

The Effectiveness of Land Reform Implementation in the Context of the Impact of Armed Hostilities: Regulatory Aspect

Oleksandr Nechyporenko^{1*}, Olena Bilyk², Mariia Hrab³ and Iryna Tsvigun⁴

¹National Research Center “Institute of Agrarian Economics”, Kyiv, Ukraine

²Department of Administrative and Financial Management, Institute of Administration and Postgraduate Education, Lviv Polytechnic National University, Lviv, Ukraine

³Department of Law, Institute of Lviv Interregional Academy of Personnel Management (IAPM), Lviv, Ukraine

⁴Department of Civil Law and Procedure, Faculty of Law, Main Department of the State Geocadastr in Ternopil region / Western Ukrainian National University, Ternopil, Ukraine

*Corresponding author: o.nechyporenko57@gmail.com (ORCID ID: 0000-0002-1080-5633)

Received: 20-05-2022

Revised: 11-09-2022

Accepted: 03-10-2022

ABSTRACT

The relevance of the topic of the academic paper lies in the possibility of improving the mechanism of implementing land reform in the conditions of armed hostilities in Ukraine. The state of the land market has changed significantly, which makes it necessary to conduct a study of the quality of its functioning. The discussion around the effectiveness of the land reform is controversial, and the expediency of its impact on the economic situation of the country during the war determines the importance of its analysis. The purpose of the academic paper is to study the effectiveness of the land market in the conditions of armed hostilities, economic instability, destructive factors of its development, and as a consequence the expediency of adopting land reform. The object of the research is to determine the positive processes of the development of the land market and outline the negative aspects of the land reform, which directly affects its economic and legal activity. The research methodology implies the use of the analytical material on the state of the land market, the application of statistical methods in order to assess the indicators of the state of the land market and the possibility of its further development in the conditions of a constant military threat. By the way, the methods of a theoretical nature have been used in the academic paper, namely: the synthesis method determines the basics of the problems concerning functioning of the land market; an analysis of the implementation of the land reform is carried out with the help of the generalization method. Vulnerable spots in the processes of implementing land reform were identified by the method of explanation, taking into account the military threat and the unstable economic situation. The obtained research results are important for the improvement and further development of the land reform in the country and the implementation of relevant recommendations for the strategic development of the land market. The academic paper highlights the ideas and tools for improving the functioning of the land market in the conditions of armed hostilities, as well as proposes the ways of improving the legal mechanism for the implementation of the land reform. The practical significance lies in the stabilization of the land market due to the military influence of the aggressor country.

HIGHLIGHTS

- The relevance of the topic of the academic paper lies in the possibility of improving the mechanism of implementing land reform in the conditions of armed hostilities in Ukraine.
- The academic paper highlights the ideas and tools for improving the functioning of the land market in the conditions of armed hostilities, as well as proposes the ways of improving the legal mechanism for the implementation of the land reform.

Keywords: Land market, land reform, armed hostilities, taxation, legal status, territorial communities, agricultural enterprises

How to cite this article: Nechyporenko, O., Bilyk, O., Hrab, M. and Tsvigun, I. (2022). The Effectiveness of Land Reform Implementation in the Context of the Impact of Armed Hostilities: Regulatory Aspect. *Econ. Aff.*, 67(04s): 959-968.

Source of Support: None; **Conflict of Interest:** None



Currently, the issue of the functioning of the land market is important for the fundamentals of the country's economic development in conditions of global economic instability and a shortage of agricultural products. The problem of the land reform lies in the possibility of commercial actions by the owners of land plots, territories, districts and the weakening of state influence on restraining the functioning of the land market. The possibility of purchasing / selling land stimulates the land market to develop; however, it exposes it to danger due to speculative activities, strategic risks and the possibility of losing positions in agricultural production. The land reform was implemented in conditions of a deficit of the state budget and had a planned nature of increasing the role of the influence of legal entities, increasing the level of GDP and providing farmers with legal and economic tools for the implementation of agricultural development. However, the consequences of the implementation became negative due to the reasons of purchasing of a significant share of land on the market and subsequent sale for use by foreign investors and agricultural holdings. The issues of a regulatory and legal nature also raise a number of doubts, forasmuch as certain aspects have been simplified, namely, the possibility of selling land plots and the necessary package of documents.

