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# STRUCTURAL AND FINANCIAL RISKS OF LAND CAPITALIZATION: LESSONS OF DOMESTIC HISTORY

The article is devoted to the problem of the relationship between expected results and real institutional, structural, and financial consequences of agrarian reforms aimed at the capitalization of land. The purpose of the publication is to summarize the positive and negative experience of the peasant reform of 1861 on changes in the relations of ownership and land use in the budgetary and financial sphere and foreign economic activity. Research is based on the history-institutional methodology using tools of economic comparability, retrospective analysis, and historical reconstruction.

It is defined that the opening of the land market and the creation of a system of mortgage land loans allowed to increase the share of private land ownership of peasants, but did not turn them into effective owners and did not solve the problem of peasant land. Rising land prices contributed to the development of land speculation and increased rents, encouraging the farmers to predatory land use and depletion of soils without increasing productivity.

The capitalization of land and the expansion of the hired labor market contributed to economic growth, increased government revenues and expenditures, and overcame the chronic state budget deficit. At the same time, the credit indebtedness of peasants grew, while ransom payments depleted peasant farms, reducing the potential for capital formation and investment.

The public policy of forcing grain exports and supporting large agribusiness allowed to replenish the gold reserves of the treasury, but also led to the impoverishment of farmers, reduced quality of the exported grain, increased share of fodder crops, and lower share of food crops and finished goods. Intensified international competition to expand the supply of cheap grain led to lower prices, weaker competitive position of domestic exporters, and the

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growing dependence of the economy on world markets for agricultural products, and the local agrarian business - on foreign capital.

The article provides recommendations to the government about taking into account the historical experience in the implementation of modern agrarian transformations, in particular, comprehensive support for farming as the main link of agricultural production and the guarantor of food security of the country. Their implementation will help prevent the risks of over-concentration of land, the proletarianization of the peasantry and its mass migration to cities and abroad, growing environmental problems, and vulnerability of the economy due to increasing dependence on the world markets for agricultural raw materials.

**Keywords:** agrarian reform, land capitalization, land ownership, peasant bank, financial support of the reform, the productivity of agricultural production, the export of agricultural products

Market reforms, which should ensure progressive changes in the institutional structure of the economy, open space for economic initiative and entrepreneurial activity, and serve as a means of increasing productivity and social welfare, necessarily include reforming the agricultural sector, including "launching" the land market. This aspect accumulates a number of problems in the functioning of land as a commodity, capital, and subject to mortgage. They deal with opportunities for access to objectively limited land resources, features of pricing, distribution of rights and powers of land market participants, spatial inequality of economic conditions, and economic efficiency of land use in combination with social dimensions of agricultural production and rural development. It is quite natural that the transformation of land as a living space into an object of alienation in the market requires not only scientific conceptualization, and political decisions, but also institutional support. Thus, the effectiveness of agrarian reforms, like any other, is determined by the effectiveness of mechanisms for adhering to selected priorities, ensuring consistency and systematization, and focusing on long-term socially significant goals.

For more than two hundred years, the domestic academic discourse has been the subject of theoretical controversy on the optimal model of land use. At the same time, there is a political struggle for the choice of the institutional vector of agrarian reforms that will open opportunities for increasing agricultural productivity, remove barriers to free movement of capital in this area and, at the same time, protect peasant labor property, and ensure a consistent unity of economic efficiency and social justice. An important role in the transformation of agrarian relations at all stages of domestic economic history was played by external factors such as the loss of international economic and political positions, the demands of foreign creditors, the spread of revolutionary sentiments, etc. At the same time, the success of the reforms directly affected the state of production, foreign trade, the level of welfare of the population, public finances, and the country's competitive position in international markets. The historical experience of reforms aimed at integrating farms into a market economy, and land capitalization, represents the positive and negative consequences that should be taken into account when developing legislation and regulatory mechanisms of modern institutional transformations in agriculture.

Theoretical, methodological and factual basis for the study of the domestic history of market transformation in agriculture is laid by the fundamental works of famous economists-historians I. Gurzhiy [1], P. Liashchenko [2; 3], and V. Teplitsky [4]. The modern scientific literature presents the following foreign experience of market transformation in agriculture: practices of regulation of the agricultural lands markets in the



EU member states and candidate countries [5]; and land reforms in Central and Eastern Europe after 1989 and their consequences for agricultural restructuring [6; 7]. Numerous publications are devoted to highlighting the features of post-socialist transformations of agriculture in some countries.

The problems of reforming the Ukrainian agro-industrial complex, including changes in land relations, intersectoral proportions, and socio-ecological situation in the agricultural sector of Ukraine's economy and in rural areas for many years remain the subject of research by the authoritative scientists such as O. Borodina, L. Moldavan, T. Ostashko, O. Popova, I. Prokopa, O. Shubravska and others. A number of scientific reports are devoted to the generalization of the main measures and results of institutional and structural transformations in Ukraine's agricultural sector [8; 9]. Analysis of the restructuring of Ukraine's agriculture during the years of independence (production structure, income dynamics) in the context of the quality of government reforms shows the traditional problems, among which is the desire of big business to get high income and market control, leaving most villagers without proper support and developed infrastructure [10]. This conclusion corresponds to the historical experience of national economies that underwent the attack of capital in agriculture during the twentieth century: the focus on forced export growth of agricultural products and exclusively commercial economic results has negative long-term consequences. In addition, they are manifested in both economic and social dimensions. O. Borodina and V. Krupin studied the risks of hypertrophied development of the corporate sector of the Ukrainian agribusiness with the active support of the state [11]. Thus, despite the general view that reforms should increase inclusiveness, counteract social entropy and exogenization of economic development and, as a result, strengthen the economic sovereignty of Ukraine [12, p. 3], in the agricultural sector, negative trends of the opposite direction are intensifying. In particular, the issues of transformation of organizational forms of agricultural production into private market-type enterprises on the basis of strengthening labor private ownership of land remain unresolved; the fiscal system of motivation for innovative development of the agricultural sector has not been created; the process of concentration of market power by agricultural holdings continues; and measures of state support for agricultural producers show signs of management collapse with inevitable economic and social losses.

