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## **Domestic support for Ukrainian agriculture under the conditions of world financial crisis**

**Abstract.** In the last years Ukraine has allocated considerable, with respect to their load on the budget, financial resources for agricultural support. However the significant increases of budgetary support do not substantially influence the effectiveness indices nor agricultural yields. Such information testifies to an imperfect nature of the internal support mechanism of Ukrainian agriculture. As the result, the domestic support did not become an effective stimulus for a production quality increase nor for a rise in the stock breeding production. In 2008 Ukraine gathered the biggest grain harvest. Increased production did not improve the financial results of agriculture and did not produce a stable and dynamic branch development because of the negative influence of world finance crises. Unbalanced supply and demand for agricultural production, low buying ability of inhabitants, lack of branch effective mechanism of domestic support caused complications of price situation in the domestic food market.

**Key words:** domestic support, agrarian policy, agriculture, Ukraine.

### **Introduction**

An impartial necessity of the state support of agriculture in the conditions of market economy is caused, from the point of view of economic theory, by unique peculiarities which are immanent for this branch, its place and importance in providing the state food security and for the life of society. According to the foreign and national experience the negative consequences of volatility of the internal and external environment have a significant influence on the parameters of agricultural production development. The existing problems are significantly complicated by the crisis phenomena which periodically emerge in the development of the domestic and world economy. It is really true: the global food crisis has been changed by the financial crisis. The scientific research concerning the increase of role and place of the state in the area of regulation of economic processes needs deepening in order to avoid the possibility of appearance of crisis phenomena and in order to provide sustainable agricultural development in the long term.

The complexity of the present situation lies in that for the years of reforms Ukraine has not been able to substantially increase the effectiveness of agricultural production, to perform a technological re-equipment and to create an innovational model of the

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development of the branch. The managerial decisions of the state in the area of agricultural production are in practice not consistent and effective which, as a result, does not allow to achieve the desirable financial and economic results of the development of the branch and which also does not allow to meet in the full extent the requirements of society. This situation, from our point of view, is caused by a quick change of the external environment, by an absence of practical experience in the decision-making under market conditions, by an insufficient level of its scientific support. It shows that an integrated system of state regulation of agricultural production in Ukraine has not been formulated yet.

Ukraine is making only the first steps as a competent member of the World Trade Organization and that is why it can be affirmed that the degree of its integration into the world markets is not high enough and that the external crises have rather a somewhat lesser influence on the branch than its internal problems. In the future situation, under the conditions of strengthening of the world prices influence on the domestic agricultural market, one of the important tasks of state regulation will be to provide the information on the possibility of appearing of crisis phenomena and to minimize the influence of negative consequences on the Ukrainian economy. Otherwise there arises a real menace for the domestic agriculture which is linked with the possibility of gaining the status of a resource base country for the developed countries.

So there is a necessity of implementation of a weighed and systematic approach to the development and realization of the state agricultural policy, which is directed to the protection of the domestic market with the help of mechanisms which correspond to the international principles and standards; and there is a necessity of formation of a competitive, export oriented agricultural production through an effective usage of land, labour, intellectual, material and financial resources, through an implementation of innovation, increase of labour efficiency and products' quality and also through the creation of favourable conditions for attraction of state and private investment into the Ukrainian agriculture. The accomplishment of the above tasks will depend on the effectiveness of the state support for the branch on various hierarchical levels of governance.

The theoretical reinterpretation and the methodological improvement of the governmental support for agricultural production under the conditions of global changes of the external environment are caused, first of all, by the need of a quick adaptation of the agricultural branch to the new conditions of economic activities and of a formation of preconditions for a sustainable development of agriculture in the long-term perspective. That's why the search of new theoretic, methodological and practical approaches concerning the improvement of state support for agricultural production (also taking into account the knowledge which is accumulated by the economic science and also taking account of advanced foreign and national experience) is an exceptionally topical task [Dibrova 2008].

## **Material and methods**

The present research is based on general scientific methodology. During the process of research the system analysis and synthesis, monographic, abstract, logical, economic mathematical, computational and balance methods of scientific research were used.

In order to evaluate the effectiveness of agricultural policy and the level of domestic support for agriculture a methodology which is applied in the OECD member states was

used. The methodology of quantitative estimation of the state support is substantiated in the works of such famous scientists as Josling [1988], Tsakok [1990], Webb, Lopes and Penn [1990].