On the other hand, the process of the need to combine the land plots for personal use makes it difficult to certify packages of documents at a notary. During the hostilities, the process of functioning of the land market has caused a number of speculative and panicky moods, which are expressed in the mass sale and purchase of land. Moreover, the military actions in Ukraine have caused an uncontrolled increase in prices and a significant diversification of the land plots' and agricultural lands' prices. The problem of the effective functioning of the land market is the moratorium on legal entities participating in trade transactions, which delays the development of individual farms and causes a negative impact on farming activities. Natural entities mainly use the lease agreement as a tool to protect against possible risks, which also negatively affects the redistribution of the land market. The state support for the land reform contributes to the improvement of agricultural activities and provides a number of economic and tax privileges since the

beginning of the wartime posture, which has a positive effect on the activity of the land market. However, due to the risk of falling incomes and the rapid process of inflation, there is a tendency of reluctance to participate in trade transactions or to speculate on the price range of sales and leases. Individual farming enterprises join forces when conducting trade operations on the basis of an agreement on collective farms and interfere with the commercial activities of legal entities, which cause an imbalance in the price policy on the market. Therefore, the objective of the research is to propose ways of increasing the effectiveness of implementing the land reform, taking into account the imperfect functioning of the land market and real military threats.

Literature Review

The issue of the land reform and the features of its development on the land market is widely discussed in the scientific circle, forasmuch as the factors of implementation and the possibility of stable functioning in the conditions of armed hostilities cause significant doubts. The authors (V. Astrov, A. Landesmann, 2022) note that the land market is a key tool for the activity of the commodity economy, because it creates and conditions activity in the right sector thanks to operations of purchase / sale, pledge, acquisition of ownership rights or their transfer. Emphasis is placed on the possibility of conducting transactions on the land market with the aim of obtaining commercial profit or farming. In addition, (E. Dankevych, 2017) characterizes in detail the importance of the land market for the economy, which is a significant part of its structure. An important standpoint of the land market is the one, which defines the land market as a platform for conducting commodity and legal transactions stimulating economic activity and, as a result, creating conditions for the development of the corporate sector. (Morten Hartvigsen, 2020) considers the land market as a mechanism for implementing business goals for agricultural purposes using legal and financial instruments. It should also be mentioned that scientists did not come to a single conclusion regarding the effectiveness of Ukraine's land reform, which is quite normal in the conditions of complete uncertainty of the future economy and territorial integrity of the country.

(The Kyiv School of Economics, 2022) believes that the land reform has a number of advantages, because the opportunity of purchasing land and its disposal by legal entities makes it possible to improve the quality of agricultural land. (M. Shulga, 2020) in his scientific work considers the land reform as a means of attracting investments to the country's economy, forasmuch as the problem of foreign countries is the lack of land for the formation of agricultural production for their own needs. The author (R. Bachmann, 2022) also has a positive viewpoint towards the land market; the scholar draws attention to the possibility of a simplified bureaucratic procedure for acquiring property rights and carrying out transactions with the land plots and lands. (Kharchenko, Terevetskyi, 2020) adhere to negative standpoints on the effectiveness of the land reform and the possibility of its implementation in the country's economy; they believe that the sale of land can cause a collapse for a country exporting agricultural products. The scientists also note that the lion's share of Ukraine's income is based on the export of agricultural products. Moreover, Ukraine is a strategic supplier for European and Eastern countries, which provides a number of political and economic advantages in conducting diplomatic relations. Under war conditions, the role of the land reform in terms of its implementation mechanism can be critical, due to mass speculative sales; however, the majority of farms, despite the risks of the country's existence, adhere to a passive strategy of activity in the market, not carrying out any operations on the market. When carrying out transactions on the land market, (Samsonova, 2020) investigates the key legal measures related to the acquisition of rights, the possibility of conducting commercial activities, the transfer of the land for lease, the use of credit facilities and the creation of collective farms or the transfer of legal ownership to trustees. The land reform has had a significant impact on the part of European creditors, who emphasized the need for such reform in order to receive tranches from the International Monetary Fund (IMF) for supporting macroeconomic stability and security. (Kharchenko, 2020) notes that obtaining loans is not a reason to sell Ukrainian land, which can cause a total decline in the export of agricultural products by national producers and worsen Ukraine's position

on the world market. Attention is also focused on the necessity to revise the terms of lending in order to avoid conducting the land reform or the implementation of certain amendments in favour of long-term leases and refusal to sell. Thus, scientists argue with each other about the effectiveness of the land reform. In the conditions of armed hostilities and a military threat to Ukraine, the land market has undergone a partial collapse, but it has tendencies towards gradual recovery.

