table 2. Tariffs, 1868 and 1891 (kopeks per pood)¹⁴

	<i>1868</i>	<i>1891</i>
Pig iron	5	25-52.5
Iron	20-50	90-150
Rails	20	90
Machinery	30	250
Locomotives and other engines	75	300

Finance minister Sergey Witte, one of the consistent promoters of this policy did realize that the rise of tariffs would load a serious financial burden on the Russian consumers, due to the increasing prices of industrial products. Nevertheless, he believed that on the long run the involvement of foreign capital would lead to the establishment of competitive conditions and eventually to the fall of the prices of finished goods.¹⁵

In the second half of the 19th century almost all the leading industrial countries adopted a protectionist policy: Germany for example in 1879, France in 1892, Italy in 1879 (and more severe tariffs in 1887), and Sweden in 1888. Among the major Western European powers, only Britain adhered to free trade principles.¹⁶ Kevin H. O'Rourke, analyzing the correlation between tariffs and economic growth in ten countries between 1875 and 1914, demonstrated that in these cases tariffs were positively correlated with growth.¹⁷

Case studies show that tariff policy was not the only means to encourage foreign entrepreneurs to establish production. The policy of the Russian government to attract foreign entrepreneurs can be characterized as "stick and carrot" strategy. The protectionist tariff policy served as the stick, while the carrot was an attractive investment climate. Russian government, through a comprehensive public campaign, tried to convince foreigners that Russia offered a golden opportunity for investment. They published statistics in foreign languages, such as in the "The Russian Journal of Financial statistics". The image they cultivated was that of an unshakable financial stability, which played a crucial importance concerning long-term investment.

Foreign analysts too participated in creating an image of Russia as a “land of opportunities”, a promising arena for their activities and a tempting target for profitable investment. For example, in the early 20th century a Belgian professor and business promoter, Marcel Lawik visited Donbass and published a book about it, which became a kind of welcome poster of the region.¹⁸

As a result of all these efforts, a real “Russian industrial speculative fever” emerged by the end of the 19th century. Promising market, vast natural resources, low competition level combined with financial stability and political loyalty made investment in Russia a very attractive option. For this reason, foreign businesspersons became interested in combining local resources and markets with their leading banks capital and modern production technologies of the leading western firms.

The legislative regulation of foreign enterprises in the Russian Empire implied an equality of the Russian and the foreigners in terms of their possibilities. Only the law on the estates had a special section entirely devoted to the rights of foreigners in Russia. The civil and judicial codes, the credit statute and the direct taxes statute did not mark foreigners as a specific legal category.¹⁹ The law however, provided a number of exceptions from this general rule. The licensing system impacted the stock companies as well some limitations applied for foreigners pursuing business activity in the frontier territories of the Russian Empire, but the Ukrainian provinces were not included among these specific areas. Thus, the statement made by researcher Tatyana Lazans’ka that “unless foreigners received Russian citizenship they had been discriminated” does not correspond to reality.²⁰ The Russian economy was liberal and its attitude was friendly towards the participation of foreign enterprises in industrial production in a variety of forms.

The fact that the Russian government guaranteed to purchase the products significantly enhanced the entrepreneurial enthusiasm. Almost each of the largest metallurgical plants, such as the Yuzovskiy iron and steel plant, the Nikolaev shipbuilding, mechanical and metallurgical plant, were eager to receive such assurance.²¹

The participation of the foreign entrepreneurs in the industrial activity could take various forms: portfolio and direct investment through different forms of associate membership and in form of individual entrepreneurship. Portfolio investments meant a passive ownership of the industrial companies’ stock, as opposed to direct investment that implied an active participation in the management of the enterprise.