## Results

Integration of Ukraine into the world community causes the necessity of a system approach to the analysis of modern processes of the agricultural production development, with the aim of elaboration of appropriate mechanisms of regulation which are able to provide quick adaptation of the agricultural branch into the new conditions of economic activity. Amongst them a special place belongs to justification of theoretical and methodological principles of the state support for agriculture. The important point for the further research is the statement that the state support can not be associated with state regulation, because the latter can be directed not only to the stimulation of development of economic processes, but also to their restriction. The examples of production restriction in agriculture are the programs which are applied in the EU member states and in the USA. Thus, realizing the function of restriction, the state can at the same time exert an incentive influence through the system of governmental support.

In our view, the state support is a constituent of a system of state regulation of agriculture and it is an aggregate of law, financial, economic, organizational and other measures taken by the state (government) within the frames of an incentive influence on the development of both agricultural production and rural areas in the socially desired direction. Nevertheless, treating of state support only from the perspective of financial and budgetary support is incomplete, because it can include an information support, a development of extension service, a system of insurance and exchange market [Dibrova 2008].

Together with this, the modern agricultural economics science requires further research concerning the estimation of effectiveness of state support for agriculture. An investigation of foreign experience shows that in the developed countries changes in producers' and consumers' surpluses are widely employed means for measuring (in monetary equivalent) of profit and expenses which appear as a result of a change in country's agricultural policy. It's necessary to highlight that in the countries belonging to the Organization of Economic Cooperation and Development (OECD) a significant experience has been accumulated and a methodology and indexes of estimation of the effectiveness of state support of agriculture have been developed. That is why under the conditions of WTO membership an estimation of constructive indices of the state support for agriculture in Ukraine is an urgent task for adaptation of the national regulation system to international requirements.

WTO requirements underscore the need of decreasing the domestic support in that part, which makes distorting influence on trade, and displacing accents from production support to the support of agricultural producers through so called decoupling. However, the level of agricultural support in the countries with developed market economy stays high.

On the average in Ukraine the relative index "Producer Support Equivalent" (PSE) was for 2001-2006 equal to 0.1%, which is much less than in other developed countries of the world. PSE index shows the share of transfers to agricultural producers in the general volume of earnings in agricultural enterprises, or the share of their earnings connected with

the state agrarian policy. This attests that on the average 99.9% of gross volume of earnings of agricultural enterprises in 2001-2006 was received from the market without any state support. However, on the other side, there is a question, how is it possible, when in the last years the state has significantly increased the volume of financial resources in support for domestic agriculture. From 2000 to 2006 the volume of state assignments to financing agriculture from the state budget increased more than 6.6 times, from 1.2 to 7.9 billion hryvna. The share of budget assignments to agriculture in general expenses of the state budget increased during the analyzed period from 3.5% to 5.7%, and the same in GDP increased from 0.7% to 1.5%. First of all, such inconsistency is connected with a situation, when simultaneously with the increase of volume of state support took place a significant decrease in purchase price of agricultural products.

In the conditions of market economy for the development of a balanced agrarian policy it is very important to determine correctly its effectiveness and its impact on those who produce agricultural production. With this purpose in mind the “Market Price Support” (MPS) is calculated basing on the “Methodology of state agricultural support appraisal” which has been developed and used in the OECD. It determines the cash value of transfers to producers from consumers and taxpayers for a period of one year, which appeared as a result of action of the state policy instruments and which creates a gap between prices of particular kind of agricultural products in the local and foreign market (Figure 1).

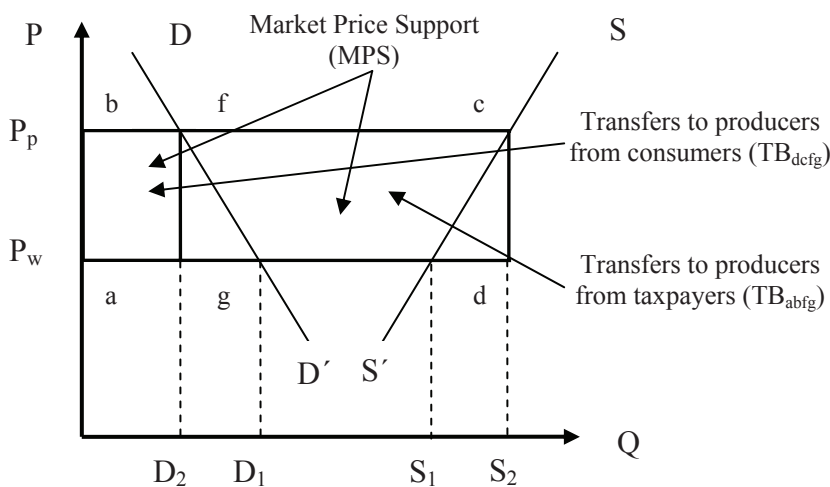


Figure 1. Market Price Support (MPS) and transfers to producers from taxpayers (TBabfg) and consumers (TBdefg) in the conditions of export

