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National Entrepreneurship in the Context of Economic Modernization in the Russian Empire (As Illustrated with Germans in Siberia)

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Abstract: The second half of the 19th century brought about the modernization of the political system in Russia which accelerated the development of its capitalist economy. The abolition of segregation regulations contributed to the formation of bourgeois relations in industry and agriculture. New bourgeois were former government officials who had required connections to establish factories and traders who accumulated significant capital. The specificity of Siberia's National Development enabled the formation of the German National Entrepreneurship in various economic sectors. The study is intended to characterize the German entrepreneurship and its place in the regional economy in the context of political modernization and industrialization.

Key words: Russian Empire, Russian Germans, national entrepreneurship, documents, Siberia

INTRODUCTION

In the middle of the 19th century, Siberia remained one of the backward regions in the Russian Empire. An explanation suggests that it above all was remote from major economic centers and sparsely populated. By 1865, there was only 4.3% of the empire's population living there (3.1 million people) (Rashin, 1956). But, the population almost doubled over the following decades (in 1897, 5.8 million people). The sharp growth is explained through ongoing resettlement policies that contributed to the industrial, agricultural, transport and trade development.

In the 19th and early 20th centuries, Siberia witnessed the formation of various national groups. The largest group was formed by Russians who settled mainly in rural areas and engaged in agriculture. Numerous members were part of Jewish, Polish, German communities who settled mainly in towns and near major transport routes. These communities became mobile diasporic groups that began to play an important role in the regional economy, taking on themselves the functions that could not be fulfilled by Russian peasants and indigenous peoples of Siberia. For instance, Germans and Poles were administration officials in the Tomsk and Tobolsk Provinces, Altai mining District, administrators at metallurgical plants and army officers; Jews were engaged in trade, construction, processing and sales of agricultural produce.

Modern science gives much attention the issues of labor division. Modern history is characterized by the ethnic division of labor and involvement of various ethnic groups in specific sectors of the economy. In modern Russia, this phenomenon is studied using the regional approach (Kalmina and Kuras, 2001; Skubnevsky, 2010; Norkina, 2013). However, there are very few works based on the comparative method which would make a comparison of the same political, social, economic, cultural, religious phenomena in different ethnic groups (Ye, 2004; Nam, 2004; Shaidurov, 2013, 2014).

MATERIALS AND METHODS

In this study, we will define main characteristics of the German National Entrepreneurship in the second half of the 19th century on a regional scale, identify conditions that contributed to the emergence of this phenomenon, define the industries in which German Entrepreneurship played an important role and use the comparative analysis to determine its place in the Siberian economy in the period under consideration.

As a main method, we will employ principles of the regional approach, represented on the Russian material by Kappeler in his monograph in the form of reconstruction of specific aspects of history of Germans in Siberia. On the other hand, we will also apply some principles of the situational approach that has been lately widely used by Russian and foreign historians to describe history as resulted from the interaction of various actors (Miller, 2006).

The research is largely based on archival documents and published sources. The integrated use of these resources will help accomplish the objectives set earlier.

RESULTS

Political modernization in the 1860s and early 1870s enabled more active development of capitalist relations in the Russian economy which led to the end of the industrial revolution in the 1880s and the start of industrialization in the 1890s. This process was slower in some Russian regions which was caused by the distinctive features of their development. National minorities (Jews, Germans, Poles, Finns, Estonians and others) became mobile diasporic groups in Russian that facilitated economic progress. Resettlement of various ethnic groups to the outskirts of the empire helped develop traditional industries at higher technical and technological levels and contributed to the emergence of new industries. This process has been related to the formation of national entrepreneurship. One of these groups became Russian Germans. The basis for their active role in business activities was provided by objective and subjective factors. Due to high levels of education, knowledge of the latest technology and equipment and proximity to power, Germans in Siberia played an important part in the development of ore mining and processing sectors, metallurgy, agricultural proceeding industry, etc.

