Abstract

Land reform, which has been ongoing in Ukraine since 1990, now includes several strategic tasks, including the opening of the agricultural lands market. The article aims to identify the main risks of land reform implementation in Ukraine and outline the prospects for its development and impact on the country's economy. The current state of the problem is analyzed based on the study of literary sources, regulatory and legal base, legislative initiatives, and their discussion in Ukrainian society. An attempt to systematically outline the possible positive consequences and risks of land reform in Ukraine in its various variants was made. Key initiatives for change, their impact on the economy of the state, and the benefits of major stakeholder groups are summarized. The necessity of ensuring based on the reform of the rational land use, forming a class of efficient land users in the society, stimulating the farming development and organic production development, was emphasized.

Keywords

agricultural lands market, legislation, moratorium, Ukraine

JEL Classification

Q15, Q18, Q24, K11, K32

INTRODUCTION

Integration into the world economic space opens new opportunities for Ukraine. Efficient land use will promote economic development and welfare of the population, stimulate the investment, and increase the productivity in agriculture and several other sectors. However, the threat to their implementation is the inefficient land use, in particular the lack of open agricultural lands market. The socio-economic and environmental issues of rational land use need to be addressed.

The problem of the agricultural land market introduction in Ukraine is in the focus of society. Since 1991, when Ukraine gained independence, active discussions on land reform have continued. The final stage of this reform could be the real introduction of the agricultural lands market. The further development of the entire national agricultural lands market depends on it. Ukraine has one of the best land funds in Europe, high soil fertility. As a result of 2019 year, Ukraine is recognized as a leader in agricultural exports (top-1 in sunflower oil, top-3 in corn, top-5 in grain).

Transition to the open land market is possible by adopting the necessary package of laws, which will ensure gradual and complete transparency of such a transition. Since 1990, approximately 27.5 million hectares of agricultural lands has been privately owned to 6.92 million citizens. The obtained land plots were called shares, the average area of
which in Ukraine was 3.5 hectares. In 2002, a new Land Code of Ukraine came into force, establishing a ban on the agricultural lands alienation. Since then, land ownership relations in agriculture have not undergone critical changes, and land reform has not been completed.

1. LITERATURE REVIEW

Improving the efficiency of the agricultural sector, and not only this one, is inextricably linked to the development of land reform, including in Ukraine (Kucher, 2015; Gadzalo & Luzan, 2017; Zhuk, 2017). The experience of the agricultural land market formation and development is a subject of study in numerous works (Martinelli, 2014; Zinchuk & Dankevych, 2016; Czyżewski, Przekota, & Poczta-Waja, 2017; Kostyashkin, Derevyanko, Hrudnytskyi, & Shlapko, 2018). Land reforms in different countries of the world are carried out under different scenarios, given the national and historical peculiarities of statehood, the current state of socio-economic development, bioclimatic potential, land structure, and other factors.

Consistent and responsible decision-making within the framework of the common national land policy should ensure a clear legal basis and institutional foundation. This part of the issue of state regulation of land relations is explored in the works of Mahoney, Dale, and Mclaren (2007), Ciaian, d’Artis, Swinnen, Herck, and Vranken (2012).

A historical analysis of land reform in Ukraine is presented by Barantsov (2016). The main tendencies of development of land relations legal aspects in the period of independent Ukraine are investigated, the problems of legislative support of the land reform modern stage, and changes of the structure of land ownership and land use are investigated.

Alexander (2014) finds that land property has restricted substitutability due to the important factor of location; qualified by location, land is limited and sometimes uncommon. From his point of view, these attributes make land and property investment assets risking speculation, warranting public intervention to mitigate negative social consequences. Land property markets require market or administrative support to work, whose planning is provided through public and private agents. In his paper, he analyzes the different forms of planning and development control in the land property market.

Bao and Peng (2017) studied the impact of land expropriation on farmers’ entrepreneurial activity in the conditions of the rapid urbanization and industrial development in China. Xia, Y. Zhang, Z. Zhang, Liu, Ou, and Zou (2020) analyzed the government’s land use decisions, peasant households and enterprises could help to model agricultural land use change, which has taken place in China for the past thirty years.

Martinelli (2014) presents a new explanation of the historically controversial role of Italian latifundia, market power, land inequality, and agricultural efficiency. Evidence from interwar Italian agriculture was considered. Restuccia and Adamopoulos (2020) made a quantitative analysis of land reform and productivity with microdata.

