The trap of agrarian economy.
A retrospective analysis of threats to economic security of Ukraine

For Ukraine, as for one of the largest exporters of grain and other agricultural products, the agrarian economy is an important source of budget revenues. However, the agrarian model of economic development, like any other raw material economy, creates relatively easy and simple profits that are usually spent on consumption. Thus, it slows down investments in the formation of high-tech industries. And this creates threats to economic security, as it significantly limits the long-term economic prospects of the state in today's globalized world. The model of agrarian economy began to form in Ukraine (which was then a part of the Polish-Lithuanian Commonwealth) in the XVI century. Back then, Western Europe received large amounts of gold and silver from colonized Latin America. This led to an increase in the amount of money in circulation, and as a result – to rising prices for most goods, including agricultural products. Large landowners took advantage of this moment and became important suppliers of grain grown on their estates. The grain was transported by rivers to the Vistula River and then to Gdansk, an important port on the Baltic Sea, where it was shipped mainly to the Netherlands (at that time – the center of the Western European economy). The owners of grain received large profits, which they spent mainly on consumption and on the development of their estates. They had no need to improve agricultural production – grain was grown by serfs. Mass production of grain in the farms of landlords kept peasants from migrating to cities, although in other countries they usually sought work in cities, becoming craftsmen and contributing to the emergence of the first industrial enterprises. Thus, the development of production in Ukrainian cities was slowed down, as did the expansion of the cities themselves. And although the first signs of capitalist relations (production for sale, integration into European markets of grain and other agricultural products, the use of hired labor, etc.) were already noticeable in the agrarian Ukrainian economy at the end of the XVI century, such agrarian capitalism created a trap of the agrarian economy, from which proved to be impossible to escape over the next centuries.

Keywords: economic security; raw material economy; agrarian economy; agrarian capitalism; grain export; Ukraine in the XVI–XVII centuries; Gdansk.

The relevance. Today, Ukraine is one of the largest exporters of agricultural products and occupies a prominent place in this segment on world commodity markets, which was clearly demonstrated by the forced interruption of grain exports in 2022 due to military actions. Grain export creates significant financial flows that replenish the budget. Agricultural firms that directly grow agricultural products are also expanding their business. They create well-paid jobs, buy the latest agricultural equipment and machinery. However, the problem is that agricultural export earnings (similar to oil and gas export earnings in some countries) are usually not invested in the development of high-tech industries because there is already a relatively simple and reliable source of income. This slows down economic growth. This is a trap of any commodity economy, and in our case – an agrarian economy. The roots of this macroeconomic trend can be seen in the times of the «great grain boom» of the 16th and 17th centuries. It was then that the trajectory of economic development was born, which is difficult to change even today, in the XXI century.

Analysis of recent studies on which the author relies. General issues of the export of Ukrainian grain and other agricultural products in the 16th and 17th centuries, considered by many researchers. I will mention only the well-known ones by F.Brodel, I.Wallerstein, and M.Hrushevskyi [1–3]. The accumulation of huge profits from grain exports was analyzed by M.Malinovskyi [12]. N.Davies and M.Malovist focused on the importance of Dutch merchants in the organization of grain export [4, 13]. Maddison E, provided data on the absolute dominance of the agrarian sector in the economies of Eastern Europe, which led to the transformation of Ukrainian lands into raw materials [8]. As O.Kompan showed [6], this inhibited the development of cities and crafts. Decline in grain exports at the beginning of the 17th century were considered in detail by M.Bogutska and A.Matsak [9–11].

The purpose of the article is to analyze the threats to economic security created by the agrarian raw material Ukrainian economy of the 16th and 17th centuries.

Results of the study. In the 16th century, a pan-European economic world was formed – it was another wave of globalization that affected our region as well. The population of the countries of Western Europe grew rapidly, so the need for food products increased. And the flow of gold and silver from South America, colonized by the Spanish, caused a real revolution in prices – food became more expensive five (and sometimes eight to ten) times.
The cost of other agricultural products also increased. Noble landowners took advantage of this chance to get rich. Many bourgeois families in the cities also began to engage in commerce, turning into a new urban aristocracy.

Thus, since the 16th century, Ukrainian lands became a major producer of grain and began to enter the orbit of the Western European economy – unfortunately, only as a raw material appendage. At first, wood and livestock were exported from Ukraine – herds of oxen from the banks of the Southern Bug were driven to Germany, and at the end of the 16th century, about 50,000 cattle were sold there annually [1, p. 209]. Then grain began to predominate in exports. In the era of rapid growth in the export of grain from Volhynia and Podillia, it was transported by boats, first on small rivers, and then on the Vistula to Gdańsk. Such a trade route arose as early as the end of the 15th century, when wood began to be exported from Ukrainian lands to Western Europe [3, p. 56–57, 83–84, 182–183, 194–197].