DISCUSSION

Bourgeois reforms, undertaken by Alexander II between the 1860s and 1870s, affected the situation of the German minority in Western Siberia. Radical changes took place in the situation of mining engineers and officials who were partly of German descent. This was described, for instance by Zinoviyev (2007), who noted that the Cabinet's enterprises had managerial personnel that came from clerks of mining and metallurgical districts and Freiberg and Ostsee Germans (Zinoviyev, 2007).

In the second half of the 19th century, Germans still held key positions in the administrative and economic apparatus of the Tomsk and Tobolsk Provinces and the Akmola region. The system of mining and metallurgical production persisted until 1896 which allowed Germans to influence this sector by working as mining engineers and managers at various levels. They held positions in Treasury Chambers, judicial apparatus, postal, telegraph and medical services. Germans retained their roles as gymnasium teachers in the system of public education. With the opening of the Tomsk University, they became

part of the system of higher education. But, compared to the first half of the 19th century, there was a reduced number of Germans (originating from Baltic Provinces) in the Russian military service. Some researchers attribute this fact to the attack by the tsarist administration on the Baltic-German autonomy in the 1870-1880s which led to a decreasing number of those wishing to serve in Russia and even more so in Siberia (Yu, 2000).

The second half of the 19th century brought about a rise in the Siberian economy as traditional and new industries developed. One of the characteristics featuring this period was the formed national entrepreneurship of the capitalist type in industry and agriculture.

Southern territories of Western Siberia with their mineral wealth and fertile land became the center of German Entrepreneurship in the 1860s. The key factor here was high educational levels of German officials and mining engineers who were trained at the Mining Institute and military schools in St. Petersburg and abroad and therefore, had the high potential for starting modern production. With the availability of family and other ties, this contributed to first large-scale enterprises.

One of the first private factories in the Altai in the second half of the 19th century became the Prang soda factory opened in 1864. The importance of soda in industry can not be overestimated. At one time, prominent Chemist Mendeleev (1868), making a review of the Paris World Exhibition, pointed to the need to organize industrial production of soda in Russia (Mendeleev, 1868).

The Russian government had realized the need for soda production already by the end of the 1850s. This is evidenced for example, by the fact that a retired lieutenant, Benardaki was granted a 10 years right to extract bitter salt from the Astrakhan lakes to produce sodium. The covering letter from the Finance Minister to this provision by the Committee of Ministers indicated that "Most soda used in Russia, one of the most important products in factory business, especially in glass manufacturing is imported from abroad at a very considerable sum whereas we have in abundance all basic materials to manufacture, the above mentioned and the indigenous production of soda in excess of the benefit for our factories could constitute a new item of trade, create a separate source of earnings, relieve manufacturers from foreign dependence on the acquisition of the above mentioned and keep capital designated for this in the state" (PSZ-II).

Such carte blanche gave prospective entrepreneurs in some regions tremendous opportunities. There is no doubt that brothers Prang as mining engineers kept track of all technological innovations. A favorable combination of circumstances enabled them to actually establish their own monopolistic soda production in Siberia.

The center of bitter salt production became Marmyshanskie Lakes in the Kulunda Steppe of the Altai mining District. Brothers Ivan and Yegor Prang obtained a right to excise free salt extraction, similar to the above one of Benardaki.

In 1870, the brothers sold the enterprise to their brother Matvey. The 1870-1872 period witnessed the struggle with the excise department which made the new owner pay the excise tax motivating by giving a reason that the excise free right covered the former owners, rather than the enterprise. For this reason, Yegor Prang had to take the lead in the production facility over again. It was not until 1875 that Matvey Prang gained a right to extract salt excise free over the next 10 years (GAAK. F. 2. Inv. 1. f. 7564. folio 100). It was he who managed the factory until his death in 1890, after which the factory was taken over by his widow Yu. Prang. In 1907, it was bought out by a firm, "Lyubimov, Solve i K°" that owned a larger similar facility in the Urals. In 1912, the Barnaul Soda Factory was closed down.