Land use models show the relationship among various driving forces of land use changes and are increasingly used in practice to forecast possible future land use. Ustaoglu, Castillo, Crisioni, and Lavalle (2017) developed an extensive methodology for the economic assessment of agricultural land use in different EU countries, the integration of economic production values of land to the local suitability approach in the analyzed land use model and the provision of an EU-wide database of the NPVs of agricultural lands use, including various energy crops.

Agricultural production has its objective economic laws that must be taken into account when addressing the issue of rational land use. This requires adherence to certain principles and norms (Hutorov, 2017), in particular compliance with the conditions of soil fertility preservation provided by the crop rotation system and other measures and regulated at the legislative level.

According to the current legislation, in Ukraine, there is used the concept of “normative mon-
etary land valuation.” According to the State Service of Ukraine for Geodesy, Cartography and Cadastre (State GeoCadastre), as of January 1, 2019, the normative monetary valuation of 1 ha of land by region was from 21.4 thousand UAH (EUR 667) in Zhytomyr region to UAH 33.6 thousand (EUR 1,048) in Cherkasy region (State GeoCadastre, 2018).

An analysis of the agricultural lands prices in Europe, according to Eurostat (n.d.) (Table 1), showed that Ukrainian agricultural lands are 3.1 times cheaper than European agricultural lands in comparing the lowest current level of average price per hectare in the EU and Ukraine.

It should be noted that in recent years, the value of land has increased in most countries. Most notably, agricultural lands prices increased 3.5 times in Czech Republic, almost 3 times in Lithuania, 2.7 times in Estonia, 2 times in Hungary, Bulgaria, and Poland (Eurostat, n.d.).

An analysis of agricultural lands rent data in Europe (Eurostat, n.d.) showed that the most expensive land rent is in the Netherlands, the cheapest - in Estonia. In Ukraine, the average rent per hectare of agricultural land in 2018 amounted to 1.613 UAH or approximately 53 euros (State GeoCadastre, 2018), which is 18% more than in 2017. The highest rent per hectare is paid in Cherkasy (UAH 3.525), Poltava (UAH 2.970), and Kharkiv (UAH 2.495) regions. The amount of land rent was lower in Kherson (UAH 927) and Zaporizhzhia (UAH 878) regions.

Value-added is the best indicator of the quality state of the national economy. The higher the value-added of the finished products of the basic industries, the higher the rate of economic growth. The effectiveness of land use of some countries of the European Union and Ukraine is illustrated in Figure 1.

Liberalization of the agricultural lands market contributes to increasing the efficiency of agribusiness and the value-added of agriculture. Figure 1 illustrates that countries with a functioning open agricultural lands market have a much higher value-added growth of agribusiness than Ukraine.

The key initiatives and changes for the implementation of land reform in Ukraine are presented in Figure 2.

Table 1. Agricultural lands prices by region (last update: 21-01-2020), euro/hectare

