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Transformation of the agricultural financial system in the age of globalisation

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Abstract: The paper is an attempt to address the advantages and risks connected with the wave of financial globalisation, with a focus on its impact on financial policy in European agriculture. The aim of the paper is to identify the basic conditions of the functioning and change of the financial system of agriculture under the conditions of the globalisation of financial markets. Financial globalisation, also referred to as financial integration or openness, is understood as an increase in global ties and interdependences caused by capital flows. Potentially, globalisation can bring a lot of benefits, which are manifested in an acceleration of economic growth and decreased fluctuation in consumption, which should further improve the level of overall prosperity. On the other hand, however, internationalisation of financial flows entails a range of threats, including the possibility of crisis.

Keywords: agribusiness, budget deficit, economic crisis, food markets, internationalisation, monetary policy, public debt

A financial system emerges when financial autarchy is no longer sufficient, and outside capital becomes necessary (Fuchs and Graf 2015). Generally, the Polish financial system shows characteristics of a bank-oriented model, which potentially facilitates the development of agriculture and small and medium-sized enterprises. This system is, however, dominated, at least in the case of banks and insurers, by foreign capital. Potentially, this represents a threat to the smooth, generally accessible and cheap financing of the above-mentioned entities and poorer groups of population (Pietrucha 2013).

Financial globalisation is characterised by a great diversity of links between countries and financial centres. Generally, it is stimulated by countries opening up to external flows of capital, increasing liberalisation and deregulation of financial markets, as well as huge progress in information technologies, which leads to decreased costs of communication and popularisation of trade. The historical and economic relations between Poland and Ukraine are very important for trade and financial flows in both countries.

FINANCIAL GLOBALISATION

In the theoretical aspect, factors that impact financial globalisation include (Sievers 2013):
– openness (integration) of trade,
– financial development of a country,
– size of a country,
– restrictions regarding the capital level,
– European monetary integration,
– fulfilment of the role of a financial centre.

Most studies (Wichels 2013) show that openness of trade should be accompanied by financial openness, although some claim that less restrictions on commodity trade may encourage an increase in the optimal level of home bias in financial transactions. However, it has been recognised that increased financial openness is conducive to better risk diversification and that it reduces information asymmetry and stimulates the development of instruments to finance.

The impact of financial development is complex. On the one hand, it may encourage foreign investors to use local financial institutions and to invest in a

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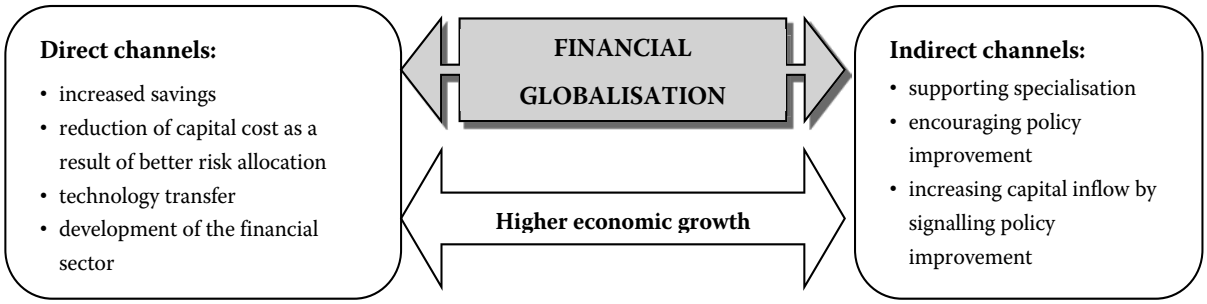

Figure. 1. Channels through which financial globalisation affects economic growth

Source: own work

given country. This has both advantages and disadvantages, although so far it has mostly been proven that financial development usually stimulates financial globalisation. Thus, factors stimulating financial globalisation include trade, i.e., the relationship of the sum of exports and imports to GDP, financial development, status of a financial centre and European monetary integration.

From a purely theoretical perspective, we can distinguish several independent channels through which financial globalisation affects growth. The proposal presented in Figure 1 can be taken as a starting point here.

An increase in domestic savings brings benefits to countries into which capital flows and those that provide it. It allows the former to invest more, and the latter to achieve a higher profitability of capital. An analysis of the dynamics of changes in Ukrainian household savings showed that despite the expectations of devaluation savings in local currency are dominant. Savings in US dollars and Euros have grown in recent years, but their liquidity remains below that of local currency deposits. This shows the stable confidence of the population in commercial structures even during crises (Tsischyk 2015).

A reduction in capital cost as a result of an improvement in global risk allocation is connected in the first place with the development of capital market, and to an even larger extent – with its opening up to foreign investors. Liberalisation makes it possible for these investors, just like local investors, to better diversify risk. This, in turn, should encourage them to invest further, resulting in higher economic growth. An inflow of foreign capital into the capital market increases its liquidity, which is another incentive for reducing the costs of capital, and thus stimulating new investments.

