Introduction

Reform in the agrarian sector is accompanied by instability of production tides, inflation rate, credit-price hike, a significant decrease in state support for agriculture and the whole agro-industrial complex, erosion of purchasing power of agricultural consumers and rise in debt of agriculture and industrial enterprises, which produce means of production necessary for agricultural producers.

For economically independent enterprises, there is a need for groundbreaking approaches to ensuring their own economic security, which requires a radical change in the entire system of protection of economic interests [Blank 2004, p. 17]. That’s why financial security is defined as an essential component of economic security of enterprise, special attention to which should be given by business entities including agricultural enterprises.

Research Goals, Tasks, Objects and Methods

The goal of the research is to draft scientifically grounded proposals on development of the crop insurance system in Ukraine by improving the existing provisions and developing theoretical, methodological and organizational ones. Implementation of this goal is associated with the solution to the following tasks:

- to clarify the line of anti-risky activity of agricultural enterprises in order to provide their insurance coverage;
- to evaluate the current state, features of risks insurance of crop production in Ukraine and its methodological support;
- to analyze trends of crop insurance and the need for government support in conjunction with the other forms of insurance coverage;
- to justify the ways of development of crop insurance system in order to improve insurance coverage of agricultural production.
The object of research is crop insurance in Ukraine, its state support and the practice of its implementation as a risk management tool in crop production. The following methods were used in the research: analytical, statistical, normative, formalization, observation, etc.

**Research Goals, Tasks, Objects and Methods**

The goal of the research is theoretical and methodological basis of the definition of the notion “financial security of agricultural enterprises”, the disclosure of basic essential features of the financial security of agricultural enterprises in the context of current changes in the economic situation in the country, taking into account macro-and microeconomic aspects of this problematic. Implementation of this goal is associated with the solution to the following tasks:

- to justify the essence of the concept of “financial security of enterprise” and peculiarities of its provision to agricultural enterprises;
- to analyze the ways of ensuring the stability of the financial security system of agricultural enterprises;
- to determine the directions of organizational and economic measures to improve the financial stability of agricultural enterprises.

The object of research is financial security of the Ukrainian agricultural enterprises as a tool to enhance the financial stability of agricultural enterprises. The following methods were used in the research: analytical, statistical, normative, formalization, observation, etc.

**Results of the Research**

The transition to a market economy has led to the strengthening of the role of finances and defined their new place in the economic system. The majority of market instruments refer to elements of the financial mechanism, i.e., they are part of the financial system. Therefore, under the financial security at the state level one should understand the state of the financial, monetary, currency, banking, budgetary, taxation systems, characterized by a balance and resistance to internal and external negative effects, the ability to ensure the effective functioning of the national economic system and economic growth. The concept of “financial security of enterprise” is synthesized and integrates in itself essential characteristics of the categories of “economic security of enterprise” and “finance of enterprise”. Being a bearer of financial measures to ensure the effective economic development of enterprise, financial security
is the object of its economic management, entrusted to appropriate financial services.

In recent years, the main adverse factors that caused the crisis in the financial and economic system of Ukraine were as follows [Kyrychenko 2009, p. 14]:

- diminution in external demand,
- deterioration of financial performance of enterprise;
- diminution in consumer and investment demand;
- business loss;
- reduction in purchasing power of the population;
- high rate of inflation.

The growth in agricultural production, due to the negative impact of the global financial crisis, did not allow to improve the financial performance of this sphere and the standard of living of the rural population. In addition, the imbalance of supply and demand of agricultural production and low purchasing power of the population, which significantly limits the capacity of the domestic market resulted in deterioration of the price situation on certain food markets [Mazur 2011, pp. 8–10].

Now agricultural producers are losing the basic sources of obtaining current assets, particularly from the sales of their own products and reduction in state support, which requires urgent solution to the issues of their lending, first of all, to prepare for the spring-field works.

Most banks have stopped or significantly reduced the volume of lending, even in operating loan facilities, overdraft and credit rates are increasing, payments are made with delay. Prolongation of credits involved in prior periods is carried out slowly by agricultural producers.

Rate of growth of wages in agriculture is unable to ensure its motivational function and secure qualified personnel in the rural areas in full.

Assessment of debt trend of agricultural enterprises can be based on the following indicators:

1. The level of debt loads on assets (the ratio of total liabilities to total assets).
2. The level of net debt loads on assets (the ratio of total liabilities minus the cost of receivables to total assets).
3. Turnover of accounts receivable (the ratio of the amount of sales proceeds to the amount of accounts receivable).
4. Turnover of accounts payable (the ratio of the amount of sales proceeds to the amount of accounts payable).
5. Participation of accounts payable in the financing of the cost of production (the ratio of the amount of accounts payable to cost of sales).