| Country       | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Bulgaria      | 2,112 | 2,843 | 3,175 | 3,620 | 3,891 | 4,131 | 4,622 | 5,011 |
| Czech Republic| 1,836 | 3,264 | 3,662 | 4,282 | 4,775 | 5,463 | 6,448 | 7,572 |
| Denmark       | 17,476| 17,562| 15,708| 17,209| 18,752| 17,584| 17,328| 17,690|
| Estonia       | 1,062 | 1,265 | 1,865 | 2,426 | 2,567 | 2,735 | 2,890 | 3,174 |
| Ireland       | –     | –     | 26,366| 23,449| 23,949| 23,594| 19,903| 27,457|
| Greece        | 15,393| 14,968| 13,907| 13,276| 12,633| 12,528| 12,627| 12,750|
| Spain         | –     | 12,005| 11,910| 12,192| 12,574| 12,522| 12,827| 13,023|
| France        | 5,390 | 5,440 | 5,770 | 5,940 | 6,000 | 6,070 | 6,030 | 6,020 |
| Croatia       | –     | –     | –     | –     | 2,726 | 2,835 | 3,005 | 3,285 |
| Italy         | 34,257| 39,342| 32,532| 39,247| 40,153| 28,985| 33,538| –     |
| Latvia        | 2,336 | 4,475 | 4,980 | 2,552 | 2,654 | 2,917 | 2,975 | 3,856 |
| Lithuania     | 1,212 | 1,527 | 2,009 | 2,330 | 3,089 | 3,516 | 3,571 | 3,890 |
| Luxembourg    | 23,648| 24,230| 26,621| 27,438| 27,738| 26,030| 35,590| 35,110|
| Hungary       | 2,089 | 2,380 | 2,709 | 3,042 | 3,356 | 4,182 | 4,368 | 4,632 |
| Netherlands   | 50,801| 52,716| 54,134| 56,944| 61,400| 62,972| 68,197| 70,320|
| Poland        | 4,855 | 6,080 | 6,275 | 7,723 | 9,220 | 9,083 | 9,699 | 10,318|
| Romania       | 1,366 | 1,666 | 1,653 | 2,423 | 2,039 | 1,958 | 2,085 | 4,904 |
| Slovenia      | –     | –     | 15,545| 16,009| 16,071| 17,136| 16,876| 18,460|
| Finland       | 8,210 | 8,047 | 8,461 | 8,090 | 8,138 | 8,326 | 8,718 | 8,380 |
| Sweden        | 6,811 | 7,043 | 6,797 | 7,408 | 7,751 | 7,921 | 8,708 | 8,845 |
| United Kingdom| 18,885| 21,905| 23,283| 26,634| 30,292| 25,730| 23,450| 23,155|

Source: Compiled by the authors based on Eurostat (n.d.)
Along with the start of the land reform, restrictions on the sale of agricultural lands were introduced. This restriction was primarily regarded as a temporary precautionary measure. If at the beginning of the transition to a market economy model, the reasons for the restriction were justified, then the continued extension of the restriction on the sale of land contradicts the declared approach of agricultural lands liberalization and current economic realities. Businesses have virtually no land in ownership and use it on the rent conditions, and lately, land use on the right of the emphyteusis has become increasingly popular.

**Figure 1.** Land use efficiency, value added of agribusiness 2008 and 2018 (constant 2010) per hectare of agricultural land, US$

| Year | Austria | Czech Republic | Germany | Georgia | Denmark | France | Italy | Netherlands | Poland | Romania | Spain | Ukraine |
|------|---------|----------------|---------|---------|---------|--------|-------|-------------|--------|---------|-------|---------|
| 2008 | 13.3    | 4.7            | 1.8     | 1.5     | 0.4     | 0.9    | 1.2   | 1.9         | 3.1    | 3.4     | 0.3   | 0.4     |
| 2018 | 9.4     | 7.6            | 0.7     | 0.7     | 0.9     | 1.5    | 0.7   | 0.7         | 0.7    | 1.9     | 0.4   |

**Figure 2.** Legislative acts on implementation of land reform in Ukraine

18.12.1990. Resolution of the Supreme Soviet of the USSR “On Land Reform”; Law of Ukraine No. 561-XII “Land Code of Ukraine”, legal regime of land transfer to citizens, agricultural enterprises, organizations has been determined

23.03.1995. Resolution of the Cabinet of Ministers of Ukraine, methodology of normative monetary value of land depending on the purpose of using

25.10.2001. Land Code of Ukraine, basic legal act Land Legislation of Ukraine

26.12.1992. Decree “On Land Privatization”, free land transfer to private ownership

30.01.1992. Law of Ukraine “On Land Ownership Forms”, the forms of land ownership – public, collective and private – are defined

25.09.2019 Draft Law on Amendments to certain legislative acts of Ukraine on the turnover of agricultural lands

2001-2008, Laws of Ukraine on extension of the moratorium on alienation of land (shares)
Due to the long-term moratorium on agricultural lands sales in Ukraine was not formulated a regulated market and, consequently, no market prices. Despite the moratorium, a shadow land market is active. There are many ways to circumvent the moratorium on agricultural lands sales: long-term rent, mephitis, fictitious testament, pledge, proxy, change of land use purpose, legal foreclosure through debt, etc. By buying land through hidden schemes, the relationship subjects understand the risks involved. After all, if necessary, the lawyers of competitors or raiders will be able to find a lot of hooks and fraudulent offers to such landowners. That is why the land price under such schemes is not fair. De facto, two parties detect the losses: the seller who received the reduced value of the land and the buyer who is not legally protected. These are the farmers, the state, and the legal investors who lose from the shadow market.