Scientists investigated issues of sustainable development, development of the agricultural sector on land, production and sale of organic products, and territorial development is Samsonova YA. O. Shvets, V.Y., Rozdobudko, E.V., & Solomina, G. V. (2013). Ostapenko, R., Herasymenko, Y., Nitsenko, V., Koliadenko, S., Balezentsis, T., & Streimikiene, D. (2020). Hubanova, T., Shchokin, R., Hubanov, O., Antonov, V., Slobodianiuk, P., & Podolyaka, S. (2021).

Research Goals

The purpose of the research is to analyse the prospects for the implementation of the land reform in the conditions of armed hostilities and political and economic instability. The research goals imply the formation of effective tools for refinement of the land reform in the conditions of armed hostilities and improving transactions on the land market. The characteristic features of changes in the land market in the conditions of armed hostilities have been considered, which creates the need to reveal the effectiveness of the land reform in the qualitative approaches towards commodity and market economy. The main goal of the research in the present academic paper lies in proposing effective measures in order to enhance the land market and contribute to the possible improvement of the land reform in the context of a constant military threat. Moreover, it's quite important to outline the main proposals for ensuring the export potential of agricultural products of Ukraine and the search for innovative solutions in order to solve the problems that exist in the modern land market, both from the legal side and from the financial, economic and commercial side. The results of the analysis can be used for practical aspects of the activity of state bodies regulating the land market and providing practical recommendations for individuals and

legal entities regarding the functioning of the land reform.

MATERIALS AND METHODS

In the course of the research, scientific research methods were used, with the help of which approaches to solving the problem of the effectiveness of land reform in the conditions of armed hostilities were outlined. The issue of applying current practices and concepts of economic behaviour in conditions of uncertainty and instability was substantiated. The statistical method was used in order to investigate the main indicators of the land market in terms of the number of concluded agreements. The synthesis method was applied in order to analyse the main indicators of the sale of the land plots and their distribution by territorial features. The importance of using the abstraction method lies in the possibility of forecasting the further development of the land market in conditions of economic crisis and complex economic processes, which is taking place on the basis of military operations in the country and an imperfect regulatory and legal framework. The method of exploratory analysis was used to study the theoretical and methodological fundamentals of the land market and its importance in the country's economy. Characteristic features of the development of Ukraine as a key exporter of agricultural products and the possibility of using diplomatic means to resolve food security problems have been identified. The deduction method was applied in order to consider the problem of attracting foreign investment in the conditions of armed hostilities and searching for the necessary credit resources. Ukraine's land market should be restored through significant government bonds at the first stages of its formation.

However, in the strategic vision of long-term prospects, the attraction of credit funds and the payment of reparations from the aggressor country will be able to stabilize the macroeconomic situation of the country; however, the mechanism of regulatory and legal regulation and the implementation of relevant agreements must be developed right now. By the way, with the help of the induction method, the main tasks of the development and approach towards reforming land transactions with plots and taxation have been outlined. Currently, a system

of minimum payment is proposed; however, the conducted research shows the need to increase tax payment terms and provide preferential conditions for individuals, as well as to promote the participation of legal entities in the market. Effective management of corporate activities will be able to qualitatively improve the conditions for the development of the land market and stabilize the country's economy in conditions of armed hostilities. Thus, the determined research methods will be able to reveal the effectiveness of the land reform in the most detail and indicate directions for the implementation of the following ones.

RESULTS

The problems of the land market have existed since the independence of Ukraine, forasmuch as the agricultural economy exceeds 10% of the country's total GDP, which is the largest indicator among all other sectors. This is precisely why the study of the land reform quality and the search for optimal means of resource potential distribution and optimization of trade transactions is a priority task of the state (Dankevych, 2017). In order to ensure the high-quality functioning of the land market, regulatory and legal aspects of the analysis are used, based on the formation of the legal basis for the lease, sale and purchase of the land plots. Over 5 global reforms have been implemented in Ukraine over the 30 years of its existence, which are characterized by the following main stages of its development, namely:

- ◆ During 1990-2001, systems of private ownership of land, basic market operations and quality approaches were introduced in relation to the circulation of land among farming enterprises and legal participants in the market;
- ◆ During 2000-2011, structural amendments were made to the normative and legal regulation of the acquisition of property rights, leasing and activities on the land market. The main key position of state reforms was the introduction of privatization tools on the land market, which led to the possibility of creating a commercial land market. Despite the widespread popularization of privatization, the reform contained a number of shortcomings of a tax nature and the absence of a system for the distribution of land rights and a bureaucratic process.