Turnover of accounts receivable is the number of days required to cover this debt, during which the entity receives cash from customers or other counterpar-
Turnover of accounts payable is understood as the period (expressed also in days), during which the organization should cover its credit debt.

The use of these indicators makes it possible to assess debt trends in the agrarian sphere of Sumy region for a long period of time. First of all, it is expedient to trace the ratio of turnover of receivables and payables (Figure 1).

![Figure 1: Ratio of Turnover of Receivables and Payables](http://www.ukrstat.gov.ua)

In the period of 1995–2010 there is a clear trend towards reducing the gap in the turnover of both types of debt that positively affects the solvency of agricultural enterprises of Sumy region. The biggest gap was in the period of 1998–1999, when the turnover period of accounts payable amounted respectively to 420 and 344 days against 57 and 53 days of turnover of accounts receivable.

Typical in this regard is the trend of receivables and payables ratio in the total balance of agricultural enterprises (Figure 2).

The chart shows that since 1998 the ratio of receivables in the amount of assets steadily increased. In 2009–2010 it exceeded the ratio of payables in the amount of liabilities of agrarian formations. A further analysis of debt trends enables to examine the relationship between debt activity and results of economic activity (Table 1).

As the calculations have shown, with the growth of net debt burden on assets by 10 kopecks, return on sales decreased by 3.7%. With the increase in participa-
tion of accounts payable in the financing of the cost of production by 0.01 points, return on sales decreased by 1.3% [Skrypnyk 2011, p. 52].

Meanwhile, the debt problem is inextricably linked to issues of bankruptcy, the probability of which will significantly influence the debt ratio of the economic agent, putting the latter in a certain scope of debt rationality.

Financial security of agricultural enterprises is a key element of their economic security. The substantive nature of financial security of agricultural enterprises is directly linked to the economic sphere of its manifestation. It is integrated with the category of economic security of agricultural enterprises, which is one of its most important elements.

Almost all objectives of economic development of agricultural enterprises, and raise in the volume and recovery of its assets require increase in the amount of financial resources. Selecting the sources of formation of these resources, as well as minimizing the cost of their involvement largely determines the level of economic independence of agricultural enterprises and efficiency of their business [Wasilewski, Felczak 2011, p. 58]. Thus, the strategy to ensure financial security of agricultural enterprises is an integral part of the overall strategy of their economic development.

Figure 2
Dynamics of debt ratio of agricultural enterprises in Sumy region in the total amount of their assets (liabilities)

Source: Calculated according to the data of the State Committee of Statistic of Ukraine: http://www.ukrstat.gov.ua.
**Table 1**
Debt Burden and Its Impact on the Economic Results of Agricultural Enterprises in Sumy Region