The development of the domestic financial sector may be encouraged by increasing the liquidity of the capital market or by taking over the assets of a banking system. In the latter case, domestic banks are given easier access to international financial markets; they may also be subject to more effective supervision and control, and usually have access to state-of-the-art financial instruments and managerial techniques (Rieger and Rieger 2013).

Promotion of specialisation seems to be a natural consequence of any globalisation. It should, however, be added that encouraging specialisation alone can very quickly increase macroeconomic volatility and, as a result, decrease consumption and prosperity.

Involvement in economic policies shows that financial globalisation may impose discipline on the governments of countries hosting international capital, forcing them to implement changes in their investment policies to relocate resources to more productive applications. The presence of foreign investors may also be inhibited by direct and indirect overtaxation of economic activity and capital.

Improving economic policy involves the readiness of a given country to make its policy more foreign capital-friendly, which may significantly increase the inflow of such capital and facilitate its influence on economic growth.

In order for financial globalisation to exert its impact through the above-mentioned channels, certain mechanisms and conditions have to be implemented to ensure that capital reaches countries that are lacking it.

We can distinguish two types of such mechanisms: the first type, referred to as 'pull' forces, result from political changes in demand-creating countries, which lead to the lifting of restrictions on the capital account of the balance of payments, liberalisation of the conditions of access to the stock exchange market and large-scale privatisation projects. The second mechanism, called 'push' factors, refers to investors and is based on differences in the business cycles

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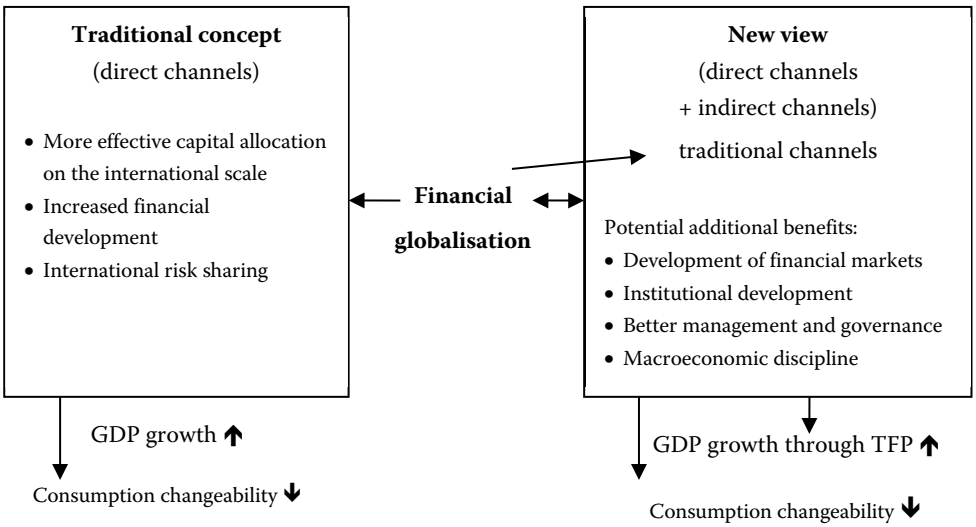

Figure. 2. Two concepts of the impact of globalisation

Source: own work

between countries, and reforms of pension schemes in highly-developed countries, which significantly increases the importance of institutional investors in these lands (Schaefer 2014).

The 'push' factor accurately reflects the characteristics of rich countries, i.e., their clear tendency to remain more open thanks to, among other things, their well-developed financial systems and high levels of institutional development, which is manifested in easy enforceability of contracts and low corruption.

The views on the impact of financial globalisation on the real sphere have evolved, which has been presented in Figures 2 and 3. They show that the channels through which the impact of globalisation are mediated have become more and more complicated; two-way dependences have emerged, and indirect impacts have become more important – especially by means of total factor productivity (TFP). There also has been increasing evidence that financial globalisation increases financial fragility and susceptibility to an outbreak of crisis (Duso 2014).