The companies were registered either abroad or in Russia, depending on where their foundation took place. The “New Russia Company Ltd.” for example, that was the owner of the Yusovskiy iron and steel plant, was founded in 1869 in the United Kingdom, and its board of administration resided in London, with British directors.²² The plant was managed by executive directors in Russia – John Hughes and John Gooch – but the most important, especially financial matters were settled in England, and the major part of the profit was transferred there, too.²³

To cite another example, the “Nikopol-Mariupol Mining and Metallurgical Society” was established in Russia, and its board of administration too was Russian. Though the stock-company was founded in Russia, it was initiated by a German citizen, Adolf Rodshtein and an American, Edmund Smith. In 1914 the fixed capital totaled 15.4 million rubles, 4 million from which was possessed by Frenchmen, the share of Belgian measured 3 million, and 3 million was the share of German capital.²⁴ Thus, the Society was formally Russian, but its foundation was initiated by foreign businessmen, it was based on foreign capital. The entire equipment and engineering came from abroad as well: in 1896 a complete steel plant was transported to Nikopol from the United States, and it was launched under the supervision of American engineers. The neighbor plant “Russian Providence” of The Mariupol mining and smelting company led its engineering based on American productive standards, equipment and technologies as well.²⁵

The most common situation was marked by a symbiosis of Russian and foreign capital and the joint participation of Russians and foreigners in the companies’ board of administration. A classic example of such cooperation is the “Russian-Belgian Metallurgical Society” that owned several large metallurgical plants in the Ekaterinoslav Province.²⁶ The society was founded in 1895 based on the Russian statute. The Russian Andriy Bunge became the chief of the administrative board, and the board members were Russian (F. Enakiev, M. Suschov, B. Yalovetskiy) together with a number of Belgians (O. Bie, E. Despres, A. Nef-Orban).²⁷ Investments and technologies were provided by the French bank “Société Générale”, the Belgian companies “Société anonyme du Charbonnage d’Angleur” and “Société anonyme Saint-Léonard à Liège”.

Another common way of founding companies in Russia was to establish affiliated enterprises of Western firms. In this case, the parent provided its subsidiaries with a start-up capital, equipment, technologies and managerial know-how. The stock company “Russian Providans” was

typical example for such an arrangement.²⁸ The society was founded in 1898 by the Belgian “Société Anonyme des laminoirs, forges, fonderies et usines de la Providence” to build steel plants and to carry out other types of business activities.²⁹ The plant was furnished exclusively with foreign equipment and managed by Belgian managers.

Though by the beginning of the 20th century multiunit business enterprises owned by stock-companies started to replace gradually the small traditional enterprise, still the traditional individual (family) entrepreneurship was the dominant form. Most industrial enterprises were concentrated in the hands of the sole owner or co-owners, but the largest companies were owned by stock companies, and the lion’s share of the production and workers was focused there.

Contemporary publication of lists of plants and factories created on the basis of industrial censuses and other sources informs about the proportion and structure of foreign sole proprietorships and their business-interests.³⁰ By entering the data into a relative database system and analyzing it, the following can be concluded:

Among the enterprises located in the nine Ukrainian provinces³¹ (a total of 2,655) at least 123 belonged to foreign citizens (5%). These enterprises produced 12 million of the total 228 million annual output of the sole proprietorships and concentrated 7 thousand of the total of 110 thousand workers. Therefore, the share of production corresponded to their share in the structure of entrepreneurship in Russia.

The absolute majority of enterprises owned by foreign citizens in the Ukrainian provinces belonged to Germans and Austrians – 60 % of the number, 60 % of the output, and 70 % of the workers (see Table 3).

Table 3. Distribution of sole proprietorships with an owner of foreign nationality concerning the number and proportion of workers employed in the manufacturing and distribution (%).

Citizenship	<i>Enterprises</i>	<i>Production</i>	<i>Workers</i>
German	38	37	57
Austrian	22	26	13
French	3	5	8
Turkish	3	3	7
Greek	7	3	6

Belgian	13	6	3
Italian	0	1	3
British	11	18	2
Swedish	0	1	2
Swiss	3	2	2

It has been a recurring view in scholarship that business interests of foreign entrepreneurs in Russia focused mainly on “high-tech” industries, such as machinery, metallurgy, chemical industry.