<table>
<thead>
<tr>
<th>Years</th>
<th>Level of debt load on the assets, UAH*</th>
<th>Level of net debt load on the assets, UAH*</th>
<th>Turnover of accounts receivable</th>
<th>Turnover of accounts payable</th>
<th>Participation of accounts payable in cost financing</th>
<th>Return on sales, [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0.216</td>
<td>0.209</td>
<td>42.458</td>
<td>11.821</td>
<td>0.118</td>
<td>28.1</td>
</tr>
<tr>
<td>1991</td>
<td>0.132</td>
<td>0.112</td>
<td>20.482</td>
<td>6.159</td>
<td>0.259</td>
<td>39.8</td>
</tr>
<tr>
<td>1992</td>
<td>0.127</td>
<td>0.050</td>
<td>6.737</td>
<td>7.521</td>
<td>0.338</td>
<td>48.0</td>
</tr>
<tr>
<td>1993</td>
<td>0.193</td>
<td>0.056</td>
<td>3.319</td>
<td>3.309</td>
<td>0.555</td>
<td>49.7</td>
</tr>
<tr>
<td>1994</td>
<td>0.344</td>
<td>0.223</td>
<td>7.220</td>
<td>3.409</td>
<td>0.541</td>
<td>33.4</td>
</tr>
<tr>
<td>1995</td>
<td>0.139</td>
<td>0.111</td>
<td>10.000</td>
<td>2.222</td>
<td>0.500</td>
<td>10.0</td>
</tr>
<tr>
<td>1996</td>
<td>0.059</td>
<td>0.048</td>
<td>8.057</td>
<td>1.602</td>
<td>0.603</td>
<td>–17.4</td>
</tr>
<tr>
<td>1997</td>
<td>0.085</td>
<td>0.071</td>
<td>6.844</td>
<td>1.141</td>
<td>0.720</td>
<td>–43.8</td>
</tr>
<tr>
<td>1998</td>
<td>0.130</td>
<td>0.116</td>
<td>6.317</td>
<td>0.869</td>
<td>0.825</td>
<td>–62.9</td>
</tr>
<tr>
<td>1999</td>
<td>0.155</td>
<td>0.139</td>
<td>6.600</td>
<td>1.061</td>
<td>0.773</td>
<td>–43.4</td>
</tr>
<tr>
<td>2000</td>
<td>0.335</td>
<td>0.298</td>
<td>9.493</td>
<td>3.256</td>
<td>0.402</td>
<td>20.9</td>
</tr>
<tr>
<td>2001</td>
<td>0.404</td>
<td>0.349</td>
<td>7.250</td>
<td>3.035</td>
<td>0.437</td>
<td>1.9</td>
</tr>
<tr>
<td>2002</td>
<td>0.419</td>
<td>0.364</td>
<td>7.221</td>
<td>2.755</td>
<td>0.445</td>
<td>–7.9</td>
</tr>
<tr>
<td>2003</td>
<td>0.438</td>
<td>0.372</td>
<td>6.237</td>
<td>2.714</td>
<td>0.441</td>
<td>–1.9</td>
</tr>
<tr>
<td>2004</td>
<td>0.454</td>
<td>0.364</td>
<td>5.503</td>
<td>2.816</td>
<td>0.446</td>
<td>2.1</td>
</tr>
<tr>
<td>2005</td>
<td>0.408</td>
<td>0.313</td>
<td>5.864</td>
<td>3.351</td>
<td>0.387</td>
<td>4.1</td>
</tr>
<tr>
<td>2006</td>
<td>0.457</td>
<td>0.330</td>
<td>4.649</td>
<td>3.105</td>
<td>0.397</td>
<td>3.1</td>
</tr>
<tr>
<td>2007</td>
<td>0.456</td>
<td>0.309</td>
<td>4.258</td>
<td>3.777</td>
<td>0.389</td>
<td>16.4</td>
</tr>
<tr>
<td>2008</td>
<td>0.569</td>
<td>0.409</td>
<td>3.511</td>
<td>3.121</td>
<td>0.443</td>
<td>–4.5</td>
</tr>
<tr>
<td>2009</td>
<td>0.614</td>
<td>0.397</td>
<td>3.372</td>
<td>3.529</td>
<td>0.458</td>
<td>1.5</td>
</tr>
<tr>
<td>2010</td>
<td>0.642</td>
<td>0.428</td>
<td>3.566</td>
<td>4.023</td>
<td>0.363</td>
<td>1.5</td>
</tr>
<tr>
<td>Average annual growth</td>
<td>0.025</td>
<td>0.018</td>
<td>–0.789</td>
<td>–0.149</td>
<td>–0.009</td>
<td>–1.5</td>
</tr>
</tbody>
</table>

* Exchange rate was 9.25 UAH/EUR in 2010

Source: Calculated according to the data of the State Committee of Statistic of Ukraine: http://www.ukrstat.gov.ua.
Operations, related to financial activities of agricultural enterprises, are of a stable character, i.e., they are carried out constantly. This is due to the fact that every agricultural enterprise in the process of its development needs external financing of various directions of financial activity, and therefore provides a continuous service of financial resources attracted from external sources. Financial operations are carried out even in a temporary complete cessation of operations of agricultural enterprises because of poor condition of commodity market or for other reasons. In these cases measures to ensure financial security are of primary importance in the system of general economic security of agricultural enterprises [Arefyeva, Kuzenko 2009, p. 101].

Financial activity plays a priority role in ensuring economic stability of agricultural enterprises in general. The instruments of such stabilization are various insurance and other trust funds, generated in the process of financial activity, against the possibility of incidental fluctuations not only of the financial, but also commodity markets, reduction in operating business and operating profit respectively. The higher share of these insurance and other trust funds in the total capital used by entity is, the higher level of its economic security and implementation of objectives of its economic development.

Risks associated with financial activities of agricultural enterprises (financial risk) with their adverse effects are the most dangerous. Implementation of many financial risks creates a direct threat to the loss of a substantial part of equity, bankruptcy and winding up of agricultural enterprises.

Thus, being a bearer of financial measures to ensure the effective economic development of agricultural enterprises, financial security is the object of its economic management entrusted to the appropriate financial services.