In this context, it is worth discussing the character of financial fragility in more detail. In general terms, this term is understood as a kind of oversensitivity of a financial system to various types of external and internal shocks. Thus, sources of financial fragility include (Mitrega-Niestrój 2014):

– underdevelopment of the legal and institutional environment,
– macroeconomic instability,
– prematurely and inappropriately sequenced financial liberalisation,
– overregulation or inadequate and delayed intervention,
– lack of a lender of last resort,

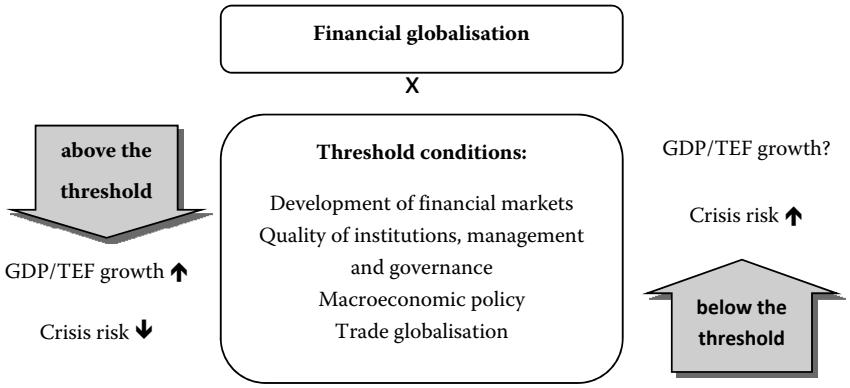

Figure. 3. The nature of the threshold for the development of financial globalisation

Source: own work

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– uncertainty, ignorance and conflicting goals and motivations of basic economic agents,
– liquidity shortage in the financial sector,
– lack of compliance between the potential of financial institutions and their goals, strategies and *corporate governance*.

The traditional concept focuses on the importance of channels through which the inflow of capital could directly reduce the volatility of consumption. The new perspective recognises the importance of traditional channels, but stresses that financial globalisation can be a catalyst in generating additional benefits. The latter may be even more important for the acceleration of a reduction in consumption volatility.

According to Figure 3, financial globalisation leads to better macroeconomic results when certain trigger levels are reached. From a purely theoretical perspective, financial fragility is one possible state of balance. It may appear suddenly, even in economies with solid macroeconomic foundations. Poland and Ukraine are very are good examples, as they show that when world markets experience shocks, emerging markets, including Poland and Ukraine, are particularly susceptible to the negative effects, becoming fragile in financial terms (Klepacki 2015). Therefore, ratification of the agreement on the association of Ukraine with the EU and the signing of the free-trade zone agreement have great importance for increasing financial flows and the development of financial institutions in Ukraine and partner countries.

Figure 3 shows, among other things, the thresholds, i.e., achievement of certain levels of financial development that allow the positive effects of financial globalisation to become visible.

GLOBALISATION AND ITS EFFECTS ON FINANCIAL CRISES

A crisis describes a turning point, breakthrough or change in the existing tendencies of the development of a certain phenomenon. The classical economic crisis is a period of serious difficulties manifested in a sudden reduction of economic activity, i.e., shift from a phase of expansion to a phase of depression (recession).

However, the last decade of the 20th century brought a new type of economic crisis, which has its source in globalisation, and, in particular, liberalisation of international flows of capital. According to the general explanation of their occurrence, financial globalisation, by enabling the incurring of debt on world financial markets, strengthens imperfections in all markets, in particular in moderately developed countries. As a result, 'moral hazard' behaviour and practices of credit rationing by banks occur there on a wider scale.

When looking for the sources of modern economic crises, we should consider immanent types of risk in the current wave of globalisation (Figure 4).

Research shows (Ortloff 2014) that trade liberalisation reduces the threat of economic crisis, whereas the release of financial turnover usually has an opposite effect. *Emerging markets* are much more exposed to the destructive impact of globalisation than highly developed countries, in particular those that are financially liberated but closed in the area of trade.

Globalisation is conducive to the occurrence of crises through commercial, capital, organisational and functional links in financial sectors as well as correlations of financial, commodity and raw

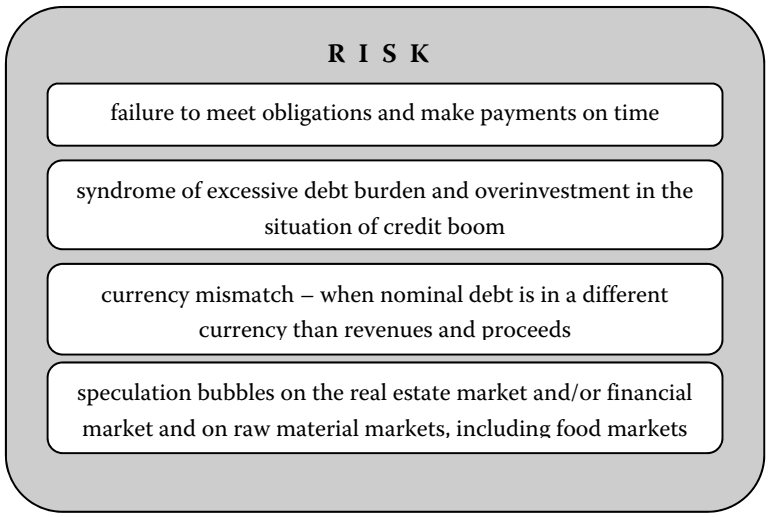

Figure. 4. Types of risk associated with globalisation

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material markets, including agricultural and food markets.