Initially, there were hand furnaces installed at the facility. There were no steam engines there as their installation was prohibited in private factory located in the lands of the Cabinet. The ban had valid, since 1828 and it was not until the late 1870s early 1880s that the facility equipment was updated. However, despite the ongoing ban, the director of the Altai mining District, A. Freze, permitted the installation of steam engines. This allowed M. Prang to boost production levels.

According to statistics, the enterprise operated quite successfully from the very beginning. Already in 1866, the factory produced 3000 poods (pood a Russian unit of weight equivalent to about 16.4 kg) of soda and in the 1870s the annual production capacity already was approx. About 6.20000 poods. According to Orlov as of the end of the 1890s the "Prang i K°" soda factory produced 14.2000 poods of caustic soda and 4000 poods of refined soda. By the end of the 19th century, the enterprise had been a major soda supplier for tanneries, glass and soap factories in Siberia and the far East. The Prangs had only one rival beyond the Urals at that time K. Zanevsky's factory in the Trans-Baikal oblast which produced at that time only 450 poods of caustic soda (Orlov, 1985).

Early 20th century studies into the work organization at private factories in the Altai mining District preserved information on the organization of production and workers' fe at the "Prang i Ko" factory. For instance, Shvetsov (1897) noted that as to the plat buildings, they were in a terrible state: "The first section of the factory which has a number of so-called sulphate furnaces is nothing but the quite an old log barn with no windows

and ceiling; gates instead of the door, earthen floor." That there were no basic security measures on the production floor in indicated by the quotation that "without assistance it was impossible to take a single step without risking to fall somewhere in a boiler or furnace" (Shvetsov, 1897).

Despite a significant workforce (there were over 60 workers at the end of the 1890s), the soda factory had no physician or feldsher (feldsher a medical doctor's assistant). The lack of medical personnel at such a dangerous production facility was compensated with an available first aid kit from which workers received free medications. If necessary, they were sent for treatment at the Red Cross Hospital in Barnaul. In this case, expenses were covered by the owner of the enterprise. The soda factory was one of the few enterprises in the Altai that maintained its own school for workers' children. Shvetsov pointed out that children were taught for a long time by Matvey Prang's wife Julia Prang. In 1890, after her husband's death, she assumed control over the company and had to take for the vacant position of teacher a graduate from the Barnaul pre-gymnasium. Since, the factory was located near Barnaul, the school had children of workers and clerks at the factory office.

According to the production organization, production volumes and number of employees, Prang's soda factory can be characterized as a factory type enterprise. It was the first production of this type in the Altai. In addition, the value of the factory is that it was Russia's first enterprise in the industrial production of soda. At the 1882, Russian Industrial and Art Exhibition, M. Prang was awarded a gold medal inscribed "For the foundation of the first and sole active soda factory in Russia to date as well as for the contribution made by the exhibitor in the development of Siberia's soap and other manufacturing sectors" (Zavidovsky, 1894).

Another example of the German Industrial entrepreneurship in the post-reform period can be provided by M. Funk. Before his retirement, he served as chief of the Barnaul post and telegraph office. In 1869, he partnered with B. Shmurygin and opened a buckshot manufacturing plant in Barnaul. Such cooperation was mutually beneficial for partners: the first one had contacts needed to obtain approvals and the second one the initial capital to establish a business. The tandem of this kind was not unique to that time, on the contrary, it was typical in the situation when economic interests of the military, bureaucratic nobility and the merchant class converged.

In conditions of high demand on buckshot in Siberia, the enterprise turned profitable. By the end of the 1890s, it had returned its owners 12000 rubles annually (Orlov, 1985). Modern researchers who study the history of

Funk's business activity, suggest that until the 1880s lead to produce buckshot was purchased at Altai silver producing plants of the Cabinet. In the 1880s, raw materials were purchased in England and Germany. At the turn of the 19th and 20th centuries, it once again became of Russian origin. Until the early 20th century, it was the only factory in the region that specifically offered these products.