Data in Table 4 data show that the business interest of foreign entrepreneurs was indeed more attracted by metalworking as compared to that of Russian ones. However, they were broadly represented in “traditional” sectors too such as food processing. In general, the structure of the industrial business interest of foreigners repeated the structure of the interest of all the owners.

Table 4. Structure of industries by types of owners (in %%)

<i>Group</i>	<i>All single proprietorship</i>	<i>Foreign citizen single proprietorship</i>	<i>Associated owners</i>
Food processing	52	35	54
Processing of mineral substances	12	5	10
Metal processing	10	27	15
Mechanical wood processing	8	6	6
Paper production	6	5	4
Processing of cotton, wool, hemp	4	9	2
Processing of animal products	4	6	4
Chemical production	2	3	4
Processing of different materials	1	5	1

Foreign joint companies appear as being more attracted by the technology industry, which sounds fairly reasonable. Building machine and metallurgy plants require large-scale long-term investment, usually not possessed by a sole entrepreneur. The solution lied in associating capital, technology, and management.

According to the opinion of Rainer Lindner, business activity of foreign entrepreneurs characterized all regions of the Ukrainian provinces, but they were most densely centered in the cities of Southeast Ukraine, while the historical cities, such as Kiev and Zhitomir, remained the preferred locations for business activity of Ukrainian, Russian and Jewish entrepreneurs.³²

In the following I will briefly review the main components of industrial management from the point of view of participation of foreign entrepreneurs, the “five M’s”: money, machinery, materials, methods, and men.

Money

According to various estimations concerning different times, foreign capital constituted the 1/3 to the 1/2 part of investment in joint-stock companies operating in Russia.³³

It is difficult to reconstruct the national structure of investment because of the denationalization process of the capital that took place in this period. Different attempts to calculate it however, show the dominance of Belgian and French capital in South Russia (see Table. 5).

Table 5. Foreign capital in the Russian industry by region in 1900 (in million francs)³⁴

	<i>France</i>	<i>Belgium</i>	<i>Great Britain</i>	<i>Germany</i>
South	275	550	236	261
Poland	106	32	4	93
Center	72	106	4	24
Russia	692	831	236	261

Foreign capital played the most significant role in mining, machine-building, electrical and chemical industries, that is the high-tech industries that became the basis of the industrialization.³⁵

Foreign entrepreneurial investment was involved in the case of each among the 14 major steel producers in South Russia between 1888 and 1900, even if they had Russian statutes and were managed by Russian managers. On the eve of the First World War, the operation of 26 of the 36 Donbass coal mines was based on foreign capital and foreign technology.³⁶

Such a significant share of foreign capital has drawn criticism on the financial policy of the government, and gave reason to some of the contemporaries and historians to speak about a “semi-colonial” status of the Russian economy. They accused foreign capital with creating competition for Russian entrepreneurs, they complained for the outflow of the profit claimed that the high proportion of foreign capital enabled foreigners to influence governmental decision making. The latter would have already endangered political sovereignty and national security.

Minister Sergey Witte formulated the essence of such concerns:

There have been lately repeated voices against foreign capital flow. They insist that foreign capital harms the main national interests, that it strives for absorbing the profit from the rising Russian industry, that it leads to selling-out natural resources.³⁷

He responded to the criticism as follows:

Foreign capital is five times less than Russian. Nevertheless, it is more noticeable and strikes the eye because it brings both better knowledge and more sophisticated enterprise. But it leaves these cultural forces in Russia, that is why the country should not be dissatisfied.³⁸

Evaluations of foreign business as speculative can still be found even in modern historiography. For example, Ukraine scholar Tetyana Lazans'ka says: “the huge profits earned by foreign entrepreneurs were almost completely exported”.³⁹ Some capital certainly left the country, but dividends received by foreign shareholders, in general, were not taken out, but reinvested into the production.⁴⁰ The constant increasing of the production capacity forced the owners to reinvest everything, up to the last penny. By the time the foreign entrepreneurs were ready to reap the fruits of their investments however, the market collapsed because of the 1900-1903 industrial crisis.⁴¹

The large amount of foreign capital, both in absolute and in relative terms, in itself does not prove the subjection of the economy. Large

businesses, both foreign and Russian ones, tried to lobby for their own interests in the government and to influence the tariff and tax policy⁴² and the system of state orders about industrial products. At the same time, the strategic issues of domestic and foreign government policy remained independent from this influence.