The purpose of the publication is to identify, based on historical and economic analysis of the consequences of the peasant reform of 1861 and the accompanying market transformations of the domestic economy, the influence of land capitalization as the main resource and conditions of agricultural production on changes in land ownership and land use relations, as well as the state of public finances and the level of credit indebtedness of peasants, foreign trade and the position of domestic agricultural products on world markets. An important task is to generalize the positive and negative historical experience of market transformations of agriculture, and the importance of government reforms for the development of entrepreneurial capitalism in the agricultural sector and access of rural communities to land resources.

### The dynamics of land ownership

Reforming property relations in the agricultural sector of the economy of the Russian Empire, which included Ukrainian lands, was, along with the liberation of peasants, the most important task of the peasant reform of 1861. It was meant to create institutional preconditions for unleashing the productive potential of wage labor and development of peasant entrepreneurship and for increasing the productivity of agricultural production.



Prior to the reform, there were only two legal main categories of landowners: the treasury (in fact, the state) and the nobility. The treasury owned about 2/3 of the entire European territory of the country, the nobles owned about 1/3, but this one third included the most valuable and suitable land for cultivation, located in the most populated and best weather areas. The third, the most widespread category were the peasant landowners, who appeared due to the reform. Despite this, the overall decrease in land use by peasants as a result of the reform was almost 28% [13, p. 6].

Ukrainian scholars consider that one of the consequences of the agrarian reform of 1861 that freed peasants from serfdom and opened a free market for agricultural land, was the artificially created system of land scarcity. In particular, a well-known historian of the national economy P. Liashchenko emphasized that, along with the liberation from the landlords, the peasants were "liberated" from a significant, moreover, the best part of the fertile lands that were previously in their use [2, p. 224]. Direct producers of agricultural products now received land plots that were of inferior quality in terms of their location, land topography, and ease of cultivation. In addition, the land plots were often scattered or wedged into land that was used for cattle grazing or construction of infrastructure, which discouraged agricultural activities. Thus, despite the formal opening of land market, and its declarative accessibility for all segments of the population, land use conditions for peasants actually deteriorated. The integration of peasant farms into the market system of the economy was accompanied by their dispossession from land.

The desire of the peasants to expand production while maintaining extensive farming methods raised the necessity to rent landlords' land. According to M. Tugan-Baranovsky, about 42% of peasant households were forced to lease a land area, which exceeded 30% of all peasants' land. And as the agricultural population grew, (which process, unlike in Western Europe, was not distracted by industry), so did rents and land prices, and the peasants' need for land became more acute. The greatest rise in rents occurred in the first decades after the peasants' liberation: in some provinces by the mid-1880s, it had risen three-fold, four-fold, and even more; then, after a ten-year slowdown of this process, from the second half of the 90s, the upward movement of prices resumed [14, p. 92–93]. Together with redemption payments, this became a powerful financial pressure that hampered the development of the peasant economy.

The dynamics of personal private landholding in the post-reform period in fifty provinces of the Russian Empire allow us to produce the following estimations (Table 1).

 $Table\ 1$  The distribution of personal private property according to social status

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Social status of the	in 1877,	in 1905,	in 1877,	in 1905,	
owner	million dessiatin	million dessiatin	share, %	share, %	
Nobles	73,1	53,2	77,7	52,3	
Peasants	5,8	13,2	6,2	13,0	
Merchants	9,8	12,2	10,4	12,7	
Citizens	1,9	3,8	2,0	3,7	

Source: Sviatlovskyi V.V. (1911). Mobilization of land ownership in Russia (1861-1908). Saint Petersburg. P. 43.

According to these data, the nobility lost 19,9 million dessiatin (1 dessiatin = 1,09 hectare) in 28 years, and the biggest losses were in the central region (3,1 million dessiatin), but the share of peasants' lands increased insignificantly. During the same period, peasant land property (both individual and collective ones) underwent significant changes (Table 2).



Table 2

Changes in peasant land tenure

Purchased land	in 1877, million dessiatin	in 1905, million dessiatin
Individuals	5,8	13,2
Communities	0,8	3,7
Societies	_	7,7
Total	6,6	24,6

Source: Sviatlovskyi V.V. (1911). Mobilization of land ownership in Russia (1861-1908). Saint Petersburg. P. 44.

Thus, the increase in peasant land ownership over 28 years amounted to 18 million dessiatin. The term "peasants" includes private owners of various "weight categories" from landowners, who owned thousands of dessiatin, to the owners of parcels of ½ dessiatin. Peasants purchased land in three ways: individually, in communities and in societies. Among the purchase agreements, sole proprietors dominated especially in the 1870s, but the growing demand for land encouraged the peasants to pool their capital and buy land collectively. A significant increase in the number of collective deals for the purchase of land occurred with the foundation of the Peasants' Land Bank, whose activities significantly expanded the opportunities for land acquisition by peasants, in particular via pooling. After the opening of the Peasants' Land Bank in 1883, with its help by the end of the century the peasants bought out more than 4,8 million dessiatin of land for 276,1 million rubles [15, p. 131].