Like many other entrepreneurs in the post-reform period, Funk tried to occupy niches in several industry sectors. In the first case as we can see, he achieved spectacular results. His other activity was a shipping company which focused on the Northern Sea Route and trade in Altai products with Nordic countries. By joining forces with Tara merchant A. Shcherbakov, he built a few steamships that transported goods to the Gulf of Ob. But, this venture was not successful. In addition, Funk and his brother gained a right to extract salt in lake Burlinskoye in the Barnaul District of the Tomsk Province in the late 1880s. At the same time, he was engaged in the bread trade.

The fate of Funk's enterprises was to a large extent typical for their time. After the death of the owner, his heirs were not interested in commercial affairs and sold their shares to third parties.

In the post-reform period, Germans flocked not only into the commercial and industrial sectors. They made attempts to organize updated agricultural production in Western Siberia. In particular, they took first steps in establishing commercial production of industrial crops in the Altai.

In the middle of the 19th century, Western Siberia was a place of work of a number of Germans who went to Russia from German states to conduct commercial affairs. Without taking Russian citizenship, they remained Prussian, Hamburg, Bavarian and other subjects. One of such "immigrants" was a native of the free city of Hamburg, August Brokmiller who settled in the Altai. He was so firmly entrenched in the District that was temporarily a Barnaul merchant and father-in-law of the manager at the Pavlovsk silver factory, Fialkovsky, historians note (Ivanchenko, 1993).

In the early 1860s of the 19th century, he was allocated 100 dessiatines (dessiatine a Russian unit of area equal to approximately 2.7 acres or 10 800 m²) of land near the Village of Malyshevskoe in the Barnaul district with a permission to grow sugar beets. The experience proved successful and Brokmiller built a beet sugar factory the first enterprise of this profile in Siberia. In 1862, he already rented from the Cabinet 300 dessiatines of land. The factory began operating in 1862 and produced in the period between 1862 and 1865 2400 poods

of sugar. The enterprise operated using horse engines that were set in motion by 16 horses; the enterprise employed 2 foremen and 70 workers. At the same time, Brokmiller also started alcohol production. In 1864, it returned 44.5000 rubles and employed 22 workers. In 1868 by order of the Cabinet, Brokmiller's factories were shut down and the owner was charged with illegal alcohol production. According to Ivanchenko (1993), a significant role in the case of Brokmiller was played by K. Platonov who opened in cooperation with merchant Badiin the Itkul distillery in the village of Sokolovo in the Biysk District in 1868 and sought to defeat his competitor (Ivanchenko, 1993).

By the end of the 19th century, German commoners of foreign origin were also actively involved in various sectors of the food industry. They launched the greatest activity in their traditional sectors such as the flour-milling industry, distilling and brewing. Although, their presence in these areas were noticeably inferior to that of Jews and Poles. Nevertheless, there are several large enterprises that are worth mentioning. For instance, a distillery operated in the Tyukalinsk district of the Tobolsk Province, since 1883, owned by a colonist, Albert Fischer. Certainly, this enterprise could not compete with such "heavyweights" as N. Davydovskaya and heirs of Poklewski-Koziell. Still, the factory can be classified as a medium-sized enterprise. In the late 1890s, it annually gave about 8000 pails of vodka to the amount of 100,000 rubles. At the time, the factory employed 20 people (Orlov, 1985). Like other distillery owners, Fischer located his enterprise in one of the major centers of commercial grain production.

The late 1880s were a period of the booming yeast production in Western Siberia which was associated with development of related sectors in the food industry. Its centers became Tomsk and Omsk. In 1887, a Prussian subject, Gustav Goltzgoter opened his factory in Tomsk. After 10 years, it annually produced up to 250 poods of dry yeast to the amount of 3000 rubles (Orlov, 1985). In 1888, a yeast factory was opened in Omsk by Alexander Fischer which, unlike the above enterprise was oriented to the production of compressed yeast. The factory output amounted to 200 poods year⁻¹. Both factories were comparable through the use of artisanal production methods. The evidence is the number of workers employed in the production: there were only two workers employed at each factory. But while Goltzgoter faced completion from Franz Kaminsky's factory in the Tomsk Province, Fisher was spared such trouble in the Akmola region as his factory was the only producer there.