Machines and materials

Foreign businessman believed that their advanced manufacturing technologies and managerial know-how were their main asset, the key to producing large profit in Russia. The question is whether the technology of the enterprises belonging to foreign entrepreneurs corresponded to the European standards. Analysis of case studies and memoirs of engineers let us give an affirmative answer. The largest metallurgical and machine-building plants were often constructed with an equipment entirely brought from Western Europe. For example, in the summer of 1870 John Hughes transported equipment and tools to the Donbass on eight ships, accompanied by a hundred South-Welsh specialists.⁴³

In late 1880s a Warsaw factory was dismantled by Belgian steel industry workers and sent to the village Kamenskoe located near Ekaterinoslav province. Due to the mastery of the Polish managers combined with the know-how of the Belgian engineers, one of the largest metallurgical complexes in the world was founded here.⁴⁴

In 1896 a whole steel and tube plant was transported from the USA to Nikopol' (near the Azov Sea). The American engineers came to Russia together with the equipment to conduct the start-up of the plant.⁴⁵

According to the results of the industrial census in 1900, the cost of the equipment used in the Russian factories and produced in Russia totaled 27.2 million roubles, while the cost of the equipment produced abroad counted 37.7 million roubles, or 58 %.⁴⁶ The proportion of foreign equipment was even higher in high-tech enterprises. For example, both of the locomotive plants located in the Ukrainian cities, in Kharkov and Lugansk, were installed based on foreign equipment and managed by foreign engineers.⁴⁷ In the Kharkiv Locomotive Plant they applied machine tools mostly made by German and American factories, with the exception of some that were produced by the Kramatorsky Steel Plant and some of their own products.⁴⁸ All these mean that Russian industry was developed mainly based on the foreign equipment.

Production figures too indicate the high level of technology implemented at metallurgical plants in South Russia. Table 6 shows that the average output of a blast furnace in South Russia was even more than that in the Western-European countries. The explanation lies in the high quality of Krivoy Rog iron ore combined with its processing with advanced metal working technology.⁴⁹

Table 6. Average yearly output per blast furnace in selected areas (in tons)⁵⁰

	1880	1890	1900	1910	1913
All Russia	2	4	10	20	28
South Russia	7	16	47	59	63
Great Britain			23	30	
Germany			31	49	
France			21	35	
Belgium			27	46	
United States			56	100	

The level of technology in the coal mining industry was worse. Mining engineer E. Kolodub employed in the Grushevskij mine for many years wrote: "Attempts to use machinery produced no success".⁵¹ Another mining engineer, assistant manager at "Pastuhovskaya" mining (township Sulin) O. Terpigorev evaluated the situation in similar terms:

The foreign owners of the coal mines certainly wanted to squeeze everything they could out of their mines. That is why they introduced machinery there, for example, mechanical tramming in the John Huger's mines, and coal hammers in the Enakiev's mines. All these tools were of course produced abroad. But such mechanization was absolutely not typical for Donbass. Most of the mines that I have seen were equipped with the most primitive tools. In fact, the only "mechanism" there was the miner's muscle strength. The coal was produced by using only tubber or pickaxe.⁵²

Consequently, the level of technology of coal mining in Donbass was lower than in the Western European countries. Still, this represented a progress as compared to the previous times, when the mine was only a number of few meter deep holes ("peasant hole").⁵³

As John McKay rightly pointed out, foreigners were not necessarily the first to apply certain processes or innovations standing on the technological frontier of their particular industry – certain domestic Russian firms were also on that frontier – but foreigners as a group applied the advanced technique in general. As a result of this consistent approach, what had previously been isolated or exceptional was very rapidly diffused and became received and usual. Similarly, by 1914 technical differences between entirely foreign and Russian firms became increasingly blurred and in some cases ceased to exist.⁵⁴

Methods

Foreign entrepreneurs copied the structure and principles of management of the Western-European companies. Most of the largest metallurgical and machine building plants, especially in the 1890s, employed many foreigners. The share of foreigners among all employees in South Russia, however, was not that significant.