- ♦ The period of 2011-2014 was characterized by attempts to create a truly effective land market and the possibility of conducting financial transactions on it. However, the Verkhovna Rada of Ukraine did not adopt the draft law, which extended the moratorium on land.
- ♦ From 2014 to 2021, a number of positive changes were introduced in the land market, in particular, notaries were involved, and the legal framework for lease and monitoring of land relations was improved. By the way, a decentralization system for the transfer of land into communal ownership of individual territorial communities was also built.
- ♦ On July 1, 2021, the global land reform was implemented, which caused a discussion among scientists and participants of the land market. As a result, the moratorium on the purchase / sale of land was lifted, which actually started the functioning of the land market, but created a number of negative factors of a strategic and legal nature. The average price per hectare was about 40 000 UAH.

In 2022, since the beginning of the Ukrainian - Russian war, significant transformations have taken place in the land market and the consequences of the land reform have been manifested both from the positive and negative side. The effectiveness of the implementation of the reform lies in the ability to carry out economic activities in a crisis period, to increase the role of the corporate sector in the market, as well as to carry out commercial transactions on land (Shulga, 2020). The main disadvantages are the lack of systematicity and the impossibility of directly influencing the processes of the land market without proper legal legislation.

This is the war that has turned the stable state of the land market into a completely chaotic one. The first two months testify to speculation in the market and massive uncertainty in the land market. Only with the help of European lending and the provision of benefits for farming enterprises did the land market begin to return to normal condition.

In Ukraine, during the first quarter, the country's economy shrank by 30% and the rate of capital outflow from the total increased by 46,5%, which became critical for ensuring the functioning of the economy. The majority of participants in the land

market did not carry out financial transactions due to the lack of a clear system for assessing the value of land, difficult bureaucratic processes of registration and verification (Teremec'kij, 2020).

In general, the consequences of the land reform of 2021 caused a total crisis during the escalation of hostilities; however, with the gradual stabilization of the situation and control of the frontline regions, the land market began to return to normal condition without the additional intervention of state regulatory bodies. Let's consider the main dynamics of the land market, reflected in Table 1.

Table 1: Indicators of the state of the land market during armed hostilities in 2022

Region	Number of land plots sold	The total area of the plots, ha	Price for 1 ha
Chernihiv	10	20,15	14 879
Cherkasy	22	39,20	51 871
Chernivtsi	5	6,4	33 972
Zhytomyr	19	43,20	20 560
Dnipropetrovsk	28	41,40	31 454
Ivano-Frankivsk	8	6,8	40 913
Khmelnyskyi	65	138,10	27 810
Kharkiv	2	2,41	30 850
Kyiv	21	31,40	32 613
Kirovohrad	16	24,90	27 650
Lviv	21	22,78	21 435
Mykolaiv	5	4,51	32 978
Odesa	12	12,30	33 531
Poltava	21	25,60	54 219
Rivne	4	3,20	32 985
Sumy	4	7,60	27 865
Ternopil	32	28,70	118 754
Vinnytsia	56	124,50	76 587
Zaporizhzhia	2	6,70	41 451
Zakarpattia	8	11,80	33 430

*Source: compiled from the materials of the publishing house "Agropolit".

The indicators of the land market testify to the fact that the frontline regions have the lowest share of transactions conducted. In addition, we can observe changes in tendencies in the land market in favour of Vinnytsia and Khmelnytskyi regions, where the largest number of agreements on the sale and purchase of land plots were concluded. The importance of implementing the concluded agreements indicates the gradual stabilization of the land market, but this is not enough for the full functioning of the land market.

In Table 1, the main negative factors of the implementation of the land reform in 2021 can be observed, significantly differentiating the price of land plots. Even excluding the factor of military threat, there is a rapid price deformation of the market, which characterizes it negatively prior to spontaneous evaluation. As of July 1, 2021, the average price on the land market reached 40 000 UAH per hectare; however, during armed hostilities, this indicator is completely absent. There are structural shifts in the land market every month, which requires qualitative regulation (Samsonova, 2020).

The conducted research is characterized by an uneven load on territorial regional centres. This indicates the migration of the economically active population to the western regions and the impossibility of conducting a qualitative analysis of the real activity of the land market in the front-line territories, in particular in the Zaporizhzhia, Rivne, and Kharkiv regions.

Military actions on the territory of Ukraine cause a number of negative consequences for the land market, such as: the reduction in the harvest, the decline in economic activity, the impossibility of observing legal legislation, as well as damage to the agricultural infrastructure (Bachmann, 2020).

The indicators show that Khmelnytskyi, Ternopil and Vinnytsia regions were the most optimal for conducting operations on the land market; these regions were able to optimize their activities most quickly in accordance with the realities of the military threat.