Financial security is a system of quantitative and qualitative parameters of the financial condition of agricultural enterprises, which together reflect the level of its financial security. In this essential characteristic of the concept of financial security of agricultural enterprises the following constituents should be distinguished:

1) financial security of agricultural enterprises represents determinate aspect of its financial status, that reflects one or the other level of financial security. Although in the work of some researchers there are the features of security of agricultural enterprises such as a form of behavior of business entity, the degree of harmonization of the most important directions of its activity, form of sovereignty and others.

Financial condition of agricultural enterprises, which characterizes its financial security, is shown by a set of defined parameters. The molded system of these parameters is the most important distinctive feature of the notion of financial security of agricultural enterprises from other forms of security. This set of parameters is formed on the principles of systematic approach, which allows to
characterize the financial security of agricultural enterprises as an independent system that differs from other systems of operation of agricultural enterprises.

2) parameters of the financial security system of agricultural enterprises require a clear quantitative and qualitative determination. Such determination of values of individual parameters enables to evaluate the level of financial security of agricultural enterprises, to form its desired dynamics with regard to the trends and features of its financial activities. Thus it should be borne in view that the quantitative or qualitative change in each of the parameters of economic security of agricultural enterprises is displayed on its overall level. The quantitative and qualitative determination of parameters of financial security creates its unique system for each certain entity.

The object of providing financial security is the existing system of priority balanced financial interests of agricultural enterprises that require protection in the course of its financial activities. This characteristic of the notion of economic security of agricultural enterprises is one of the most important, as the financial interests determine not only the basis for the construction of its system, but form the directions of development of all financial activity, its motives. Clearly defined financial interests give rise to the strongest incentives to intensify and improve financial performance of agricultural enterprises, and vice versa, this activity is deprived of the necessary purpose without sufficient identification of the financial interests.

When considering the essential characteristics of the notion of financial security of agricultural enterprises one should pay attention to the following main points:

- in the financial security system of agricultural enterprises one should consider only priority financial interests that play the most important role in its development. Review of all financial interests caused by various types of financial relations of agricultural enterprises at all levels of its financial activity would significantly complicate the system of its financial security and reduce the possibility of complex of priority protective measures;
- a system of priority financial interests should cover not only current, but also their long-term types. This stipulates the strategic orientation of the financial interests of agricultural enterprises considered in the system of its financial security;
- priority financial interests of agricultural enterprises in the system of their financial security should be balanced with the interests of other entities of its financial relations. This balance or harmonization of financial interests is an essential condition for improving the efficiency of the molded system of financial security of agricultural enterprises. In the first place such balance of the financial interests of agricultural enterprises should be carried out with the financial interests of entities of the external environment in which it operates. In this case, the financial security of agricultural enterprises will be
based not only on their own financial capabilities, but also on the financial potential of its partners in business.

The basis for financial security of agricultural enterprises is the identified system of real and potential threats of external and internal nature to its financial interests. Orientation of financial activity of agricultural enterprises to prevent threats to its financial interests is the main intrinsic characteristics of the concept of its financial security. The factors (conditions, actions), which impede the full realization of the financial interests in the process of the development of agricultural enterprises, should be considered to be threats to these interests of agricultural enterprises.

On consideration of this essential characteristic one should focus attention to the following fundamental provisions:

- threats to the financial interests of agricultural enterprises are generated by the action of not all the factors that affect its financial activities, but only some of the factors that make the destructive impact and require identification.
- identifications should be determined as the composition of the factors that make a destructive impact on the implementation of financial interests and the possible size of damage to the financial interests of agricultural enterprises-loss of profits, capital, etc.

In the system of financial security of agricultural enterprises not only real but also potential threats are identified. This is due to the fact that necessary protection of both current and long-term (strategic) financial interests of agricultural enterprises should be provided in the formation of financial security:

- the concept of the financial security of agricultural enterprises includes protection of its priority interests not only from external but also internal threats. The system of these threats is determined in the process of research of the factors of external and internal financial environment of operation of agricultural enterprises;
- among all identified threats the main attention in the system of ensuring the financial security of agricultural enterprises is focused on the most hazardous forms. These threats include the ones that affect the opportunities of feasibility of the priority financial interests and lead to rather tangible financial losses for agricultural enterprises.

Following the accepted financial philosophy agricultural formations choose independently the specific type of policy of the formation of the system of financial security, that defines a specific differentiated level of quantitative and qualitative parameters of the protection of its financial interests.