The strongest presence of Germans in the post-reform period was in Western Siberian brewing. Each province

had its own German brewer. Germans were very often invited as subject matter specialists by Russian and Jewish owners of beer mead breweries. For example, since the early 1880s, the Akmola region was the principal place of business of breweries owned by court councilor Hans Schpringbach. One of his factories was located in Omsk and its annual production amounted to over 10000 pails to the amount of 8000 rubles (Orlov, 1985). His other beer and mead production facility was located in Petropavlovsk; its output was smaller (6000 pails) but to 9000 rubles (Orlov, 1985). This was due largely to the product range offered by the enterprises. Both factories were artisanal; they employed only 5 employees and 3, respectively.

But Western Siberia's largest German family business belonged to Tomsk brewers of Prussian origin the Kruegers.

Information on the start of Karl Krueger's business activities refers to the Summer of 1876. August 11, a meeting of the Tomsk municipal duma read out a document as follows: "a subject of the North German Confederation, Karl Krueger in an application to the administrative board of the city, requests that he should be granted a lease of a land plot for 10 years, under the authority of the Yurtochnaya community in the newly designed street behind the city hospital with the area 913 and a half square sazhens (sazhen an old Russian measure of distance equal to 2.13 m) to establish a brewery for the price which will be fixed by mutual agreement; a plan for the requested land plot was submitted attached thereto.

As a consequence of this, the administrative board of the city has found no reasons preventing a lease of the land plot in the specified area and by mutual agreement fixed 100 rubles per year as a lease payment and determined to submit the applicant's application to the discretion of the duma. Having considered the area plan attached to the board's register with the plan marking the land plot requested by Krueger and found that the terms are beneficial, the Tomsk municipal duma has resolved: to grant a 10 years lease on the requested land plot to master brewer Karl Krueger from September 1, 1876 with an annual payment to the city income of 100 rubles."

Constructing a brewery and installing equipment took about a year. In 1877, the register of general inspection of industrial and commercial establishments already contained an entry on K. Krueger's brewery as an operating facility. It was a small enterprise of the artisanal type.

In 1880, construction of a university began in Tomsk and the land plot where Krueger's operating enterprise was located was transferred to the construction committee. As K. Krueger realized that the interests of the Imperial University would prevail, he chose to start new construction. This happened at the beginning of 1884. On a land plot that was at the corner of Tyuremniy vzvoz and Moskovski trakt, October 27 (November 9, new style) 1884 an excise officer in the presence of the brewery owner, Karl Krueger, measured new vessels, thereby giving a legal permission to launch the enterprise.

In September 1890, Karl Krueger leased out the brewery to his nephew Robert Krueger for a period of 5 years. And in August 1895, Tomsk brewery No. 8 owned by a Prussian subject, Karl Krueger, became the property of a Prussian subject, Robert Krueger.

Between 1897 and 1898, the facility was retrofitted. This is how the factory looked in February 1898 according to the "Description of beer mead brewery No. 8, located in area 5 of Tomsk": steam facility, stone building, 3 stories. The building has:

- One steam boiler
- One well with a steam pump and pipes
- A steam 50 hp engine, a wooden tank feeding the steam boiler
- · Refrigerating apparatus
- Two-story malt kiln with an oven, underneath it, close to it a room in which a malt winnower is installed
- A sector of an old refractory plant that is now being designed to be pulled down for a beer warehouse

The brew house in the 2nd floor has: mash mixing vessel, filter tun with a over-flow tun. The 1st floor:

- A mash boiling boiler
- Wort boiling tun; two centrifugal pumps
- A hop separator and two condensing pots
- Transfer mash and wort tubes as well as water pipes for hot and cold water
- Wires

On the right side, next to the brew house in the 1st floor there is a washery with a pasteurization unit. There is an apartment for the brewer above the washery; there is a fermentation room behind the brew house which has 30 tuns installed and a refrigerating apparatus to cool wort as well as tin cylinders to cool wort fermenting in the tuns, there is an engine room and then a steam room on the left side of the brew house. The second floor above the brew house has a shallow cooler; the premises near the cooler have a malt mill and two tanks for cold and hot water on the left.