According to the approximate data collected by the Department of Trade and Manufactures of the Ministry of Finance, in the climax of the Russian industrialization the proportion of foreign top-managers in South Russia did not exceed 10 % (see table 5). Although in high-tech production, such as iron-making and machinery building, it increased up to 28 %, most of the managers were Russian even there.

Table 7. The ratio of Russian and foreign productive top-managers in 1890⁵⁵

Provinces	Russians managers		Foreign managers		% of foreigners
	With technical education	Without technical education	With technical education	Without technical education	
Ekaterinoslavskaya	14	324	13	17	8,2
Including iron-making and machinery building plants	13	34	8	8	25,4
Don Host Oblast	25	1229	-	6	0,5
Including iron-making and machinery building plants	11	2	1	-	7,1
Tavricheskaya	3	241	3	17	7,6
Including iron-making and machinery building plants	2	37	1	8	18,8
Kharkovskaya	23	322	9	13	6,0
Including iron-making and machinery building plants	4	4	5	1	42,9
Khesonskaya	45	341	50	70	23,7
Including iron-making and machinery building plants	7	10	10	5	46,9
Totally: South of Russia	110	2457	75	123	7,2
Including iron-making and machinery building plants	37	87	25	22	27,5
European Russia	957	16717	417	903	6,9
Russian Empire	1199	20843	525	1199	7,3

Foreign specialists had mainly prosaic reasons to come to Russian provincial cities, characterized by “boredom, monotony, exceptionally dull life”:⁵⁶ the promise of a fast career and high salary, much more they could have received than in Western Europe.

Companies spent much for administrative and engineering services. The main advantage of employing a foreign manager over a Russian one apparently lied not only in the higher professional level of the former, but in his superiority in the field of ethics. The general perception of the level of Russian dishonesty, however, appears to be an overestimation. Foreign managers were often described as persons for whom the administration of a public corporation was a profession, not a “fief to be plundered”.⁵⁷

Both Russian and foreign industrial companies had to face the problem of internal and external corruption at all levels, but its level can be estimated rather differently on the basis of various sources.

For example, the miners’ folklore presents an illegal financial relationship between the miners and the mine foreman as follows:⁵⁸

You have received a pay
Do not forget about foreman miners
One rouble after every hundred, two – on vodka
Three and a half – on tips.

However, as the mining engineer Alexander Fenin wrote:

... among South Russian engineers, professional ethics required irreversible loyalty to the owner. Throughout my long career, when I was in touch with hundreds of mining engineers whom I observed under everyday conditions, I never came across dishonest people, with only one or two exceptions. Such people immediately became social outcasts.⁵⁹

Similar illustrations can be found in many other memoirs too, like in that of Eduard Kriger-Voinovsky, the Minister of Railways of Russia: “cases of dishonesty among the management and employees of the railway were rare”.⁶⁰

On the other hand, incompetent people occurred among foreign engineers as well. The factory inspector A. Klepikov wrote about one of these managers:

This was a foreigner, a Frenchman, a complete ignoramus in his profession. The owners paid him a lot. He did not have any knowledge, either in chemistry or in coloristic and used recipes from foreign recipes. Of course, he was doing his business very badly. He was a typical representative of the type of alien-cheaters you could previously often meet in Russian factories. He was made many penalties and fired before his contract expired.⁶¹

There was one more field where Russian managers could perform better – that of the relations with the state and the society. One of the highest compliments that could be paid to a foreign manager was that he knew “how to treat officials correctly”. Such cases were, however, rare exceptions, so the best solution was to employ local managers, which generally meant entering into a cooperation with Russians, who were more efficient in solving external questions such as negotiating with the government for contracts, obtaining official permissions, and dealing with locals.