During the «great grain boom» in Eastern Europe, a general economic boom began and free capital appeared. In particular, in Poland, GDP at purchasing power parity per capita increased from $702 (at the exchange rate of 1990) in 1500 to $810 in 1578 during the maximum boom [12, p. 375, 401].

Landowners sold grain to merchants from the port city of Gdańsk. Not only princely families dating back to ancient Russia (Vysheevetskyi, Zaslavskyi, Zbarazhskyi, Koretskyi, Ostrozhskyi, Sangushskyi, Chetvertynskyi, Czartoryskyi, and others) took part in the international grain trade, but also burghers. Gdańsk merchants controlled 80% of the grain trade, selling it to the countries of Western Europe – mainly to the Dutch, who partly consumed the grain and partly resold it profitably.

When buying grain, the Dutch used term agreements – they collected money in advance in Antwerp, where they then resold the grain, and paid Gdańsk merchants in advance for the grain that had not yet been harvested. And they paid in advance to large landowners on whose estates grain was grown. At the end of the 16th century, when the volume of grain exports reached its maximum, agents of Gdańsk merchants could be seen in city and village markets, where they negotiated the purchase of grain [13, p. 103].

In fact, it was the economic expansion of the Dutch into peripheral commodity economic systems (such as the Commonwealth of Nations with Ukraine included in it), and it further consolidated the commodity status of Eastern European countries. They could not oppose the Dutch methods of conducting commercial operations. They didn't want to. According to Braudel, «on its outskirts... Europe found sparsely populated and underdeveloped countries capable of supplying it with grain, which Europe lacked» [1, p. 141].

Thus, Eastern Europe, especially Ukrainian lands, became a peripheral raw material appendage of Western Europe for the supply of agricultural products. The agricultural sector here provided at least 70% of GDP, proto-industry – no more than 20%, the service sector – about 10%. In the Netherlands, around the same time, the agricultural sector accounted for 40% of GDP, industry – 33%, and services – 27%. In England – 56%, 22% and 22%, respectively [8, p. 122]. Although grain was exported through the Baltic in the 15th century (or maybe even earlier), then this export was not of significant importance for the agrarian economy. After the capture of Constantinople by the Turks in 1453 and the fall of Byzantium, the Ottoman Empire began to control the Black Sea coast, eastern goods from the Black Sea Italian colonies stopped entering Europe through Poland, where important trade routes passed through Kraków, Lviv, Kołomyja, Rohatyn, Khotyn and further into Moldova. When this route of transit trade ceased to exist, the cities along it began to decline (this has always been the case in history – remember the Great Silk Road). Then a new trade route through Gdańsk appeared, from where eastern goods were now imported, arriving at this port by sea. And from the middle of the 16th century, the rapid growth of grain trade began – through Gdańsk at the end of this century, more than 100,000 bushels (200,000 tons) of grain were exported annually. The journey with grain along the Vistula to Gdańsk became an important ritual for many provincial nobles – it gave them the opportunity to see a wider world than their cozy but closed estates. The port in Gdańsk, through which grain was exported, was then not only a trade but also a cultural window to Western Europe. In this city with its huge warehouses and naval ships, provincial nobles came into contact with Western European civilization. After all, it was here, after selling grain, that they bought fashionable luxury items for themselves and their families.

Grain in Gdańsk could be sold for almost twice as much as it cost in the province; and in Amsterdam, where it was transported by ship, its price was twice as expensive as in Gdańsk [4, p. 254]. So everyone's profits were considerable. However, in Polish lands, not so much grain was exported – about 5%, and the rest was consumed on the domestic market. In Right-Bank Ukraine, this percentage could be higher, because this region was less populated at the time and, as is known, there were especially large filvarkas – agrarian farms of nobles. At first glance, 5% is very little. But even in 1850, England exported only 25% of the grain it needed, the rest was grown domestically. At that time, none of the states had such a large surplus of grain that other countries could fully count on its import [5, p. 236].

What was the significance of the grain boom? The beginning of the mass export of grain through Gdańsk led to a real economic revolution in the agrarian economy of noble estates. If earlier grain was grown for one's own needs, at most – for the needs of the domestic market, now the whole of Europe became a market for the manor's estate, and subsistence farming at the end of the 16th century turned into commodity farming. Thus, the «Great Grain Boom.»
brought economic thinking to our lands, creating, in fact, a «new economy» with elements of capitalism. It was born when the production of goods (in our case – grain) for sale began and permanent markets for these goods appeared.