The brewery building is connected with a two-story malt house; its first floor has the malt house itself, the second floor barley and malt barns.

The area on the left side of the facility has ice rooms to store beer. Besides it, there are the following buildings near the beer mead brewery:

- The brewery owner's house
- · An apartment for employees
- Food for the workers
- A kvas (kvas a Russian fermented beverage similar to beer, made from rye or barley) brewery
- A malt house
- Barns and stables

In addition to the restructuring of the premises themselves, modernization of the enterprise was primarily expressed in the installation of a 25 hp steam engine. The wooden mash mixing vessel with a capacity of 123 pails were replaced with an iron one rated for 199 pails. The 80 pail iron tun for mash decoction was supplanted with a 132 pail 1 and the 296 pail iron wort boiling tun with a 487 pail one. The facility's capacity was increased to 50000 pails per year while it was no >10000 pails until 1887. According to industry statistics in the late 1890s, the share of Krueger's brewery amounted to >27% of the total output or 31% in the ruble equivalent. But, production processed remained largely semi-artisanal in this period, it employed 4 workers. It should be noted that brewery No. 8 by the nature of its production did not differ from other enterprises in the industry: Reichsigelman's brewery had 6 workers, Fuksman's and Andronov's 3 each (Orlov, 1985).

Krueger's brewery produced a variety of beers Bavarskoye, Venskoye, Pilzenskoye, Bok-Bir, Eksport, Gambrinus, Tsarskoye, Kozel, Porter, Kabinetskoye, Beloye, Zimneye, Letneye, El, Chernoye Barkhatnoye, Myunkhenskoye.

This was not the last role of Germans in the development of Siberian industry. They did not only own enterprises. By the end of the 19th century, a widespread practice was to invite engineers, technicians and technologists from Central Europe. Austria-Hungary and Germany became a source of highly qualified personnel for Russia, including Siberia.

As they lived up to the end of the 19th century in large cities, Germans were incorporated into the city economic life. They were owners of meat and sausage shops in Tomsk, Tobolsk, Omsk and Barnaul. They owned furniture stores and shops selling musical instruments. As the resettlement process intensified and the demand for improved agricultural equipment sharply

increased, they became sales representatives of leading manufacturers (McCormick, Erlanger and others). Advertisements of these establishments were continuously posted on pages of Siberian newspapers.

A very small part of the German community had lived in rural areas by the end of the 19th century. They were predominantly former colonists who came to Tobolsk and Tomsk Provinces from the Middle Volga region. Once at the new place of residence, they tried to adapt to local conditions which they successfully managed. Their economic activity was traditionally based on agriculture. Cattle breeding was of an auxiliary nature. Inadequate knowledge of local environmental conditions hampered the process of establishing farming enterprises. As the settlements were located in areas remote from big cities and major trade routes, they were unable to integrate into the commodity exchange process and for this reason the farming business was primarily self-sustaining for a long time

Thus in the post-reform period Germans turned out to be more actively involved in the economic life of Western Siberia compared with the first half of the 19th century. While earlier the German community was highly concentrated within various local structures of the public military and civilian apparatus in the subsequent period it "blurred". By the end of the 19th century, Germans were more involved in the manufacturing sector as enterprise owners or hired workers. But in this period, their influence on the region's agricultural development was still minimal. All attempts to initiate large-scale agricultural enterprises of the commercial type proved ineffective. This sphere of economic activity will come into view of the German population of Siberia in the early 20th century.

CONCLUSION

The foundation for the study is built on the archival documents, statistical digests and current research. The research is based on the regional approach.

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