Despite the fact that part of the purchased land was then re-sold, most of the land remained in the hands of small peasants. Therefore, the activities of the Peasants' Land Bank became an important factor in the consistent increase in the area of private peasant land tenure in the post-reform period (Table 3).

Private land ownership of peasants

Table 3

Years	The size of land ownership, million dessiatin	The growth of the area of peasants' private land ownership, %
1877	8,5	100
1882	10,6	125
1887	13,5	158
1892	15,8	185
1897	18,1	213
1902	22,3	262
1904	24,6	189

*Source:* Sviatlovskyi V.V. (1911). Mobilization of land ownership in Russia (1861–1908). Saint Petersburg. P. 133.

Taking into account the sale of land through the Peasants' Bank during the following years, the size of peasant land tenure in mid-1910 is 27,5 million dessiatin, summing up that in 32 years it increased approximately 3,2 times [15, p. 134]. At the same time, the increase in the total area of private peasant land holdings took place against the background of a decrease in the per capita land area.

The functioning of the land market was negatively affected by the communal form of land ownership, which limited the property rights of the peasantry, and the system of easements, which significantly reduced the supply of land and at the same time, reduced the efficiency of land use [for details see 16, p. 22–24]. The main disadvantages of this form of



land ownership and collective land use were as follows: the inconvenience of cultivating the land due to elongated and patchwork land holdings; the transition to more profitable field crops and more advanced agro-technologies is complicated due to forced crop rotation; soil exhaustion as a result of permanent redistribution, which prompted the peasant to predatory land use; lack of incentives to increase labor intensity and investment in land, etc. The problem of delimitation of real estate property and possession today retains not only theoretical but also practical significance. As evidenced by modern experience of agrarian reforms in China, land that is legally in state ownership can be successfully used by settlement enterprises on a market and even capitalist basis [17, p. 17]. Removing barriers to the development of market-oriented rural private enterprise is critical.

In Western Ukraine, after a similar reform in 1848, the solution of the question of specific forms of market transformation of agriculture in practical terms was hampered by the efforts of landowners to maintain their positions and economic power. Concentration of land, including concentration due to the expropriation of smallholders, low productivity of agricultural production, peasants' "land scarcity" and, as a consequence, their impoverishment and proletarianization are the main features of post-reform agricultural development, which exacerbated social problems, in particular a powerful wave of international migration of the Ukrainian population in the hope of obtaining the dream land [see details 18, p. 145–148]. Thus, the commodification of living space – the transformation of land into a commodity and an object of capital investment – led to "expulsion" of the peasantry from rural areas, concentration of land ownership and peasant emigration.

The process of market transformation of the economic environment in the Ukrainian lands lasted more than half a century. The beginning of the functioning of the classical land market in the Dnieper Ukraine is connected with the Stolypin agrarian reforms, who was the Russian Prime Minister in 1906–1911. Due to the transformation of organizational forms of agricultural production into private market-type enterprises, development of ports in the south of Ukraine, construction of railways, tax reform and the creation of a system of land mortgage lending, which together represented a set of long-term measures aimed at organizing the agricultural market and its financial security, significant changes took place in the structure of land ownership and types of agricultural production.

### Financial security and consequences of the reform

One of the ideologues and leaders of market reforms in the Russian Empire, M. Bunge, came up with the idea of organizing cheap credit for peasants to make them the main buyers of landed estates, which landlords often mortgaged to banks without buying them back. The Ministry of Finance approved the project of the Peasants' Land Bank. Its main provisions were as follows: 1) the issuance of loans to peasants, regardless of their wealth, at 6% per annum; 2) the size of the loan was to be 75% of the land's value; 3) the loan repayment period ranged from 24 to 34 years; 4) the bank had to be an independent credit institution and be accountable to the Ministry of Finance. In the period 1883–1885, 25 branches of the Peasants' Land Bank were established, the amount of loans increased from 864,000 to 14 million rubles, and the amount of land purchased increased from 18,2 thousand to 318 thousand dessiatin. [19, p. 249]. Subsequently, the sale of land to peasants was somewhat reduced due to the opening of the Nobles' Land Bank, which completed the formation of the mortgage system. This bank issued loans with land as collateral in the amount of 60% of the value of estates for a period of 36 to 48 years with an annual interest



of 5%. And although the conditions of this bank were extremely favorable, they could not slow down the process of reduction of landownership.

Analyzing the reform from a financial point of view, the famous scientist and financier P. Kovanko stated: "The allocation of land to former landlord peasants with the participation of the government is a unique credit operation by the breadth of design and implementation" [19, p. 2]. The reform provided not only for the opening of the land market, but also for a whole set of institutional mechanisms to compensate the landowners' losses. Their income from the use of free labor of peasants was to be compensated by socalled "redemption payments", and the peasants actually had to redeem not only land but also themselves (by paying the monetary equivalent of their annual servitudes multiplied by 16). According to historical sources, the increase in the capital debt of the peasants for the purchased land grew in parallel with the expansion of the redemption operation. Let us illustrate the situation with the data of peasants' debt for land and its repayment in 1892– 1907 (Fig. 1). According to the reports of the State Bank and the Department of Fixed Taxes of the Ministry of Finance of the Russian Empire, the capital debt of peasants for land reached 900 million 138 thousand rubles. On January 1, 1907 the peasants repaid 478 million rubles (53,2%) in urgent payments and advance payments, and the state assumed the 411 million rubles (45,7%) worth of the debt, the rest remained on the peasants of the western provinces, who were not covered by the manifesto of November 3, 1905 that wrote off 25% of the peasants' total debt [19, p. 479–480]. Overall, the peasants themselves repaid about 54% of the debt, being the rest covered from budget expenditures. However, through the mechanism of taxation, the fiscal burden all the same fell on the peasants.