FINANCIAL POLICY IN AGRICULTURE UNDER CONDITIONS OF GLOBALISATION

Financial globalisation, turbulence in financial markets and economic crises naturally increase the interest in the significance of the impact of macroeconomic conditions on the economic and financial situation of agriculture. These studies are collectively referred to in the literature as the 'macro-agricultural nexus'. The first studies in this area were conducted in the United States in the 1970s and 1980s (Kwon and Won 2009). Another wave of interest in these issues was observed at the end of the previous and the beginning of the current decade (Arora et al. 2013).

Most often, the starting point in discussions about the macro-agricultural nexus is specification of the domestic and international macroeconomic determinants of the net income of agriculture. These include prices of agricultural products; prices paid for production means and services purchased by farmers; agriculture revenues from export; real exchange rate; supply of domestic money (usually M2 aggregate); real gross product of agriculture and the statutory interest rate of the central bank. Econometric procedures for estimating models of the above type are quite complex and include vector error-correction (VEC), converted by reparametrisation to an equivalent vector autoregression (VAR). However, vector moving average (VMA) analysis is becoming more widespread in recent times. Further, impulse reaction functions (IRFs) are used to determine the character and extent of mutual relationships between the variables in the model and their impact on the net revenue of agriculture. However, such impacts can be determined more precisely by means of fixed-effects vector decomposition forecast (FEVD). Following the steps presented above it was found that the reaction of agriculture to macroeconomic shocks is better described by the hypothesis of exchange rate overshooting than its undershooting or the classical theory of monetary policy (Kohn and Öztürk 2011). It should be noted that overshooting of a long-term exchange rate is understood as a situation in which a short-term increase in the money supply – under conditions of a specific level of production and full use of the potential of the economy – will cause a more than proportional depreciation of the currency within a short period of time. Subsequently, its appreciation in relation to the long-term exchange rate will take place.

This phenomenon leads to a larger volatility in the exchange rate, which sometimes can be very significant even within one day (Gouel 2012). According to the overshooting hypothesis, agriculture incurs certain adaptation costs, measured in relation to the general variance of the sector net revenue. A floating exchange rate, which is used in Poland, and introduced in Ukraine in 2015, enables a significant reduction of these costs, but cannot absorb them fully. Thus, exchange rate, interest rate and money supply (a type of monetary policy) contribute to volatility of the basic economic aggregates in agriculture. This source of volatility will not be fully eliminated by Poland's entry into the Euro zone, and in certain conditions it may even make it more difficult to pursue an autonomous economic and agricultural policy.

From the above-presented perspective, *macro-agricultural nexus* cannot be perceived as a complete concept. It does not take into account fiscal impacts on agriculture, which in the conditions of financial globalisation are identified to a lesser degree than monetary channels.

The concept described above disregards adjustments of the agricultural and food import and unit labour costs to changes in the exchange rate of the Polish zloty. The discussion above also passes over the issue of instability being spread via markets and financial institutions.

Taken together, it is clearly necessary to conduct an analysis which includes relations between policy mix and agricultural policy, including the financial policy pursued in this sector, and financial stability. A good introduction to such an analysis may be Figure 5, as it becomes more and more necessary to develop tools for coordinating the monetary policy with the supervisory policy, in order to ensure stabilisation of the financial system and the current economic situation, among other things (Chao et al. 2011).

As the figure shows, one of the limitations of such a strategy is fast accumulation of negative effects of increases in the levels of taxes and/or budget deficits, i.e., further debt of the economy and society. This leads to an overall decrease in the ultimate and average effectiveness of financial interventionism, especially those of a fiscal nature.

These tendencies are important for agriculture in the EU, which strongly depends on budget support. Analysis of the fiscal position of Poland against other EU countries shows that it has a relatively