For example, in the “New Russia Company Ltd.” a honorable figure was assigned as a head responsible for the negotiations with the government: Prince Sergey Kochubei. His rights and responsibilities were settled in the statute of the company. He was an honorary director, but only “with the right of presence and advisory opinion”. He did not have any fixed obligations, nor any responsibilities.⁶²

Foreign managers lived separately from the workers and there existed also a language barrier between them and the locals.⁶³ This barrier was not just a problem in the communication between the managers and the workers, but between the foreign and local managers as well. For example, the representative of the British company “Vickers” cooperating with the shipyard “Naval” in Nikolayev wrote in his letter addressed to the director of the company and the owner of the shipyard that “because of the difficulties with the language sometimes one could really be annoyed ...”.⁶⁴

The language barrier was a common problem. Most of foreign top-managers of large enterprises could not speak Russian and communicated with the local workers through special representatives.⁶⁵ In other cases, it was the “body language” that helped to solve the problem through the method of learning by doing. For example, in the Nikopol iron plant, according to the memories of a worker, the communication between the foreign managers and the Russian workers took place as follows:

Kennedy [an American engineer] was a great specialist <...> he did not speak Russian, still, we learned a lot from him. When he was frowning, it meant that something was wrong. He took a wrench, unfastened the screws, checked if they were all right and tightened them again. When one could understand, based on this pantomime, what he was looking for, one went to him and said "I see, Mister!". He gave the wrench back, and he checked if everything was done the proper way. He himself knew how to use a hammer, a scrap, how to change a truss, how to handle the plumbing. He never lost his temper. When he became angry, his face turned red, but you could never hear him raising his voice. Even if his clothes became dirty, it did not take more than an hour and he returned wearing clean ones.⁶⁶

After 1900, sources suggest a massive trend of replacing foreign managers with Russians.⁶⁷ It can be explained by a number of reasons.

In 1900–1903, due to the crisis, profits decreased, and owners attempted to cut the high expenses of the management and administration. Employing a Russian manager costed less, so it appeared as a possibility to economize on administrative expenses. Another objective factor resulted from the increasing qualification and number of Russian engineers.⁶⁸ As Aleksandr Fenin wrote,

About 60 percent of the coal and 90 percent of the cast iron was produced in plants owned by foreign companies, but by the very beginning of the twentieth century, the overwhelming majority of the managers in the Donbass were Russian engineers. One had to admit that the Russian technical intelligentsia rose brilliantly to this difficult challenge.⁶⁹

After 1904 one more reason emerged to minimize the presence of foreign managers. The development of the revolutionary movement was accompanied by the spread of xenophobia and anti-capitalism, bursting into direct aggression and even attack against foreign managers and engineers in a number of cases.

There was one more alternative of the choice between a more qualified but expensive foreign manager and a Russian one, that is to find an "intermediate" solution by employing Polish engineers and managers. As an example, in the early 20th century all engineers at the "Providans" steel plant were Polish.⁷⁰

Men

A researcher studying the economic history of South Russia unavoidably has to encounter an interesting “paradox”. The second half of the 19th and the early 20th century was characterized by a rapid growth of the population and contemporaries were speaking about agrarian overpopulation and the “extra” manpower.⁷¹ Still, entrepreneurs complained about a lack of workers.⁷² The problem was recognized by Russian publicists and scientists too. The “Complete geographical description of our fatherland” (1910) says:

... the Donetsk coal industry almost always experiences, but especially in the summer, a lack of workers. The government even offered to provide coal-industrialists with up to 10 thousand prisoners, but this proposal was rejected by the owners of the mines.⁷³

This contradiction can be explained by the specific character of the labor market in the region. The southern labor force can be described with an unskilled and migrating character as compared to that in Moscow or Saint-Petersburg. Gustav Hartmann, the founder of the locomotive plant in Lugansk complained that

since all Russian iron plants were fully loaded with work at this time, we managed to employ only few well-skilled workers for the rolling mill.⁷⁴