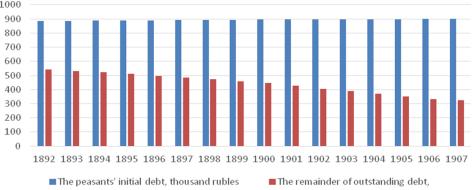


Fig. 1. The dynamics of peasants' debt for land and its repayment (1892-1907)

Source: Kovanko, P. (1914). Reform of February 19, 1861 and its consequences from a financial point of view. The buy-back operation 1861-1907. Kyiv. P. 53.

The Peasant Reform was considered a credit operation that had to pay for itself. At the last stage of the reform, the redemption operation almost lost its credit character, and the payments became a direct tax. The peasants had to pay redemption amounts for the land for 49 years at a very low interest rate. But as a result of the redemption operation, the payment became a heavy burden for them, because the loan granted for such a long period was expensive and, moreover, the value of land was overestimated everywhere. In the end, it became clear that the payment amount far exceeded the peasants' incomes; in addition, the amount of payments continued to grow. In 1905, when the payments were abolished, the total repayment amount was almost three times the market value of the land. In particular, Ukrainian peasants paid to the state not only the loan of 166,8 million rubles, but also 215,2 million rubles of interests [4, p. 108–109]. As a result of the provision of loans to peasants



with land as collateral, the practice of selling land plots at auction became widespread, resulting in the transition of land into the hands of big landowners and foreign capitalists, but not peasant farmers.

A significant factor in the success of modernization measures is their complex nature. The liberation of the peasants and the opening of land market circulation were to take place inseparably with the market oriented tax reform, and the two decades delay of the latter caused a considerable damage to the national economy. In the 1880s the reform of the public finance system began, which increasingly relied on revenues from commercial and industrial activities. This provided an increase in revenues and expenditures of the state budget, expanding the possibilities of restructuring the economy on a capitalist basis, and promoting technical modernization of the production and restructuring of the economy. The influence of the peasant and tax reforms on the dynamics of public expenditures and revenues in the second half of the nineteenth century is shown in Fig. 2.

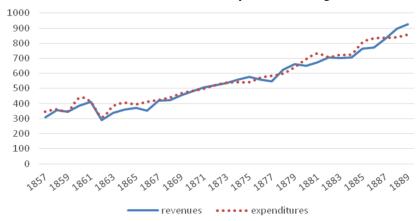


Fig. 2. The dynamics of state revenues and expenditures of regular budget, 1857–1889

*Source:* Kovanko, P. (1914). Reform of February 19, 1861 and its consequences from a financial point of view. The buy-back operation 1861-1907. Kyiv. P. 249.

At the same time, the tax policy was to ensure the creation of conditions for attracting foreign capital, financing the growing military and police expenditures of the government, servicing and reducing the public debt. The negative consequence of the fiscal nature of reforms with the provision of preferences to producers at the expense of consumers was a decline in real incomes for majority of population, which reduced aggregate demand. A "vicious circle" was created: limitations of the domestic market necessitated state support for entrepreneurship, so domestic capitalism depended on government protection. But the government orders at overstated prices, protectionist customs tariffs, export premiums, government guarantees and easy credits for industrialists were provided through redistribution of tax revenues in favor of individuals and financial-industrial groups, which did not contribute to improving economic efficiency and suppressed the formation of market relations based on the principles of freedom and competition. "The key role of the state in the development of industrial entrepreneurship, that ensured its forced development and structural and technological modernization of the economy, at the same time, contributed to the monopolization of new promising industries" [20, p. 528]. At the same time, the powerful development of industry due to governmental protectionism led to depletion and decline of the agriculture, and impoverishment of the main social stratum the peasantry.



## The impact of agricultural capitalization on the structure and volume of exportimport operations

The active railway construction and the development of monetary economy after the peasant reform of 1861 encouraged further increase in grain exports. Before the world agrarian crisis, that is, until the mid-1870s, the situation of Russian grain producers was favorable due to the weak capabilities of competitors from other countries. During and after the global agricultural crisis, the situation changed dramatically in the mid-1890s. Competitors increased output and exports, so gradually due to better product quality, lower prices and greater supply stability, they gained an increasing share of the European grain market. To better understand the trends of total and grain exports of the Russian Empire from the middle of the XIX century, it is more appropriate to estimate it in monetary terms (Fig. 3), and after improving the collection of statistical material on exports – in weight terms (in poods) (Fig. 3a).

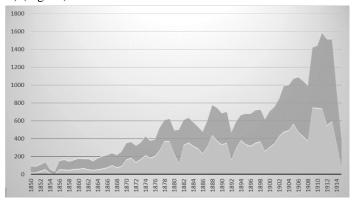


Fig. 3. Total and grain exports from the Russian Empire in 1850-1914 (million rubles)

Source: Kovalevsky V.I. (1896). The productive forces of Russia. A brief description of various branches of labor, according to the classification of the exhibition. Saint Petersburg: Leifert. P. 14-15; The collection of information on the history and statistics of Russia's foreign trade (1902). Saint Petersburg, T. I. Tables. P. 104-117; The reviews of Russia's foreign trade along the European and Asian borders for 1896-1915. Saint Petersburg. P. 1898-1917.