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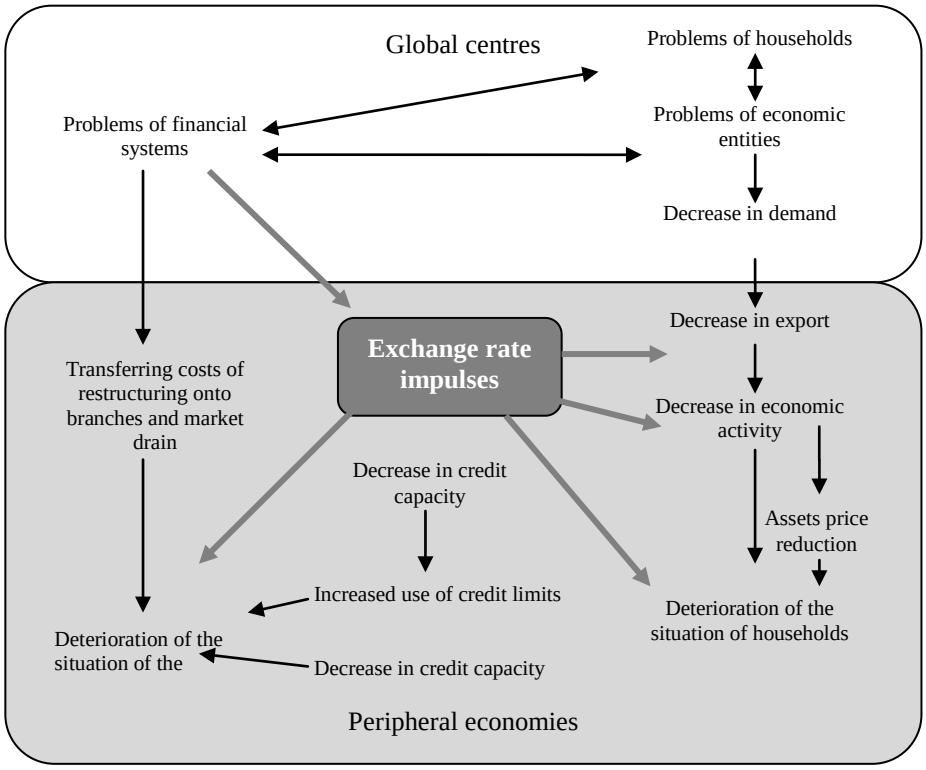

Figure. 5. Transfer of economic problems from global centres to peripheral economies (in financial sectors)

Source: own work

higher budget deficit and public debt compared with more developed countries. Moreover, it shows a high degree of public spending rigidity, i.e., spending pro-cyclicality and strong dependence of the state's fiscal situation on the pace of GDP growth. The latest forecasts show that GDP in Poland may grow by around 3% within the next years – a pace that is slower by 1–1.5 pp compared with the potential of the domestic economy (Postuła 2014).

At the same time, in the April World Economic Outlook the International Monetary Fund (IMF) has downgraded the growth forecast of the Ukrainian economy from 2% to 1.5% in 2016. According to the IMF forecast, in 2017, Ukraine's GDP growth will be 2.5%. IMF experts believe that the recovery of economic growth in 2016 will be possible taking into account improving consumer and investment mood, rising real incomes, as well as a gradual improvement of credit conditions. At the same time, in 2015, the National Bank predicted that real GDP growth in Ukraine in 2016 would be 3.1%. The real GDP of Ukraine decreased by 9.9% in 2015 after declining by 6.6% in 2014 (ZN, UA 2016).

Financial policy in agriculture within the next years will be strongly affected by the consequences of this crisis, and they will be manifested through financial, commodity and labour markets. Such policy will also be reflected in structural changes and the behaviour of households and food consumers, as well as in the public sector, i.e., in the sphere of fiscal, monetary and regulatory policies with reference to the financial sector. Future prices of agricultural products will, in turn, be determined to an even larger extent by changes in the exchange rates of the Polish zloty and Ukrainian hryvnia and oil prices, and both these factors will be strongly affected by the macroeconomic, regional and global situation. We should, however, keep in mind that the impact of macroeconomic shocks on agriculture will be even more complicated. This has three implications for the financial policy in agriculture of all countries (Soliwoda 2014):

(1) It is necessary to systematically monitor regulatory changes in the financial sector in terms of their impact on farmers' access to credit and the level of risk management in households;
(2) More attention should be paid to tendencies on the market of agricultural soil and lease;
(3) Mechanisms for transmission of agricultural prices, construction of margins in the supply, food and value creation chains have to be closely analysed in

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connection with processes occurring on financial asset, raw energy materials, industrial metal and precious metal markets.

One of the key issues in the financial policy in agriculture is to ensure that agricultural holdings have appropriate credit conditions for their activity. The scale, scope and terms of credits depend on three factors: level of subsidisation of the sphere of agricultural credit; quality and stability of the value of credit protection offered by farmers and the scale, competitiveness and degree of complication of the operations performed by lenders (Zawadzka et al. 2014).

In this context, it can be stressed that the system of supplying credit to Polish agriculture is functioning in a satisfactory way, although we can observe phenomena typical of the domestic banking system (increased share of irregular receivables, creation of reserves, pro-cyclicality of crediting). Polish cooperative and commercial banks specialising in granting credits to agriculture are well-capitalised and have no problems with taking deposits, but they largely rely on preferential credits and handling budget, domestic and EU support. In the case of preferential credits, their profitability is strongly determined by the interest rate policy of the National Bank of Poland, so they constitute a channel through which macroeconomic volatility is transferred to agriculture.