The main manifestation of the effectiveness of land reform in relatively safe areas is the ability of the land market to self-regulate and conduct land purchase / sale and lease transactions, which can qualitatively improve the pace of stabilization of the land market.

The completely chaotic market direction and uncontrolled speculative transactions became a negative factor of the hostilities of the land reform. Problems of registration in the state cadastre and the ability to track owners were able to create a partial monopolization in certain areas, which requires a separate solution toolkit, through the adoption of amendments to the existing legislation (Harchenko, 2020).

The direction of the land market during hostilities cannot be determined, forasmuch as the impact of the land reform created a spontaneous segmentation according to factors of safety and relative reliability. The economically active population is guided, first of all, by security factors and the possibility of conducting real transactions.

The main tendency in the land market in 2022 is the critical sale of land plots and the predominance of lease agreements and the operation of farms, which delays the development of the market. Along with this, the emphasis is placed on the financing of large agricultural holdings. The negative consequences of the land reform impel to the practical improvement of financial instruments for crediting and taxation of small and medium-sized enterprises for the implementation of the country's macroeconomic policy. In addition, the constant threat of hostilities and the possibility of damage to agricultural infrastructure forces investors to leave the land market, causing capital outflows. The state's business promotion policy and preferential lending conditions are unable to fully solve the problem of capital outflow from the country's land market. Therefore, it is necessary to adhere to a single strategy of development and the introduction of more favourable conditions for regions that are not under an increased military threat.

Auctions for the sale of land make it possible to control offences in the field of land relations, against the need for a unified state register of administrative violations and the availability of a methodology for resolving economic disputes. In 2021, the project on creating the monitoring of participants and control of the acquisition of rights to land plots was in the stage of improvement; however, it caused negative consequences due to hostilities in 2022. Thus, the need arises to resolve the issue of the legal nature of the participants and their access to conducting trading transactions on the land market 18. The influence of foreign countries on stabilizing the efficiency of the land market and improving the land reform depends on the creditors. The state should get rid of direct dependence on the IMF's requirements to create a free land market and solve the problem of the state debt by restructuring it, due to hostilities and the impossibility of fulfilling credit obligations. In addition, the land reform provides

Table 2: Problems of the effectiveness of the land reform implementation

Economic	Legal	Strategic
The illegal amount of state duty for payment is 1%, which is usually established by private notaries	A complex process of arranging documents for the acquisition of property rights by natural persons	Sale of the resource part of land plots for the needs of foreign investors and wide entry of legal entities after lifting the moratorium
The lack of registration of most transactions, which causes the development of corruption and the lack of control and the ability to analyse the market	Lack of legal regulation of the price setting limit	Introduction of auctions is a practice to prevent corruption, but bureaucratic procedure and digital infrastructure are imperfect
The absence of effective lending programs and use of investment funds	Carrying out the settlement in non-cash form, which creates the need to open an account and confirm one's income by a banking institution	The absence of a clear taxation system and the availability of benefits, which restrains the strategic development of agrarian business and transactions on the land market
There is not any single toolkit for the introduction of land plot assessment and the implementation of value assessment system	The verification in the state cadastre and the State Register of Land Rights is imperfect and contains significant violations	Absence of a mechanism to restrain speculation and the possibility of resolving administrative disputes.

* Source: compiled by the author.

for the improvement of the land market by creating a competitive sector in the long term; however, this is impossible without the investment support of European countries, as the main creditor of Ukraine. The problem of the land reform can be considered from three key positions, namely economic, legal and strategic. Let's represent the results of the issues of land reform implementation in Table 2.

The problems of the effectiveness of the land reform implementation mechanism are of economic, legal and strategic importance. The issue whether the advantages contain more benefits than the disadvantages cause harm is a rhetorical question; however, in the conditions of military aggression, it is necessary to use all available financial and diplomatic resources for the possibility of restoring the land market. It is on the basis of using the quality regulation tools and the attraction of credit funds that it is possible to improve the quality of the land reform and stabilize financial and legal activity on the land market (Teremec'kij, 2020).

In accordance with the above problems of the effectiveness of the land reform, it is worth determining the main ways of its improvement, taking into account the armed hostilities in Ukraine. The formation of a strategy for the development of the land market is impossible due to the difficulty of predicting future political and social factors.

Therefore, it is suggested to use ways of short-term optimization of the market in order to ensure the economic needs of the country and build an effective model of the functioning of the land market. Let's consider the key recommendations in Table 3.