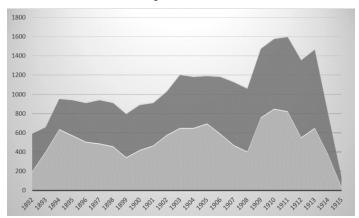


Fig. 3a. General and grain exports from the Russian Empire in 1892-1915 (thousand poods)

Source: Kovalevsky V.I. (1896). The productive forces of Russia. A brief description of various branches of labor, according to the classification of the exhibition. Saint Petersburg: Leifert. P. 14-15; The collection of information on the history and statistics of Russia's foreign trade (1902). Saint Petersburg. T. I. Tables. P. 104-117; The reviews of Russia's foreign trade along the European and Asian borders for 1896–1915. Saint Petersburg. P. 1898-1917.



The figures show that total exports of the Russian Empire during fifty years after the peasants' land reform of 1861 increased more than 8,5 times, and the value of grain exports increased more than 10 times. At the same time, the share of grain in the total exports of the Russian Empire increased from 20% in the 1850s to more than half in the 1870s and 1890s, declining only slightly in the early twentieth century (Fig. 4).

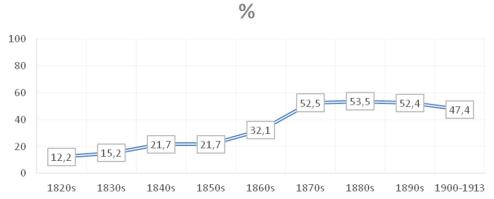


Fig. 4. The share of grain exports in the total volume of the Russian Empire exports (1820-1913)

Source: The reviews of Russia's foreign trade along the European and Asian borders for 1820–1913.

During the last third of the XIX century, grain exports from the Russian Empire were extremely uneven. Its volumes were negatively affected by poor grain yields, especially in the Russian provinces, and, to some extent, by the satiation of Western European markets with cheap overseas grain during the global agricultural crisis. In 1878, 385,9 thousand poods of grain crops were exported to foreign markets, and 247,9 thousand poods of grain crops (including 61,4 thousand poods of wheat) - in 1880. In 1888, grain exports reached a record figure for the nineteenth century - 547,9 thousand poods, including food grain - 322 thousand poods. Grain export was effected took place to almost all countries of Western Europe. But in 1892 there was again a sharp drop in exports due to an unprecedented crop failure (to 196,4 thousand poods) [21, p. 277]. All that was negatively perceived by Western European importers and forced them to refocus on grain imports from other countries, including America and Australia. Uneven grain harvest affected export volumes. While in 1870-1875, 62% of all global marine grain exports were effected from the Russian Empire through the ports of the Black and Azov Seas, in 1875-1879 the share was only 46%, in 1880–1884 – 49%, and in 1885–1888 – 61% [21, p. 278]. In general, a significant decline in grain exports through southern ports occurred during the global agricultural crisis.

Grain production in the Russian Empire slowly shifted to market conditions. During the second half of the XIX century the marketability of grain production increased, and this process grew especially rapidly from the 1870s. Thus, during 1860–1880, grain marketability in the domestic market increased from 16,4 to 21,5% of the total mass of grain, and by the beginning of the First World War, according to M. Kondratiev's calculations, carried out based on the grain balance, the figure already reached 27,8% (Fig. 5).

Describing the main features of Russian grain exports in the pre-revolutionary period, the famous researcher of agricultural history P. Liashchenko wrote: "Despite the high natural qualities, Russian grain was not taken by the best buyers. American clean and high-quality grain of single quality standard, American strict organization of trade, reliability of supply and prices,



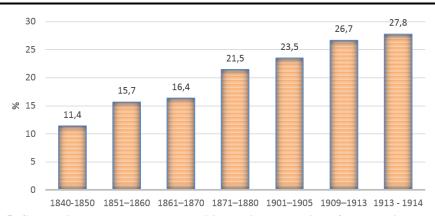


Fig. 5. Change in the average marketability grain production of the Russian Empire during 1840–1913.

*Source:* Nyfontov, A.S. (1974). Grain production in Russia in the second half of the nineteenth century. Based on the materials of the annual statistics of harvests in European Russia. Moscow: "Nauka". P. 214 (data for 1861-1870, 1871-1880); Kondratiev, N.D. (1991). The grain market and its regulation during the war and revolution. Moscow: "Nauka". P. 126, 130, 322 (data for 1909-1913, 1913).

was opposed by Russian exporters whose grain was dirty, of different types, not corresponding to trade standards, and thrown to the foreign market without any system and wait for better market situation, but often during the least favorable conditions, and as previously unsold goods, which look for an occasional buyer... As a result, the Russian exporter had to limit himself to either those markets where it had the natural advantages of geographical proximity, or those in the countries on which we were financially and commercially dependent, or those, where Russian grain was sold cheaper than world prices" [3, p. 180–181]. As a result, during the last third of the XIX – early XX centuries, in the Russian exports, the share of cheap feed crops, in particular barley, gradually increased, to whose quality the consumers were less demanding than to the quality of food grain (Fig. 6).