The stages of land reform implementation in Ukraine can be divided into several main stages: from 1990 to 1992, which resulted in the adoption of the first Land Code of Ukraine and defined the legal regime of land transfer to citizens, agricultural enterprises and organizations; from 1992 to 2001, which resulted in the definition of the main forms of land ownership, the main aspects of land privatization, the methodology of the normative monetary valuation of land, depending on the purpose of their use; from 2001 to 2019, when the Land Code of Ukraine, the basic legal act of Land Legislation of Ukraine, was adopted in 2001. From 2001 to 2018, year by year, various regulatory acts extended the moratorium on the alienation of land (shares).

The Strategy for the Development of Agriculture and Rural Territories in Ukraine for 2015–2020 (Ministry of Agrarian Policy and Food of Ukraine, n.d.) identifies three main areas of land reform:

- realization of a full-fledged agricultural lands market, deregulation of economic land circulation, sustainable land use and land consolidation;
- improvement and development of the cadastre system and registration of real rights to real estate;
- securing and protecting rights to land plots.

According to the Strategy plan, a major part of the reform should be implemented in 2020. In particular, the main issues addressed are elimination of the State GeoCadastre from land management; deregulation of land ordering; improving the tenant's pre-emptive right to acquire the land; creation of a transparent electronic trading system; easy and convenient access to state registers, inventories, and planning documentation; expansion of "land" powers of communities in the conditions of decentralization process completion; introduction of monitoring and antitrust control to eliminate corruption trends in land relations; preventing raiding; providing more preferential access to credit financing; introduction of land circulation.

In the opinion of many Ukrainian scientists and analysts, the opening of the land market will undoubtedly be a revolutionary event. Land reform implies a significant change in the land management system. The land circulation law is only one of its components. The variant of calculation of the economic effect of land reform implementation in Ukraine is offered (Nepochatenko, Kolotukha, Borovik, & Husar, 2017), but social and environmental effects are not disclosed. Lupenko and Khodakivska (2018) forecasted the supply and demand in the Ukrainian agricultural lands market in case of cancellation of the moratorium on sale and purchase.

Most scientists think that the agricultural lands market in Ukraine is a matter of near-term prospects. However, to effectively implement the civilized land market, several problems are needed to be solved urgently.

Under the current provisions of the Land Code of Ukraine, the Civil Code of Ukraine and the Law of Ukraine "On Land Rent", the pre-emptive right to purchase agricultural land have a) citizens of Ukraine who reside permanently on the territory of the respective local council where the land is being sold; b) relevant local self-government bodies; c) co-owner of the land plot; d) tenants who, by law, may own leased land. The mechanisms for exercising these rights are not sufficiently stipulated in the legislation, but there are currently only general rules on the exercise of pre-emptive rights to the acquisition of rented land by tenants and owners of privately owned or co-owned real estate. The law provides that a tenant has the pre-emptive right to
purchase land ownership under the following conditions: a) the owner intends to sell the land; b) the tenant may own the rented land; c) the tenant pays the price at which the land is sold and, in the case of the auction sale, makes a bid equal to the highest offered by the auction participants. When the landowner decides to sell the land, he is obliged to inform the tenant in writing of his intention to sell the land to a third party, indicating its price and other conditions under which it is sold. However, it is not specified what the deadline should be for the message, the term of the tenant to provide the answer, and what form it should be. At present, there is no clear procedure for exercising the pre-emptive right of tenants to purchase rented land.

The pre-approved draft law on amendments to some legislative acts of Ukraine on turnover of agricultural lands No. 2178 of 25.09.2019, amended by the Verkhovna Rada of Ukraine, provides that acquire ownership of agricultural lands may be: citizens of Ukraine; legal entities of Ukraine, created and registered under the legislation of Ukraine, whose members are only citizens of Ukraine and/or the state and/or territorial communities; territorial communities; state.

Legal entities, whose founders or ultimate beneficiaries are persons who are not citizens of Ukraine, may acquire ownership of agricultural lands from the date and in the case of approval it on a referendum.

Despite the considerable preparatory stage for the opening of the land market, numerous public discussions of land reform, there are no specific calculations and analytical data and a forecast of socio-economic effect from the Ministry of Economic Development, Trade and Agriculture and other state institutions. This makes it impossible to assess the opportunities and prospects of land market liberalization transparently.