This clearly shows that one of the most important parameters to be monitored, which is at the same time a good predictor of financial difficulties in agriculture and among lenders, is the value of agricultural land. Empirical analyses show (Jankowska 2014), among other things, that this value is negatively correlated with the level of bank reserves for irregular receivables.

The negative effects of this relationship are particularly severe in countries where so-called *collateral-based lending* dominates (Chakraborty and Hu 2006). This system prevails in Poland. Its opposing model is the so-called cash-based lending model, i.e., a solution where banks use cash generated in an agricultural holding or a specific project as the main collateral. This approach usually leads to smaller credit losses, but it sets high requirements regarding the widespread use of systematic accounting in agriculture. Prices and value of agricultural land should be systematically monitored, as so-called speculation bubbles may appear there, which may be a direct detonator of a banking crisis. In this context, it should be noted that agriculture subsidisation leads directly to increases in land prices.

Over the last two years much has changed in the political and economic situation in Ukraine, but much remains to be done. The liberalisation of trade with Poland and other EU countries contributes to the development of the agricultural business and its promotion on the European markets.

Traditional instruments of the financial system in agriculture are gradually losing their relevance due to the processes of globalisation, and are being replaced by modern instruments that have a direct influence on the formation of prices in the agricultural market and help to reduce business risks and risks related to the characteristics of agricultural business.

In addition, the existing concept of sustainable development requires a revision of the state's share of participation in the support of agricultural businesses and increases the importance of commercial structures, as well as increasing the engagement of farmers themselves in a business. In particular, this applies to the preferential taxation of farmers. This has proven to be an ineffective tool and needs to be replaced with alternative instruments, which envisage the involvement of foreign investors in the agricultural market. But this, in turn, requires a review of land legislation, since the absence of a land market impedes investors. They are in no hurry to invest in the future harvest, because they consider them to be very risky assets.

Furthermore, world creditors with good reputations, such as the European Bank for Reconstruction and Development (EBRD) and the IMF do not credit the agricultural enterprises in Ukraine. The reason is the same–the lack of a land market and the inability to obtain land in guaranty for bank lending. These banks do not take other assets (future harvest, etc.) as collateral. At the same time, the EBRD and the IMF are opening credit lines for Ukrainian agricultural companies if the latter have financial guarantees from a parent foreign group. However, the number of such enterprises in Ukraine is limited.

The existing lending conditions are another reason for the extremely difficult financial and economic conditions in the agricultural business. For example, in 2016, the average lending rate was 3.25% in the US, in France – 3.43%, in Germany – 3.94%, in Canada – 3%, while in Ukraine it reaches 16–24% in local currency and 11–16% in foreign currency. Therefore, the dynamics of the process of lending to agriculture has been very weak in recent years. The share of credits extended to agriculture of total amount of loans by different sectors of the economy

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was 5.3% in 2010 and 6.2% in 2014 (Lupenko and Feschenko 2012).

Besides the rise in the price of bank loans, the requirements for the creditability of borrowers and their collateral have become stricter. Further, proposals for credit products have decreased due to the liquidity problems in the banking system of Ukraine, which have been reflected in the worsening credit support for agribusiness structures. At present, banks prefer the farmers who have enough collateral property, large areas of farmland and have access to the internal and external markets (UAC 2016).

Significant risks associated with natural and climatic conditions are inherent to agriculture. But these risks are additionally aggravated for developing countries in times of crisis by the instability of the exchange rate, which, in turn, leads to financial losses associated with changes in interest rates and market prices. This is primarily due to the export-oriented nature of agricultural production and price dependence on imported raw materials.

The traditional instruments of protection against financial risks are insurance policies and diversification of financial resources. However, these methods of eliminating financial risks are quite expensive and not always effective.

The experience of developed countries shows that the system of agricultural and commodity exchanges, agricultural banks and insurance companies plays an important role in the elimination of financial risks and improves the efficiency of agricultural production. Hedging is considered the modern and effective way to overcome financial risk. This technique is increasingly used by agricultural enterprises not only in developed but also in developing countries to eliminate the possibility of financial losses related to changes in interest rates, market prices and exchange rates. The effectiveness of hedging is largely determined by the functioning of the commodity derivatives market such as forwards, futures, options and swaps.

Price risk management using the futures markets has long been part of world management practices. The use of commodity derivatives on commodities markets such as markets for agricultural products is especially widespread, and results from the specific conditions of production and the high responsibility of a society to ensure that a population is fully supplied with food.

The domestic economies of the developing countries of Eastern Europe are currently rapidly integrating into the global market. Therefore, the pricing of the agricultural market is largely dependent on the situation in the leading markets in the world. For example, the Ukrainian Grain Market has determined a high level of correlation between spot prices of corn, wheat, food and futures prices for these crops at the leading commodity exchanges in Chicago, London and Budapest. Futures markets in Chicago, London and Paris are known as referential, that is, markets in which quotations are determined during price setting in the local markets of different countries.