The measures are aimed at solving the key problems of regulating economic and legal relations in the land market. Necessary conditions are being created to support its functioning. The measures listed in Table 3 will be able to improve the rate of stabilization of the land market and ensure its real functioning during armed hostilities. For the frontline regions, it is also proposed to introduce preferential lending conditions and provide a simplified procedure for obtaining documents and carrying out commercial activities on the market.

The strategic priority of Ukraine is the establishment of the land market capable of self-regulation, without proper state intervention, which will act according to the actual legislation and will be able to increase the pace of its stabilization (Shulga, 2020).

Thus, the proposals of the presented research can eliminate the key shortcomings of the land reform and stabilize the domestic land market in the conditions of armed hostilities. It is worth emphasizing the importance of attracting financial and legal support from European countries. Ukraine is a key transit country and the main food supplier,

Table 3: Ways of increasing the effectiveness of the land reform in the conditions of armed hostilities

Economic	Legal	Strategic
Provision of preferential credit holidays and creation of effective credit programs	Implementation of a simple system for registration of the land parcels	Attracting credit resources of international donor organizations
Implementation of a clear mechanism of price policy, direct regulation of prices for the land plots	Involvement of state-owned notarial enterprises for the certification of agreements and the implementation of an effective consulting system	Stimulation of market diversification – by changing the range of prices in the frontline territories and providing financial, logistical and legal tools to facilitate the conduct of business
Implementation of the system of evaluation, indicators and creation of the boundary of evaluation of the land plots. Application of the unified state customs policy.	Introduction of a unified bureaucratic simplified mechanism for the acquisition and transfer of property / lease rights for citizens of Ukraine	Implementation of a unified policy regarding the future development of the land market and directing it towards stabilization.
Implementation of an effective system of participation in land tenders and the functioning of the market on preferential terms during hostilities	Regulation of price policy should be fixed to the provisions of regulatory financial bodies and institutions	Prohibition on the export, sale, transplanting of the fertile soil layer and the introduction of administrative and criminal penalties for the detection of corruption during wartime posture

**Source: Compiled by the author.*

which strengthens the potential of support in the global space.

DISCUSSION

The results of the research indicate the need to make amendments to the land reform by restructuring the principles to its economic, legal and strategic nature. The necessity is caused by significant speculative tendencies and a deep internal economic crisis. The Ukrainian practice of reforming the land market testifies to its constant fluctuations and the importance of approaches to the development of a single effective model of its functioning and implementation. The direction of taxation, registration and involvement of state notaries remains of particular importance. In addition, it is necessary to clearly structure the role of legal entities and individuals and declare the postulates of their activities as participants in land relations. In order to improve the effectiveness of the land reform implementation in the conditions of armed hostilities, a number of effective measures of gradual recovery and encouragement of participants to economic activity have been proposed.

The authors note that the role of the implementation of the land reform has had the greatest impact on its functioning since independence, which creates a number of uncontrolled processes, and to chaotic regulation during the period of armed hostilities.

Emphasis is placed on the need to model scenarios of land market development: possibilities of forecasting changes in tax rates, the admission of foreign investors and the possibility of returning the moratorium for the period of war duration.

Other researchers are debating concerning the expediency of continuing the effects of the land reform in wartime posture. The land reform was not perfect, but it was able to initiate the first shifts in the real functioning of the land market. The absence of a mechanism for evaluating the land plots, significant gaps in the legislation have caused negative social-political and economic consequences. Moreover, in the conditions of wartime, the authors raise the feasibility of the functioning of the land market under such a reform in general. Subsequent studies should be conducted regarding the possibility of returning to the moratorium and assessing the state of the controlled land market.

Foreign scientists point out that the possibility of stabilizing Ukraine during armed hostilities is impossible only through internal regulation and the implementation of internal policy. Ukraine needs significant credit regulation that can restrain inflationary processes, social-economic destabilization and ensure the restoration of macroeconomic security. Issues of possible restoration of the affected regions through the payment of reparations by the aggressor country

(some of which will be involved in the land market) are being discussed. Thanks to reparations, the country will be able to fully restore its economic and product potential and ensure planned economic growth.

Ukrainian scientists discuss the effectiveness of land reform not only from an economic and legal viewpoint, but also from a strategic perspective. The land market is a key strategic object of Ukraine's activities, both in the domestic economic space and in the world. The sector of agricultural products and raw materials occupied the first positions as a reliable exporter and supplier of the corresponding equipment. The land reform should improve the possibility of further economic development of the country's economy in the conditions of armed hostilities and geopolitical challenges.