The experience of other countries shows that to ensure rational land use, it is advisable to differentiate land sales norms, taking into account the fertility of regional land resources, the need for their restoration and protection from adverse natural and climatic impacts and irrational, self-serving, and land use. It is also important to maintain the ecological balance of the land, and to secure at the legislative level the need to develop land management projects and the obligation of ecological and economic justification of crop rotation and land management.

It is also advisable to draw attention to the importance of agricultural education or experience in agriculture to obtain a permit for the acquisition of agricultural lands. When introducing the land market, it will probably be interested in acquiring its legal entities such as industrial or other non-agricultural enterprises. Therefore, such legal entities need to discuss the issues of agricultural production in their founding documents. Failure to anticipate such a regulatory requirement poses a significant risk of non-core land management. This requirement could contribute to the agrarian motivation of land legal relations at the legislative level and reduce speculation in agricultural lands. Besides, an analysis of the legal basis of the European countries such as Denmark, Italy, Finland, Switzerland, Sweden indicates the restrictions on the education and qualification of persons interested in acquiring the land over 30 hectares (a requirement for professional education and experience of farming). German law additionally requires the provision of targeted arguments for the acquisition of land and professional education in the case of a desire to purchase more than 1 ha of agricultural lands.

Remain questions are the restriction on the total area of agricultural land owned by one person; access of foreigners to the land market; the role of banks in the purchase and sale of land. The current version of the Draft Law “On Amendments to Certain Legislative Acts of Ukraine Regarding the Circulation of Agricultural Lands” of 25.09.2019 № 2178 provides for a limit on the possession of agricultural land – no more than 10 thousand hectares. There is no transparent procedure for monitoring the implementation of this restriction. Mechanisms to prevent land consolidation by large landowners need clear specification in order to avoid abuse. The predominance of the agricultural holding market is evidenced by the fact that almost 15% of Ukraine’s agricultural lands are now concentrated in the land holdings of 100 major agricultural holdings.

Remain controversial questions of limitation on the total area of agricultural land owned by one person; access of foreigners to the land market; the role of
banks in the purchase and sale of land. The current version of the Draft Law “On amendments to certain legislative acts of Ukraine regarding the turnover of agricultural lands” dated 25.09.2019 № 2178 provides for a limit on the limit of agricultural land - no more than 10 thousand hectares. There is no transparent procedure for monitoring the implementation of this limitation. Mechanisms to prevent land consolidation by large landowners need clear specification in order to avoid abuse. The predominance of the agricultural holdings market is evidenced by the fact that almost 15% of Ukraine's agricultural lands are currently concentrated in the land funds of 100 major agricultural holdings (Appendix A).

Important is the issue of introducing additional amendments to the procedure for establishing land servitude. This aspect aims at protection against raiding, leaving to the landowner the indisputable access to it in case of buying the land plots on the perimeter. This applies to arrays of land. In this case, the obligation of land servitude will fit into the sales contract.

The legislation provides restrictions on the total area, but the procedure for monitoring compliance with this restriction is not completely transparent. It is quite possible to continue the consolidation of the land fund agricultural holdings through the acquisition of small agricultural enterprises and farms.

It should be kept in mind that developed countries have chosen the path of land reform with an open agricultural lands market and the market open to foreigners with restrictions (Figure 3).

Banks and credit institutions may acquire ownership of land plots in the order of foreclosure on them as a subject of pledge. Such land plots must be alienated by banks and credit institutions at auction within 2 years from the date of acquisition of ownership. Thus, banks, carrying out a collection of land on outstanding loans, can mask the real sale and purchase of land, concentrating large areas of agricultural lands in ownership and affect the balance of supply and demand. This needs to address more carefully the issue of depriving banks of their abuse of land ownership, which could not potentially be introduced into agriculture.

At the same time, the proposal to postpone and restrict access of foreigners to the land market for 7-10 years is relevant. Simultaneously, during this period, the government could create conditions for the Ukrainian agricultural producers that would further facilitate their formation as capable competitive buyers of the land on which they operate. This requires reasonable access to credit for a Ukrainian farmer. Currently, the most suitable ways of finding financial resources are land bonds for part of state land or sale of long-term (15/25-49 years) rent rights of state land. Money received should be directed for land mortgage and projects in the agroindustrial complex; land mortgage through state and corporate banks for 10 years at 6-8% per annual in currency with the formula 30/70 and 20/80, where the first figure is the borrower’s funds, the rest – bank; public and private financing.