The possibility of concluding international contracts, especially on a forward basis, should be singled out as one the benefits of the exchange trade of agricultural products. Such contracts envisage the commitment of the parties to buy (sell) products at a certain future time and based on certain conditions which are agreed upon by the parties.

For example, futures in Ukraine are used only in the stock and currency markets, and are not used in the agricultural sector, despite the obvious advantages of these derivatives. The approval of a Memorandum of Understanding between the Government of Ukraine, the National Bank of Ukraine and the Chicago Mercantile Exchange (CME) gives new hope that a futures trade of agricultural producers may be launched in this country. The first futures trading of wheat was held in June 2012 on the CME trading platform.

Forward contracts in Ukraine have been widely used in the grain market for the state support of agriculture since 2008 within the framework of the program of state-sponsored forward purchases of grain. However, the benefits of hedging the risks of agricultural enterprises with the help of forward contracts are largely offset by bureaucratic procedures involved in the agreement of the contract for the purchase of the grain.

For example, the rules for forward purchases include mandatory payment of insurance payments, which in 2013 was 3.5% of the minimum intervention price, and the need to conclude a contract of pledge for the future harvest, the use of the minimum lot of the base asset in the amount of 500 tons, and others (Kovalenko 2014).

In view of the above, it should be noted that the Ukrainian practice of hedging financial risks of agricultural producers by means of a forward contract on the Ukrainian Agrarian Exchange contradicts the economic nature of the derivative and negates its main advantages – low cost and individuality.

Thus, it should be borne in mind that he Ukrainian exchange derivatives market is in its initial stages. Such

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a conclusion can be made on the basis of the minor volume of transactions concluded with derivatives, and the short list of financial instruments which are used to carry out operations. The vast majority of exchange trade of derivatives in Ukraine is focused on the stock exchanges, where operations with derivative securities and derivatives on stock indices are carried out.

The derivatives market has been decreasing in size for the last two years. The annual report of the National Commission on Securities and the Stock Market in Ukraine showed that in 2013 transactions in the over-the-counter derivative market, in general, were not conducted, and little activity was noted in 2014. Thus, in 2014, the volume of trading derivatives decreased almost two-fold and amounted to 9.31 billion UAH.

The decreasing size of the derivatives market is due to the inconsistency of regulations, the need for registration of a collateral agreement and the moratorium on land sales. Under current conditions, the object of a pledge can only be an insured future harvest. At the same time, the insurance market in Ukraine is underdeveloped, and this is one of the reasons for the limited use of forward contracts and weak exchange trade as a whole.

Recently, many countries have increasingly used collateral financing of agricultural producers by guaranteeing supplies that allow for obtaining large loans from foreign banks under the commodity pledge, while retaining the ability to control, and even to sell the pledged property. The main advantage of such a mechanism of agricultural receipts is the fact that it allows agricultural businesses to obtain loans from the private sector, without the use of public funds, which, as a result, has a positive effect on the development of the agricultural products market. Suppliers of material and technical resources for agricultural producers, banks and traders and other intermediaries can be sources of financing. This testifies to the need for creating agrarian banks such as, for example, the Agrarian Bank in Poland.

Thus, traditional and modern instruments can be distinguished in the agricultural financial system (Figure 6).

The challenges faced by farmers in developing countries require flexibility and constructive solutions from government that will make the agricultural business less risky and increase the investment attractiveness of this branch of the economy.

The development of an exchange system promotes efficient pricing, raises the level of competition on the agricultural market, simplifies the sales process and guarantees the fulfilment of agreements regarding exchange contracts.

In this case, derivatives are a universal financial instrument that can be used to minimise risks and to generate additional investment income. The application of financial risk hedging technologies to agricultural enterprises meets the development needs of the agricultural sector of national economies. Hedging minimises risk for businesses, reduces fi-