Market relations during the grain boom permeated the lives of people from almost all layers of society. Even the serfs, who did not receive money for their work, grew grain for export and, due to this, were also involved in the economy of agrarian capitalism. Not to mention landowners – grain producers, or merchants who concluded commercial contracts for the supply of this product. And further, hired labor was widely used at all stages of grain export. It was necessary to build river vessels (so-called lumps) to transport grain, load it, then deliver this product by river to Gdańsk. This was done by various people who received money for their work. Property rights, as well as the execution of contracts, were sufficiently protected – everyone clearly understood where whose grain or other goods were. And if there were property disputes, the court system was able to resolve them. The simplest financial instruments were often used in grain export – analogues of promissory notes (mamrans or accounts) [7, p. 285–317].

And soon issues began in grain export - after its record volume in 1618 (115.5 thousand lash, 230 thousand tons), in the middle of the 17th century, grain export decreased to 30 thousand lash (60 thousand tons) [2, p. 159]. The reduction of grain supply was associated with the four Polish-Swedish wars of 1600–1629, especially the war of 1626–1629 for control of the mouth of the Vistula, which directly affected Gdańsk. The Swedish king Gustav Adolf blocked the mouth of the Vistula – he well understood that the export of grain would stop, and for the land magnates who supplied the grain, it would be a very painful event. In general, the wars greatly affected the safety of shipping in the Baltic Sea and led to a noticeable reduction in grain trade through Gdańsk [11]. At the same time, the demand for grain remained, and Dutch merchants were ready to pay a good price for it, but noble farms could not ensure the supply of the required amount. After all, because of the war, getting to Gdańsk, and even more so with grain, became more and more difficult, and grain owners did not want to risk not only their goods, but also their lives. Therefore, in the mid-1640s, Dutch ships increasingly left Gdańsk empty [9, p. 245–52; 10, p. 123–137].

At the beginning of the 17th century, Western Europe became dependent on the Baltic grain trade, which arrived from Ukrainian lands. But when the supply of grain was disrupted, the understanding came that grain could be bought elsewhere. The Dutch found new suppliers, and grain traders of the Polish-Lithuanian Commonwealth lost their positions in this market, after which they could not fully restore them. State protectionism was not developed in the Polish-Lithuanian Commonwealth, and the owners of agricultural farms had to survive as best they could.

In addition to the wars, there were other deep macroeconomic reasons for the decline in grain exports. The first half of the 17th century was generally marked by a change in the trend in European markets, caused by a reduction in the flow of precious metals from Latin America, which had long stimulated the European economy. Added to this were wars in various countries (in particular, the Thirty Years’ War of 1618–1648), which caused famine and epidemics. Under such conditions, as early as 1615–1620, prices for grain exported from the Polish-Lithuanian Commonwealth, in particular from Right-Bank Ukraine, began to fall. For exporters, the conditions became more and more unfavorable, the profits of the land tycoons of Right Bank Ukraine decreased, and they began to enlarge their holdings, buying up (and more often simply taking away) land from small nobles in order to reduce the number of competitors. And after the beginning of Bohdan Khmelnytskyi’s uprising, the state of affairs among grain exporters from Right Bank Ukraine worsened even more. Many tycoons had to leave their estates, which were in the war zone, and in the general chaos of those years, everyone was unable to export grain from Ukraine.

During the decline of grain exports, the Ukrainian economy, where capitalist relations were born, first encountered the problem of relations between the periphery and the center. The economic decline in Western Europe spread to the agrarian periphery – the Polish-Lithuanian Commonwealth. And on the periphery, all such recessions or crises are felt much more strongly for a simple reason – financial flows always and everywhere arise in the center, so the periphery is unable to influence their fluctuations.

The problem is not even that in the 16th century the economy was raw and peripheral, but that it remained so in the following centuries – until today. However, for the 16th or 17th century, such a raw material economy was quite an achievement. After all, where there is mass export, there are always cash flows. And where there are cash flows, there are favorable conditions for the development of entrepreneurship.