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**Figure 3. Land market types classifications according to restrictions for foreigners**

| The market closed to foreigners          | The market opened to foreigners with restrictions | The market opened to foreigners |
|------------------------------------------|--------------------------------------------------|--------------------------------|
| • Azerbaijan, Armenia, Kazakhstan, Kyrgyzstan, Moldova, Russia | • Georgia, Lithuania, Latvia | • Estonia |
| • Albania, Bosnia and Herzegovina, Iran, Macedonia, Serbia, Croatia | • Bulgaria, Greece, Denmark, Poland, Romania, Slovakia, Turkey, Hungary, Finland, France, Switzerland, Sweden | • Austria, Belgium, United Kingdom, Ireland, Spain, Italy, Netherlands, Germany, Portugal, Czech Republic |
| • Korea, Nigeria, Morocco, Tunisia       | • Argentina, Brazil, Canada, Mexico, Japan        | • Australia, USA |

Source: Compiled by the authors using the data from Eurostat (n.d.), EasyBusiness (n.d.)
2. GENERALIZATION OF THE MAIN STATEMENTS

The introduction of an agricultural lands market leads to serious risks. Identifying risks is a prerequisite and the first stage in effectively managing them and developing a system of measures to eliminate or reduce them. An analysis of the latest regulations, draft documents, research, and publications on land reform enables to identify important potential risks and the most discussed aspects of the procedure for the implementation of the law on agricultural land turnover in Ukraine (Figure 4).

**REGULATORY AND LEGAL RISKS AND THEIR MANAGEMENT**

- Lack of systematization of regulatory and legal acts in the field of agricultural lands and their inconsistency – the need for systematization and compliance, establishment of an institution responsible for compliance with legislation and coordination of the agricultural lands market
- High fragmentation of agricultural lands – the need for consolidation of agricultural lands
- Lack of a clear procedure for exercising of pre-emptive right to acquisition of rented land by tenant farmers – providing for a transparent procedure
- Lack of protection against raiding – strengthening the regulatory and legal regulation of anti-raiding actions

**ECONOMIC RISKS AND THEIR MANAGEMENT**

- Absence of specific calculations, analytical data, and forecast of socio-economic effect for the country – calculation and publication of a clear analytical forecast of socio-economic effect of updated land reform implementation
- Concentration of agricultural lands in agricultural holdings’ land funds – limitation on the total area of agricultural land owned by one person
- Raiding – additional amendments to the land servitude regarding the possibility of the land owner access to the land plot
- Access of foreigners to the land market – delay and restriction of access for 7-10 years
- Threat of concentration of agricultural land owned by banks and their impact on the balance of supply and demand – legislative consolidation norms to avoid agricultural lands concentration in banks
- Understatement of land value due to lack of agricultural land base by regions, land characteristics – necessity to recalculate of land assessment according to their market value by indicators: fertility, location, etc.
- Decrease of agricultural lands productivity – fixing the norm of necessity of observing ecological and economic justification of crop rotation and land management

**SOCIAL RISKS AND THEIR MANAGEMENT**

- Non-motivated use of land resources – the necessity of introducing obligatory presence of professional agricultural education or experience in agriculture business (farming) in the case of desire to purchase of agricultural lands
- Threat to the sovereignty and security of the state – protection of border lands
- Threat to sustainable development of rural areas, development of farming through displacement them by agroholdings – support for the development of rural areas and small agricultural producers

**Figure 4. Risks of implementing updated land reform in Ukraine**
Agricultural lands in Ukraine are characterized by high fragmentation into small areas, which is associated with the sharing of land with an average share size of 4 ha. As a result, dozens of separate land plots are owned by disparate citizens and used by several farmers within the same agricultural land. That is why the process of pre-consolidation of agricultural lands must be an integral part of land reform in Ukraine. This process is advisable to be continued after the opening of the land market.

The prospects of land reform implementation and introduction of a full-fledged land market for Ukraine in the context of major stakeholder groups are presented in Table 2. Potential opportunities for agricultural lands market liberalization are obvious, in particular: rising landowners’ incomes; acceleration of the country’s economic growth; increasing investment in agriculture; increasing tax revenues to the budget.