Prospects for further studies of the effectiveness and implementation of land reform are modelling of scenarios of value ranges, the possibility of fluctuations in the market taking into account economic factors – inflation, price growth, commodity crisis, etc. In addition, any simulation should be carried out with factors of events at the front and the possibility of their impact on economic activity.

Therefore, the conducted research reflects the results of the effectiveness of the implementation of the land reform and determines the need for constant monitoring of the issue in order to improve the mechanisms of its development.

CONCLUSION

Thus, the land reform carried out prior to the war has caused a number of fluctuations in the land market. The approaches to regulatory and legal regulation of the market, the possibility of participating there and the implementation of economic activities have radically changed.

In the conditions of armed hostilities, the land reform at the beginning of the war caused a chaotic development of events, but with the stabilization of events at the front, it was able to ensure a gradual recovery of the market. The price range and its limit is a key issue in solving the problems of the land market. We can observe a diversified approach to estimating the value of the land plot, which is reflected in the average cost per 1 hectare.

State intervention in the economic space of the land market regulation is necessary, as well as the possibility of effective measures to simplify taxation and building a short-term strategy of market activity during martial law.

The war in Ukraine causes a critical necessity to attract credit funds for the restoration of infrastructure and reconstruction of damaged land plots, as well as ensuring the functioning of the agricultural sector, as the main direction of the country's economy.

Further studies should be conducted by modelling land market development scenarios and the possibility of transforming it into models of foreign countries, namely: increasing the circulation of land deals, clear legislation on the distribution of responsibilities and rights of individuals and legal entities, and promoting the development of preferential state programs during wartime posture and threats of military actions.

REFERENCES

- Astrov, V., Grieveson, R., Kochnev, A., Landesmann, M. and Pindyuk, O. 2022. Possible Russian invasion of Ukraine, scenarios for sanctions, and likely economic impact on Russia, Ukraine, and the EU. wiiw Policy Note/Policy Report No. 55. <https://wiiw.ac.at/possible-russian-invasion-of-ukraine-scenariosfor-sanctions-and-likely-economic-impact-on-russia-ukraine-and-the-eu-p-6044.html>
- Bachmann, R. *et al.* 2022. What if? The economic effects for Germany of a stop of energy imports from Russia. EconPol Policy Report No. 36. ifo Institute-Leibniz Institute for Economic Research at the University of Munich.
- Bogdan, T.P. 2019. Global'nyj borg jak indyikator problem svitovoi' ekonomiky ta vyklyky dlja finansovoi' polityky Ukraïny [Global debt as an indicator of the problems of the world economy and challenges for Ukraine's financial policy]. *Finansy Ukraïny – Finance of Ukraine*, 9: 43-63 [in Ukrainian].
- Business Insider Polska, 2022-23. Tylu uchodźców z Ukrainy znalazło pracę w Polsce, Większość to kobiety.
- Dankevych, E. *et al.* 2017. Ukraine agricultural land market formation preconditions. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, DOI: 65:259-271, 2017.
- FAO, 2020a. Smallholders and Family Farms in Europe and Central Asia, Regional Synthesis Report, Budapest, in: <https://doi.org/10.4060/ca9586en>
- Harchenko I. I beneficjarami, i vlasnikami zemli mayut' buti til'ki Ukraïnci / Igor Harchenko; besidu viv Volodimir Galaur // Uryad. kur'er. 2020.23 grud. (№ 250).S. 2.