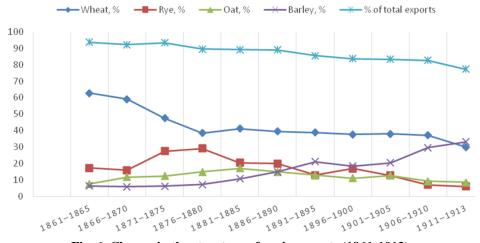


Fig. 6. Change in the structure of grain exports (1861-1913)

Source: Liashchenko, P.Y. (1915). Grain farming and grain trading relations between Russia and Germany in connection with customs tax. Petrograd. P. 50-55.

In the Russian grain balance in the post-reform decades, there were serious structural changes. The agrarian crisis and the decline of agricultural production of the Chernozemic (black-soil) Center led to a reduction in rye exports (Fig. 6). In the further transformation of



the grain economy, commodity crops, such as wheat and barley, became increasingly important, which was associated with both the redistribution of grain production and the needs of exports. At the same time, food grains stood more and more back in favor of feed grains.

Exports of grain and other agricultural products contributed to the accumulation of foreign exchange reserves in the country, stabilized the trade balance and enabled S.Witte to carry out monetary reform, which contributed to the inflow of foreign capital. On the other hand, according to M. Kondratiev's calculations [23], during the period of industrialization, the agricultural sector, which provided the lion's share of budget revenues, was taxed at three times higher rate than the industrial one. Accordingly, the necessary financial resources were extracted from agriculture, which could have been spent on improving working conditions, modernizing agricultural machinery and increasing productivity. So it is not surprising that in comparison with other countries, the agrarian success of the Russian Empire, taking into account the availability of plough-land and population, was not so convincing (Fig. 7). Yields and grain production per capita were low. The average grain yield in 1908-1912 in the Russian Empire was 8 hundredweights per hectare, while in France and the United States it was 12,4 hundredweights per hectare, in England it was 20 hundredweights per hectare, and in the Netherlands, it was almost three times higher than in Russia – 22 hundredweights per hectare. In 1913, 30,3 poods of grain per capita were harvested in the Russian Empire, while 64,3 poods were harvested in the United States, 87,4 poods in Argentina, and 121 poods in Canada.

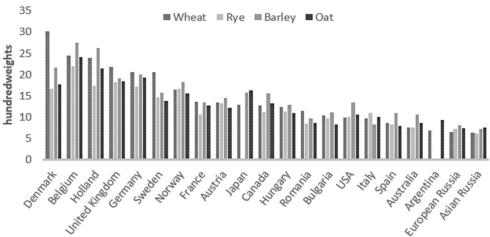


Fig. 7. The average harvest of main cereals per hectare in the countries of grain production for 1905–1914 (hundredweights)

Source: Reyent O.P., Serdyuk O.V. (2011). Agriculture of Ukraine and the world food market (1861-1914). Institute of history of Ukraine, NAS of Ukraine. Kyiv. P. 98-99.

The data of Fig. 7 show that the yields of Western European countries and the Russian Empire were at significantly different levels. The latter was inferior in the average per hectare yield of the main export crops (wheat, rye, barley and oats) to all these countries. The main competitors of the Russian Empire in the international grain market were the United States, Canada, Argentina, Australia, Romania, Hungary, Germany and the East Indies. Other countries also exported agricultural products, but in small quantities. Occupying more than half of all European sown area, the Russian Empire grew just over a third of the continent's grain harvest. At the same time, the share of the Dnieper Ukraine



(with 2% of the world population) in the world output of the four main grain crops in 1909–1913 averaged 7,2%, in particular, on wheat – 6,7%. Ukraine was inferior to only the United States, India, and Russia in terms of wheat output; by rye output – to Germany and Russia; and by oat output – to the United States, Canada and Russia; and Ukraine was the world leader in barley output. German farmers bought Ukrainian barley in large quantities for fattening pigs, whose meat was successfully sold in the markets of Denmark, Austria and other countries. In general, the share of Ukraine in total grain output of the Russian Empire (including the Kingdom of Poland, Bessarabia, Belarus and other regions) was about 45% [24, p. 15–17]. At the same time, exporters of Ukrainian grain did not set prices for it, but instead depended entirely on the situation on the world market (Fig. 7).

Thus, a development pattern of foreign economic relations was laid, which eventually led, according to S. Korablin's felicitous expression, to the so-called "trap of commodity markets". The state of the economy then was, like now, directly dependent on fluctuations in world commodity prices, and other external factors of economic and financial instability. Under unfavorable external conditions, "all economic policy is insolvent, and business becomes helpless" [25, p. 248–249].

Thus, despite the large areas occupied by the cultivation of crops, including cereals, and significant outputs, their exports did not provide a stable leading position in world markets, and revenues from it could not serve as a basis for economic development on the new technological basis. As was noted on the pages of a miners' journal of Donbas and Dnieper Region of that time, "our large landholdings <...> were under absolute trusteeship of the government. All the policy of the Nobles' Land Bank and Peasants' Land Banks, our fiscal system, our local taxation, and the organization of local government – everything is adapted to patronize large landholdings. And when the government declares that it will continue to promote the development of agriculture, it is clear what kind of assistance it is going to be" [26, p. 6461]. The government's policy was aimed at supporting large agricultural exporters, so the latter receiving export bonuses and other benefits, were not interested in deeper processing of agricultural raw materials, not in expanding the assortment, nor in improving product quality. Using the concept of institutional factors of mobility of economic resources, proposed by O. Pustovoit, we can say that the behavior of agricultural businessmen was structured by the institutional environment in such a way that the production of goods with a high share of value added, the introduction of new goods, or traditional goods of higher quality, was impractical from an economic point of view [27, p. 88-90]. In addition, the low level of reinvestment of export earnings blocked the cumulative growth of domestic commercial production even in the years of favorable external economic conditions.