Many large enterprises in South Russia were founded literally in the steppes, thus, they were not able to find enough workers among the locals and had to employ migrating labor force.⁷⁵ The majority of the workers were peasants and tried to stay in touch with the countryside even when being employed in industrial enterprises. Most factories ceased to operate during the intensive farming season prior to the industrialization. Even in the early 20th century, many among the small factories worked seasonally. According to a special poll created through factory inspection in 1909, middle-size and large factories operated about 266 days per year.⁷⁶

Seasonal work contradicted to the financial interests of the entrepreneurs after the beginning of the development of heavy industry. Moreover, ceasing the operation of the equipment in certain types of production, such as that of a blast furnace, entailed serious technical and financial consequences. Companies resorted to different methods of

keeping workers from seasonal migration: increasing their salary during the summer months (up to 1.5 times more⁷⁷), constructing houses for the workers, creating other means of social infrastructure such as churches, hospitals, schools, baths, etc. There were even more radical attempts too, for example, workers of Yusovsky iron plant were not allowed to plant even a vegetable garden.⁷⁸

Another important task to achieve was developing a new work ethic among the industrial workers still characterized by a traditional one. This traditional type of labor ethic meant working until the satisfaction of the basic needs, without seeking to accumulate money and goods.⁷⁹

The miners' song describes this way of life:⁸⁰

I received a pay
Exactly twenty-two rubles,
Two rubles gave at home,
Well, twenty – for drinking
Being jolly, soul and body
All the pay have flown away.

The mine foreman E. Kolodub wrote:

Sober locals use to earn well and live in their buildings properly. Among the local drunkards one can find many professionals. From the other side they are bad workers. They are ready to work only when compelled by hunger and cold and when they do not anything left <...> We had several periods of increasing and decreasing the wages. It was sometimes increased to three times more than the normal earnings. But one could observe neither the welfare nor the increase of civic consciousness among them even in these periods. Then the more they earn, than less days they were working.⁸¹

Complaints about drunkenness as a terrible vice in the everyday life of the workers occur in all the memoirs written by engineers, mine workers, and factory inspectors. Drunkenness led to more and more frequent absence from work, and if it became a mass phenomenon, it could obstruct the operation of the entire plant or factory. Entrepreneurs were fighting against this by closing wine shops and even by breaking the law, as they did not hand their wages to the workers in each month, but only twice a year. As another solution, the money was directly sent to the workers' families.⁸²

As it appears, despite some progress in the field of labor ethics, the industrialization in general was combined with a catastrophic backwardness in the conditions of labor, life and culture of the Russian workers.

Conclusion

To sum up, the analysis of the sources confirm that foreign entrepreneurs imported capital, innovation, advanced technology, management models to Russia, and established business relationships with Western-European banks and industrial groups.

From the late 1880s the movement of foreign entrepreneurs, managers and workers to the Russian Empire became a mass phenomenon, determined by the protectionist tariff policy and the attractive investment climate meaning vast natural resources and a promising domestic market.

The structure of the industrial business interests of the foreigners repeated the structure of the interests of all the owners, but the foreign joint companies were especially attracted by “high-tech” industries, such as machinery, metallurgy, chemical industry.

All during the pre-Soviet period of industrialization, the development of the Russian industry was mainly based on the imported equipment. The foreign entrepreneurs copied the structure and management principles of the Western-European companies, and the largest companies also employed foreign engineers, managers and workers. The encounter of the foreign ideals concerning labor ethic with the Russian reality was, however, not without problem. The clash of the strategies and expectations of the foreign owners and managers with the traditional values of workers recruited from among the local agrarian population directs the attention towards the social context of the economic changes.

Still, foreign entrepreneurs were able to transfer a “spirit of capitalism” into South Russia. They gave an extra impulse to the development of industrial capitalism and played an important and generally positive role in the relatively successful Russian industrialization.

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