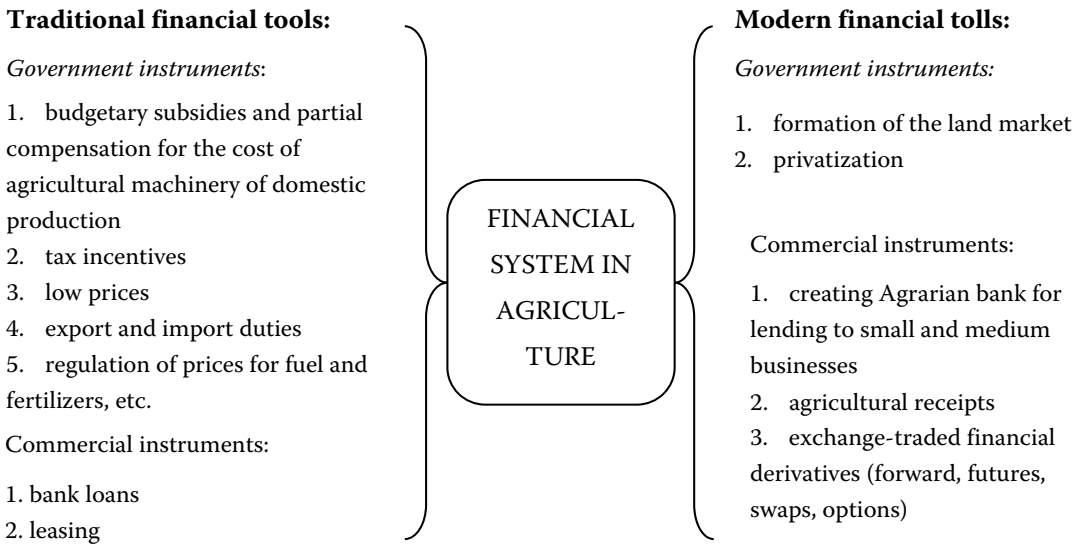

Figure 6. Traditional and modern instruments in the agricultural financial system

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nancial resource mobilisation and utilisation costs, and stabilises revenues in agrarian businesses.

CONCLUSION

Generally, the Polish financial system is small, in terms of the level of assets possessed, and peripheral in relation to regional and global financial markets. It is also characterised by a relatively higher level of margins and charges, which indicates insufficient competition, technical and technological underdevelopment and high transaction and financial intermediation costs. As a result, domestic customers for financial services are on average in a slightly worse position than their counterparts from other European countries, even from Central and Eastern Europe. A significant part of the Polish population (i.e., almost one half of potential bank customers) are excluded from the formal financial market. On the other hand, our financial system is perceived as stable and safe. It is thus difficult to definitively decide whether this system may already be regarded as a public good.

The Ukrainian financial system, in turn, could be modernised using Polish experience of the insurance and subsidies of credit risks. The so-called land issue is an obstacle in Ukraine. Given that the agricultural sector is the most attractive investment option even in the face of the state monopoly on land, the removal of the moratorium on land trade will immediately raise the investment activeness of foreign corporations and will increase the profitability of the agricultural sector.

Modern financial systems in agriculture are usually mixed, i.e., they combine features of market solutions and a model for financing development. As part of the common agricultural policy of the European Union, a modern financial system is mostly shaped by the acceptability of certain forms of credit interventionism and instruments for maintaining revenues and stimulating sustainable development. This model has recently received a strong incentive in the form of a freeze in negotiations to liberalise agribusiness as part of the WTO. Through a sharp increase in financial flows in agriculture and in rural areas, the common agricultural policy also gives certain impulses to the development of a market financial system, but the budget (fiscal) financial system plays a more important role. The relations between the latter and financial globalisation are even more complex, and the channels of impact are mainly connected with interest rates, exchange rates and movement of portfolio investments. In reality, the problem becomes very complicated, as the above-mentioned channels are also affected by the market financial system. It will be thus necessary in the future to consider various combinations of fiscal and monetary policy, also in the event of Poland entering the eurozone.

A long road of development and reforms in the agricultural and tax policy lies in front of Ukraine. Bank loans, government subsidies, crop insurance as well as derivative financial instruments like futures and spots will be the main tool for the sustainable development of agribusiness.

So far, the physical, economic and social proximity of financial institutions and their customers has been of key importance for financing rural areas and agriculture as well as small businesses. Allowing financial institutions to decide about developing a spatial network of agencies may lead to exclusion of less attractive customers and areas from access to the financial market. On the other hand, however, extensive interference of the state in defining the structure of the financial system of rural areas and agriculture (and its functioning) also carries many threats with it. Every country has to find the right combination of interventionism and market mechanisms. One thing is certain: local institutions are still an important determinant of changes in rural areas and in agriculture, although sometimes they act as local financial monopolists.

The condition, stability and effectiveness of these institutions are indeed a type of a public good. Globalisation and financial integration, and above all technical and technological innovations, have a multidirectional influence on local financial institutions. On the one hand, they will feel competitive pressure exerted by large institutions offering financial services, which may cause decreases in unit costs, charges and margins. On the other hand, however, conditions may be created to mitigate the negative effects of the fragmentation of local financial markets in the form of reduced possibilities of risk diversification and improvement of capital allocation. Naturally, this will make local markets and financial institutions more exposed to shock and threats caused by internationalisation of capital flows. The net effect of those opposing processes is not easy to determine. However, it can be stated with confidence that for sustainable and stable development, local financial institutions need high effectiveness, innovativeness, continuous technical and technological progress, and

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the risk that they are exposed to should be at a level that can be controlled and managed.

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