Considering the financial security of agricultural enterprises as a stable system, one should pay attention to the following key points:
stability of the system of financial security of agricultural enterprises is considered as its dynamic characteristics. This means that along with the parameters of its static state (relevant accepted target or normative values of these parameters in the perspective period in an unchanged form), it can be characterized also by stable trends of their changes in the process of the development (for example, sustainable rates of growth of their own financial resources generated from domestic sources);

stability of the system of financial security of agricultural enterprises is not of absolute character. In the development of financial security of agricultural enterprises individual values of its parameters can be cyclical (seasonal cycles, cycles of economic activity, etc.) or opportunistic in nature. But during the change in certain parameters the system of financial security of enterprises maintains the predicted security level of financial interest;

at certain stages of its development the system of financial security of agricultural enterprises can abruptly change, reaching the new level of the parameters of its stability. Transition of agricultural enterprises to a new stage of business cycle, experienced financial crisis and its reorganization, etc. can be attributed to these periods.

The most important target orientation of the system of financial security of agricultural enterprises is to create the necessary financial preconditions for sustainable growth of agricultural enterprises in the current and prospective period. Like all functional systems of the financial management, the system of financial security subordinates the primary objective – to ensure the growth of the market value of agricultural enterprises. This overall objective of operation of agricultural enterprises is maintained by the system of its own financial security through its primary instructed target setting-providing of financial prerequisites for sustainable growth of agricultural enterprises in the current and long-term periods.

This target-oriented system of financial security of agricultural enterprises comes from the fact that the possibilities of its sustainable growth are provided firstly by the most important parameters of its financial condition. The ability to maintain and increase its financial capacity, to ensure implementation of the financial interests, to maintain the required level of financial independence and stability, making the basic notion of financial security of agricultural enterprises, are at the same time the most important financial prerequisites for ensuring its sustainable growth.

The process of transition of agricultural enterprises to a sustainable growth maintained by its financial security involves the differentiation of target orientation of the formation of this system in the short and long-term period.

In the short-term period goal and objectives of the formation of financial security of agricultural enterprises to ensure its transition to sustainable growth,
should be focused on stabilizing its financial situation, in which the initial foundation for the future sustainable development is laid.

In the long-term (strategic) period the goal and objectives of the system of financial security of agricultural enterprises should be focused on preservation of the most important financial ratios that ensure its steady growth and constant increase in market value.

We can state that the effective functioning of economic and social mechanism of agricultural enterprise, job security of its staff as well as the level and conditions of their lives will depend on the level of financial security.

In our opinion the specific features of agriculture as a sector require an individual approach. With regard to our object of study we suggest the following interpretation: “The financial security of agricultural formation is a complex concept that ensures prevention of negative influence of factors of internal and external risks, effective use of financial resources, availability of prospects of economic development and a positive investment attractiveness of the agricultural enterprises”.

In the detailed form financial security of agricultural enterprises can be represented as:

- the state of the effective use of financial resources, resulting in positive values of profitability, quality of management, capital and asset turnover, financial interests;
- optimum capital structure;
- maintenance of the market value of securities;
- increase in dividend payments;
- prospects of economic development.

**Conclusions**

The economic essence of financial security is expressed in a complex of organizational and economic measures that provide resistance to natural and economic risks, adequate credit and investment attractiveness, and positive return on invested capital.

Financial security of agricultural formations should include not only the evaluation of the economic results of enterprise and timely monitoring of the activity of agricultural enterprises, but also the financial diagnostics with the purpose of revealing of deviations from the normal financial condition and finding out the reasons, which caused negative processes. Financial diagnosis should be considered as a set of measures that provide qualitative and comparative analysis of the main parameters of the financial system of agricultural enterprises: avail-
ability and use of financial resources, comprehensive assessment of the financial situation, potential in terms of access to external finance.

The main direction of the development of agricultural enterprises is to determine the financial security strategy, which would protect their financial interests from various threats by forming long-term objectives of such protection, selecting the most effective ways of their achieving, adequate adjustment of directions and forms of protection under the change in the factors and conditions of the functioning of the financial environment.

To improve the financial security of agricultural enterprises in Ukraine it is necessary to provide the optimum level of output, that would satisfy the needs of the population and the processing industry, the development of rural areas on the basis of the growth of the rural population income, conservation and enhancement of the natural resource potential as the basis for agricultural production.

References


Bezpieczeństwo finansowe w przedsiębiorstwach rolniczych

Streszczenie

Autorzy przedstawili kluczowe zagadnienia związane z bezpieczeństwem finansowym przedsiębiorstw rolniczych w kontekście bieżących zmian w krajo- wej gospodarce. Autorzy dowiedli, iż przedsiębiorstwa ukierunkowane na zrów- noważony rozwój, wspierany przez odpowiednie zabezpieczenie finansowe, po- zwala na zróżnicowanie przyjętych celów w ujęciu krótko- i długoterminowym.