Low yields and underdeveloped infrastructure also did not contribute to success in international competition. Ukraine lacked elevators, granaries, and warehouses. As of 1912, they could hold only 1% of the harvest, while the rest was to be sold before harvest or without storage. The situation was slightly improved by private warehouses serving export trade in seaports. Their capacity did not meet the needs, they were insufficiently equipped with mechanical equipment, which increased overhead costs, delayed the time of reloading goods, as a result of which a significant part of the products deteriorated and was lost [28, p. 69–89]. Let alone the quality of roads by which products were delivered to the railway and then delivered to the ports. These factors sharply reduced the competitiveness of Ukrainian grain in foreign markets.

Increasing the exports of agricultural products as the main potential and eternal engine of economic growth was one of the strategic objectives of the peasant reform of 1861.



However, the government failed to ensure the formation of effective institutions for private entrepreneurship and competition, diversified production, investment in high-tech infrastructure, storage and processing of agricultural products, increasing demand in the domestic market and its filling with high quality products, and entering foreign markets of goods with high value added. The result was the concentration of land ownership, increasing rural poverty, consolidating the status of a supplier of cheap agricultural raw materials and labor to foreign markets, and the formation of dependence on the world market environment.

#### **Conclusions and recommendations**

From the point of view of historical and economic substantiation of reform strategy in modern Ukraine, in particular, market transformation of agriculture, and commodification and capitalization of land, it is important to study and generalize the positive and negative experience of the first wave of market reforms, including the peasant reform of 1861. The expected results and real consequences of the reform differed significantly, which gives grounds for important reservations about the current institutional reforms in agriculture.

The analysis of changes in the structure of land ownership in the post-reform period allows identifying a number of characteristic trends. The peasant social class did not become dominant among landowners. On the contrary, the peasants suffered from scarcity of land, rising land prices, and rapid increases of rent. The opening of the land market and access to it for all social classes led to active development of the speculative sector of land transactions, when purchase of land for resale is an independent form of business activities that has nothing to do with increasing productivity of agricultural production and finding an effective owner. There are new forms of peasant cooperation for the collective purchase of land by specially created societies and unions. At the same time, the weakness of local self-government institutions, protection of the rights of local communities in opposition to large landowners, institutional inconsistency of land ownership and use, and spatial inequality in access to them led to soil depletion, predatory use of common lands, and low social efficiency of the market reform in agriculture. The process of land capitalization was aimed at obtaining quick incomes and monopolization of the agricultural sector to consolidate and implement market power.

The creation of the Peasants' Land Bank for lending to peasants served as a factor in increasing the share of peasant land ownership. At the same time, the redemption operation, which consisted in the treimbursement, by the peasants, of the value of their land plots and serfdom duties, diverted financial resources from their productive use and depleted the peasant farms, thus reducing the potential for capital generation and investment. An important consequence of the commodification and capitalization of land was the growth of peasants' debt on bank loans (much of the debt was eventually repaid by the state). The increase in state budget revenues due to capitalist reforms in the agriculture, expansion of the land market and wage labor, in the vicious circle of government support for large capital aggravated the structural and institutional distortions of the domestic economy. There was no fiscal system to motivate the innovative development of the agricultural sector, on the contrary, the mechanism of lending, taxation, and regulation of pricing for agricultural goods through excises, duties and export premiums contributed to the structural simplification of production, with its concentration and focus on foreign markets.

Despite the fact that the expansion of agricultural exports and strengthening the foreign trade position of the Russian Empire were priorities of the land reform of 1861, its results were contradictory, because the country only strengthened its status of exporter of low-quality



agricultural raw materials. The Russian Empire was one of the first to enter the European grain market and held a dominant position there until the last third of the XIX century, but it weakened considerably due to intensified international competition. In the late XIX and early XX centuries, several key markets were lost to the main competitors, the United States and Germany. As a result of the concentration of land ownership and the speculative nature of agricultural entrepreneurship, grain exported from the Russian Empire was of low quality, it had a significant amount of impurities, the country generally lacked uniform standards for grain varieties (unlike the United States and several other countries). The dependence of agricultural production and grain exports on foreign capital, in particular Greek, German, and British, was constantly growing. Significant volumes of exports were ensured not by advanced agricultural technologies and high yields, but by the state policy of supporting and encouraging exporters, despite the impoverishment of the majority of peasants. At the turn of the XIX and XX centuries, the share of cheap fodder and industrial crops in all-Russian grain exports increased and the share of food crops decreased. The share of products with high added value was critically low. That was the period of the origin of the historical trajectory of the dependence of domestic business, public finances and the effectiveness of government economic policy on the state of affairs in world markets for agricultural raw materials.