### CONCLUSION

From the perspective of the projected positive effect, as well as international commitments made by Ukraine, there is less doubt about the feasibility of introducing agricultural lands turnover. Land reform should be carried out consistently and carefully, with a preliminary analysis of existing and potential risks and taking preventive measures to manage them. This will help to prevent alienation of land at a price below their fair value, uncontrolled land market redistribution, and legal uncertainty.

Abolition of the moratorium and introduction of a transparent land market is beneficial for all stakeholder groups, as it ensures respect for constitutional property rights, creates new opportunities, improves land use efficiency, provides access to finance and credit, contributes to replenishing the state budget, increasing GDP.

Taking into account regulatory and legal risks in the land reform implementation procedure will provide more assurance for current land users in exercising pre-emptive rights to acquire the land they cultivate, ensure transparency of land auctions, and reduce the risks of agricultural lands sales and purchase agreements. Taking into consideration economic risks will ensure the rational use and protection of land resources, reproduction of productive potential of agricultural land; protection of landowners from the shadow schemes of agricultural lands concentration in ownership of banks. This, in turn, will contribute to the social formation of an effective land user with agrarian education and experience in agriculture; create the prerequisites for the development of family farming.

Integrated consideration of risks in the land reform implementation procedure in Ukraine will contribute to the sustainable development of rural areas, changes in the strategy of economic development, organization and maintenance of their infrastructure.
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## APPENDIX A

### Table A1. Top-100 latifundists in Ukraine as of January 1, 2020

Source: Compiled by the authors using the data from LATIFUNDIST.

| Group                                      | Company                                                                 | Land bank, thousand hectares | % of total agricultural lands in Ukraine |
|--------------------------------------------|------------------------------------------------------------------------|------------------------------|-----------------------------------------|
| Land fund of more than 500 thousand hectares | Kernel, Ukrlandfarming                                                  | 1,030.0                      | 2.5                                     |
| Land fund in the range of 100-499 thousand hectares | NCH, MHP-370, Astarta-Kyiv, Continental, HarvEast, IMK, Epicenter K, Ukrrprominvest-Agro, Agroton, Agrain, Agrarian System Technologies | 1,887.3                      | 4.5                                     |
| Land fund in the range of 50-99 thousand hectares | Vitagro, Privat-AgroHolding, TAS-AGRO, NIBULON, AgroVisa, Svarog West Group, Svitank, LNZ, AGROTRAID, Ristone Holdings, ROSTOK-HOLDING, Panda, AgroGeneration, Baryshevskaya grain company, Farm Forward, Western Bug, Ukrainian Agrarian Holding, Agrotis, Dnipro Agro Group, South Agro-Export Company, Chysta Krynysysa, Agro-Express-Service, Freedom Farm | 1,405.95                     | 3.4                                     |
| Land fund up to 50 thousand hectares       | Agromino, Agropecservice, Ukraine 2001, Agroprodservice, Agricom Group, Eridon, Agro-Region, LANDFORT, Olimp, AIC-INVEST, Gals Agro, Complex Agromars Roten, GREENSTONE, Zemlia I Volya, Agrarian technological company, Agroinvestgroup, SAT, Ecoprod, Yavir-AIC, TPK Alyans, Prodexim, Volyn-Zerno-Product, Cygnet Agrocompany, A.G.R. Group, Beta-Agro-Invest, Zelena Dolya, KSG Agro, VPK-Agro, Success, Agrofusin, Buchachchlibagroprom, Oskar, Kusto AGRO, AIC Rozkisnya, Agrodin, Uniline Finance Ltd, Nyva Pereyaslavskichny, Holland agrarian company, Agroinvest Holding, BB Agro, Bioland, Chmielnicki MLYN, Selhozproduct, Zarya, HORS, Arnika, Batkivschyna, Clever Agro, Avis UkrAgro, Prometey, Preobrazhenske Chongar, Zgoda, AF Pyatyhatska, Pan Kurchak, Pyatyhatska, Agrotech-Garanty, Agro-Oven, AF Kornatskyh, Kischenzi, Agrotech, Agrodar group, Rosukrprod | 1,879.8                      | 4.5                                     |
| Total                                      |                                                                        | 6,203.05                     | 14.9                                    |