However, since the grain boom, Ukraine has been trapped in a commodity-based agrarian economy. The forced labor of serfs was cheap, and the land was fertile, which allowed landowners to make good money from the grain trade, without trying to make agriculture more efficient on their estates. All this inhibited economic growth, preventing the development of production. And the strengthening of serfdom was not the cause of the lag, but the consequence. In all of Eastern Europe (especially on Ukrainian lands), GDP per capita was lower than in Western Europe as early as the beginning of the 15th century. Despite growth during the grain boom of the 16th century, this gap persisted, widening even further during the economic downturn of the 17th century. In the 18th century, the state of affairs improved a little, but GDP per capita lagged behind. In 1400, GDP per capita (in nominal 1990 dollars) in Poland (then in the Polish-Lithuanian Commonwealth) was 562
dollars (in England 1053, in the Netherlands 920), in 1500–702 (1041 and 1119, respectively), in 1600–810 (1037 and 2049), in 1700–569 (1513 and 1520), in 1820–946 (3190 and 1755) [12, p. 375, 401].

Due to the weakness of the markets, it was difficult to ensure the efficiency of the raw agrarian economy. And the peasants, due to their conservatism, were not inclined to market relations and risks. Therefore, the only way available to the land magnates to maintain profitability was to increase the pressure on the serfs. But this could not be enough for a long time – human resources had their safety margin, and rebellions began.

Trade and industry in cities in most of Europe were not a consequence, but a cause of the rise and development of agriculture. The appearance of buyers with fairly high incomes in Western European cities stimulated peasants to grow and sell their products to them with a higher added value than simple grain. And in our country, the grain boom slowed down the development of cities – it was a trap of the commodity economy. And although the land magnates made efforts to stimulate the development of handicrafts in their possessions, the quick and easy profit from the sale of grain created a temptation to focus on the export of agricultural products. Filling the markets with imported goods without imposing high import duties further inhibited the development of industry in the cities. We could only look with envy at the Western European merchants who came to our region. The emergence of a grain-export-oriented economy led to the strengthening of serfdom and the inhibition of economic growth, while it had long weakened in Western Europe. This was a real curse of the commodity economy, for which we had to pay dearly – restriction of personal freedom and entrepreneurial initiative, lack of savings due to peasant poverty, weak domestic market, slow growth of cities, underdevelopment of the middle class. In general, the inability to fully modernize society. They were the deep socio-economic consequences of the serf mentality characteristic of Eastern European economies. This mentality is firmly rooted in the collective memory of generations, complicating all attempts at modernization - both in the 1860s and at the beginning of the 20th century.

In addition, there was another problem specific to Ukrainian lands. At the end of the 16th century, agrarian capitalism based on the export of grain and livestock was formed in Right Bank Ukraine (as well as in the Polish-Lithuanian Commonwealth as a whole). However, the ways for its transformation into industrial capitalism turned out to be blocked for a long time by the presence of a large amount of free land, especially on the left bank of the Dnieper. In other countries of Western Europe, the poorest peasants abandoned agriculture and then went to cities to find work. There they became artisans, laying the foundation for the growth of production and the birth of industrial capitalism. At the same time, the cities themselves developed, providing new opportunities for migrant workers from rural areas to find work.

And in Ukraine, an impoverished peasant left his native village for free land and continued farming there. Or became a Cossack. The authorities were interested in the development of empty lands, and even provided benefits to such peasants. There was no motivation to move to the city and engage in crafts, so cities in Ukraine in the 17th century remained poorly developed [6]. The situation began to change only from the beginning of the 19th century, when after the conquest of Crimea, the threat of Tatar attacks disappeared, the steppes were plowed, and there were practically no free lands left. Thus, the birth of industrial capitalism in Ukraine was delayed for a long time.

Conclusions and prospects for further research. The model of agrarian economy was formed in Ukraine in the 16th century, at the time of the mass export of grain to Western Europe through the ports of the Baltic Sea. Grain exports generated significant profits, but they were spent mainly on consumption. This inhibited not only the economic development of cities and the creation of the first simple industrial enterprises in them, but also economic growth in general, creating a trap of the agrarian economy, from which it is difficult to get out even in the 21st century. A promising direction of the author’s further research is the study of the impact on the birth of the industrial economy of the mass export of agricultural products through the Black Sea and Azov ports in the 19th century.

References:
Україна в XVI–XVII століттях; Гданськ. Це призвело до збільшення обсягу грошей в обігу, а внаслідок цього зросли їх ціни. Так вона гальмує розвиток виробництва в українських містах гальмується, як і будь-які інші форми капіталізації. А це створює загрози економічній безпеці, як і будь-які інші форми капіталізації. А це створює загрози економічній безпеці. Надійдучи в землі Острозької землі, Речі Посполитої) ще в XVI столітті. Масове виробництво зерна в агрогосподарствах поміщиків утримувало селян від споживання і на розбудову своїх маєтків. Вдосконалювати агровиробництво у них не було потреби.

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