In carrying out land reform in modern conditions, the lifting of the moratorium on the sale of agricultural land and the full launch of the land market should contribute to economic growth. Therefore, it is important to create conditions under which there will be not only an increase in the volume of agricultural products grown, but also an increase in the degree of their processing. This requires additional financial resources and investment in fixed assets. The program to support the agricultural sector should be refocused on increasing domestic resources to modernize the industry. One of the tools to direct the profits of agricultural enterprises to the development of resources for deeper processing of agricultural products or livestock products and increase the level of technical and technological equipment of the agricultural sector may be the introduction of a tax on distributed income (tax on withdrawn capital) instead of the existing corporate income tax. This will increase the capitalization of agricultural enterprises, provide additional resources for the modernization of the existing or creation of new processing facilities, and promote more efficient land use and more transparent distribution of income that will launch ancillary production and create long economic chains.

The opening of the land market, although it carries certain speculative risks in a weak competitive environment, in the long run should become a powerful driver of the Ukrainian economy, promote investment in agriculture, and encourage the introduction of modern land use technologies for growing clean and nutritious products. After the lifting of the moratorium, there is a possibility of even greater concentration of land ownership, which, on the one hand, may improve the efficiency of land use, and on the other, it will increase unemployment among the rural population, simplify the agricultural sector, and deplete agricultural land due to the interests of agro-exporters. Therefore, the government needs to make every effort to clearly and accurately describe the country's land fund, to ensure the effective work of the State Geocadaster and the judiciary, which should become a reliable defender of property rights in the land sector.

Domestic experience shows that grain producers often did not take into account the situation on the world market when selling products. There was a boost in exports, dominated by the desire to export maximum grain in a short time, which led to falling world grain prices. Due to the lack of an adequate number of elevators and grain storages, the surplus grain was removed quickly in late summer and autumn, which led to reduced



prices. The internationalization of agricultural production requires not only an increase in agricultural output, but also the development of appropriate infrastructure, management and logistics to improve the country's international image, as well as a rapid and stable export of agricultural products and timely implementation of external contracts.

The integration of peasant farms into the market system of the economy is accompanied by negative socio-economic consequences of land capitalization and spatial discrimination in land use, among which are the following: proletarianization of the peasantry and their resettlement in cities in search of income, which in modern conditions leads to depopulation of rural areas; rapid expansion of international migration, which today is a challenge to the Ukrainian economy and state; mismanagement and irrationality in land use (violation of crop rotation, land depletion and reduction of its fertility due to predatory exploitation by land magnates to increase exports of grain and agricultural raw materials, deforestation, emergence of wetlands, etc.), which now acquire the character of an ecological catastrophe.

An important historical lesson of agrarian reforms is that the development of large agricultural enterprises stimulated by them contributes to the realization of the export potential of agriculture, while small and medium farms fill the domestic market of agricultural pro-ducts and act as a guarantor of food security. Therefore, a necessary component of the structural policy of the state in this area is the comprehensive support of Ukrainian farming as the main link of agricultural production.

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### СТРУКТУРНІ ТА ФІНАНСОВІ РИЗИКИ КАПІТАЛІЗАЦІЇ ЗЕМЛІ: УРОКИ ВІТЧИЗНЯНОЇ ІСТОРІЇ

Статтю присвячено проблемі співвідношення очікуваних результатів і реальних інституційних, структурних та фінансових наслідків аграрних реформ, спрямованих на капіталізацію землі. Метою публікації є узагальнення позитивного та негативного досвіду селянської реформи 1861 р. щодо змін у відносинах власності та бюджетно-фінансовій землекористування, сфері ma зовнішньоекономічній діяльності. Дослідження проведено на основі історико-інституційної методології з використанням інструментарію економічної компаративістики, ретроспективного історичної реконструкції.

Встановлено, що відкриття ринку землі та створення системи іпотечного земельного кредиту дозволило збільшити частку приватного землеволодіння селян, проте не перетворило їх на ефективних власників і не вирішило проблеми селянського малоземелля. Зростання цін на землю призвело до розвитку спекуляції нею та підвищення орендної плати, спонукаючи селян до хижацького використання земель та виснаження ґрунтів без підвищення продуктивності виробництва.

Капіталізація землі та розширення ринку найманої робочої сили сприяли економічному зростанню, збільшенню державних доходів і витрат, подоланню хронічного дефіциту державного бюджету. Водночає зростала кредитна заборгованість селян, викупні платежі

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виснажували селянські господарства, зменшуючи потенціал капіталоутворення та інвестицій.

Державна політика форсування експорту хліба та підтримки великого аграрного бізнесу дозволила поповнити золотий запас казни, але водночас призвела до збідніння селян, зниження якості експортованого збіжжя, збільшення у ньому частки кормових культур і падіння частки продовольчих культур та готової продукції. В умовах посилення міжнародної конкуренції збільшення пропозиції дешевого зерна зумовило падіння цін, послаблення конкурентних позицій вітчизняних експортерів та зростання залежності економіки від кон'юнктури світових ринків сільськогосподарської продукції, а вітчизняного аграрного бізнесу — від іноземного капіталу.

Розроблено рекомендації уряду щодо врахування історичного досвіду при здійсненні сучасних аграрних перетворень, зокрема, всебічної підтримки фермерства як основної ланки аграрного виробництва і гаран-та продовольчої безпеки країни. Їх впровадження сприятиме запобіганню ризиків надмірної концентрації землі, пролетаризації селянства та масової міграції його до міст і за кордон, наростанню екологічних проблем та вразливості економіки внаслідок посилення залежності від кон'юнктури світових ринків аграрної сировини<sup>7</sup>.

**Ключові слова:** аграрна реформа, капіталізація землі, земельна власність, селянський банк, фінансове забезпечення реформи, продуктивність сільськогосподарського виробництва, експорт аграрної продукції

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