- Hayek, F.A., Bartley, W.W. 3rd. 1988. *The Fatal Conceit*. University of Chicago Press. Available from: <http://www.dx.doi.org/10.7208/chicago/9780226321158.001.0001>.
- Hohych, D.G. 2020. Infljacija ta i'ij reguljuvannja v Ukraini: politekonomichnyj aspekt [Inflation and its regulation in Ukraine: political and economic aspect]. *Visnyk Kremenchuc'kogo nacional'nogo universytetu imeni Myhajla Ostrograds'kogo – Bulletin of Kremenchug National University named after Mykhailo Ostrogradsky, (Issue 3), (pp. 32-38) [in Ukrainian]*.
- Hubanova, T., Shchokin, R., Hubanov, O., Antonov, V., Slobodianiuk, P. and Podolyaka, S. 2021. Information technologies in improving crime prevention mechanisms in the border regions of southern Ukraine. *J. Information Techno. Manage.*, **13**: 75-90.
- Jevons, W.S. 2013, *Theory of Political Economy*. London: Palgrave Macmillan UK. Available from: <http://www.dx.doi.org/10.1057/9781137374158>
- Korol, E., Gaydysheva, Y. and Passmore, D. 2018. Integration of organizational-technological and social aspects in the realization of the program of renovation of residential business development MATEC Web of Conferences 251. doi: <https://doi.org/10.1051/mateconf/201825106031>.
- Koval, V., Mikhno, I., Udovychenko, I., Gordiichuk, Y. and Kalina, I. 2021. Sustainable natural resource management to ensure strategic environmental development. *TEM J.*, **10**(3):
- Milcheva, S. 2021. Volatility and the cross-section of real estate equity returns during COVID-19. *Journal of Real Estate Finance and Economics*, pp. 1– 28. <https://doi.org/10.1007/s11146-021-09840-6>
- Mishchenko, V.Y., Meschcherjakova, O.K. and Meschcherjakova, M.A. 2019. Enhancement of residential construction of urban agglomerations based on the modern financial mechanisms IOP Conference Series: *Materials Science and Engineering.*, **481**.
- Morten Hartvigsen – Maxim Gorgan: FAO experiences with land market development and land management instruments in Eastern Europe and Central Asia. *Journal of Agricultural and Environmental Law*, **XV**(29): 85-103.
- OECD, 2011. *Investment Policy Reviews: Ukraine 2011*, OECD Investment Policy Reviews, OECD Publishing, Paris, DOI: <http://dx.doi.org/9789264113503-en>
- OECD, 2013b. *OECD Territorial Reviews: Ukraine*, OECD Publishing, Paris, DOI: <http://dx.doi.org/10.1787/9789264204836-en>.
- OECD, 2018. *Divided Cities: Understanding Intraurban Inequalities*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264300385-en>.
- OECD/FAO, 2022. *OECD-FAO Agricultural Outlook 2022-2031*, OECD Publishing, Paris, <https://doi.org/10.1787/f1b0b29c-en>.
- Ostapenko, R., Herasymenko, Y., Nitsenko, V., Koliadenko, S., Balezentis, T. and Streimikiene, D. 2020. Analysis of production and sales of organic products in ukrainian agricultural enterprises. *Sustainability (Switzerland)*, **12**(8).
- Ovsiannikova, T., Nikolaenko, M. and Chilbakova, M. 2018. Expansion of urban recreation areas as a factor for human capital renovation MATEC Web of Conferences 143. doi: <https://doi.org/10.1051/mateconf/201814304011>.
- Ovsiannikova, T., Salagor, I. and Yugova, I. 2018. Evaluation of the impact of market deformations on the competitive environment of the housing investment market MATEC Web of Conferences 212. doi: <https://doi.org/10.1051/mateconf/201821208012>.
- Samsonova, Y.A. and O. Deyaki osoblivosti pravovogo statusu fermers'kih gospodarstv yak sub'ektiv agrarnih pravovidnosin / YA. O. Samsonova, A. O. Kushnirenko // YUrid. nauk. elektron. zhurn. / Zaporiz. nac. un-t.2020. № 7. S. 235-237.
- Sheina, S., Fedorovskaya, A. and Yudina, K. 2018. "Smart City": Comfortable Living Environment IOP Conference Series: *Materials Science and Engineering*, **463**.
- SHul'ga M. 2020. *Pravo spil'noi chastkovoï vlasnosti na zemel'nudilyanku v zemel'no-pravovij doktrini Ukraïni / Mihajlo SHul'ga //Pravo Ukraïni*, **5**: 116-127.
- Shvets, V.Y., Rozdobudko, E.V. and Solomina, G.V. 2013. Aggregated methodology of multicriterion economic and ecological examination of the ecologically oriented investment projects. *Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu*, **3**: 139-144.
- Teremec'kij, V.I. 2020. *Publichne upravlinnja u sferi vikoristannja ta ohoroni zemel'nih resursiv: zarubizhnij dosvid ta ukraïns'ki realii / V. I. Teremec'kij, G. 16 P. SHust // Pravo i Bezpeka*, **2**: 69-75.
- Versinskas, T., Vidar, M., Hartvigsen, M., Mitic Arsova, K., van Holst, F. and Gorgan, M. 2020. *Legal Guide on Land Consolidation - Based on regulatory practices in Europe*, FAO Legal Guide 3, Rome, doi: <https://doi.org/10.4060/ca9520en>.
- Yang, M. and Zhou, J. 2021. The impact of COVID-19 on the housing market: Evidence from the Yangtze river delta region in China. *Applied Economics Letters*, pp. 1– 4. <https://www.tandfonline.com/doi/full/10.1080/13504851.2020.1869159>