Source: [Methodology... 2009]

MPS indicator is determined in producer's prices and is calculated according to a formula:

$$MPS = (P_p - P_w) * S_2$$

where:

$P_p$  – local price per unit of product,  
 $P_w$  – world price per unit of product,  
 $S_2$  – local market supply,  
 $D_2$  – local market demand,  
 $S_1$  – local market supply at world prices,  
 $D_1$  – local market demand at world prices.

This approach is based on the fact, that every deflection of local prices from world prices can be treated as an indicator of state intervention into the open market mechanism. The size of price deviation determines the level of this intervention, and, accordingly, gives a quantitative characteristic of state agrarian policy [Melyukhina & Serova 1996].

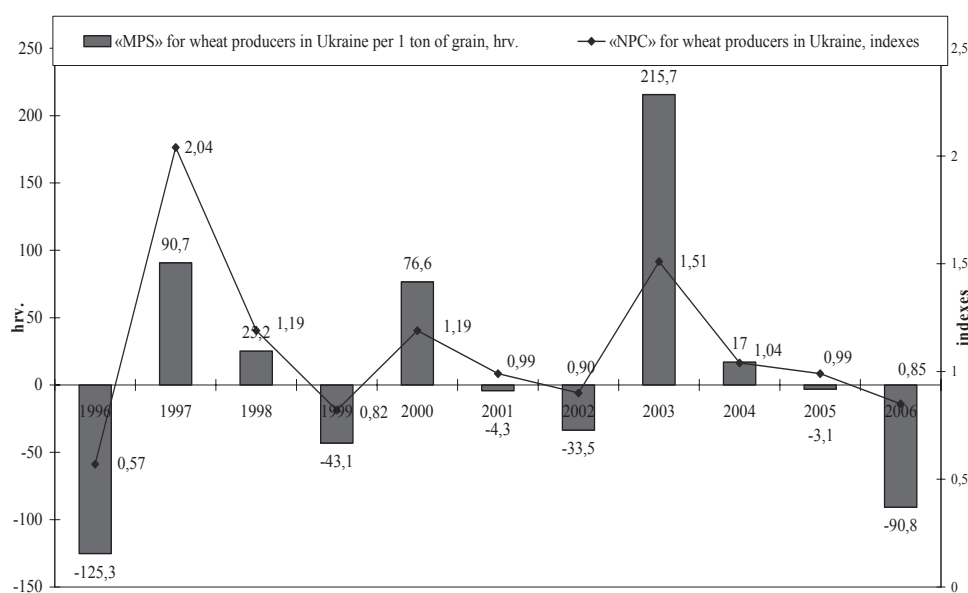


Figure 2. "Nominal Protection Coefficient" (NPC) and "Market Price Support" (MPS) for wheat producers in Ukraine per 1 ton of grain

Source: own calculation on the base of the OECD data and data of the State Committee of Statistics of Ukraine.

As we see from the data in Figure 2, MPS index for wheat producers in Ukraine for the period from 1996 to 2006 has either positive or negative values, which suggests some inconsistency of the state support system. When this value is positive, the agrarian policy is directed towards agricultural producers support by consumers and state. When this value is negative producers' incomes are reallocated to consumers' and other economic groups' good.

The computed values of NPC (net protection coefficient) index for wheat (as a ratio of average price which producer receives in the local market to the producer's price in the world market) confirm a price instability and a low effectiveness of the mechanism of state regulation of grain market in Ukraine.

The analysis confirmed that the gross transfers to wheat producers from taxpayers have accounted on the average for 33 hrv per 1 hectare of harvested area in years 2004 –

2006. At the same time the gross transfers from consumers have accounted for minus 73 hrv per hectare. Notably, when calculating the average per 1 hectare of agricultural area the commodity producers in fact ‘grant’ the consumers of particular products. In such a way, as a result of a negative value of the MPS index, the state financial resources are actually directed to producers’ compensation (Figure 3).

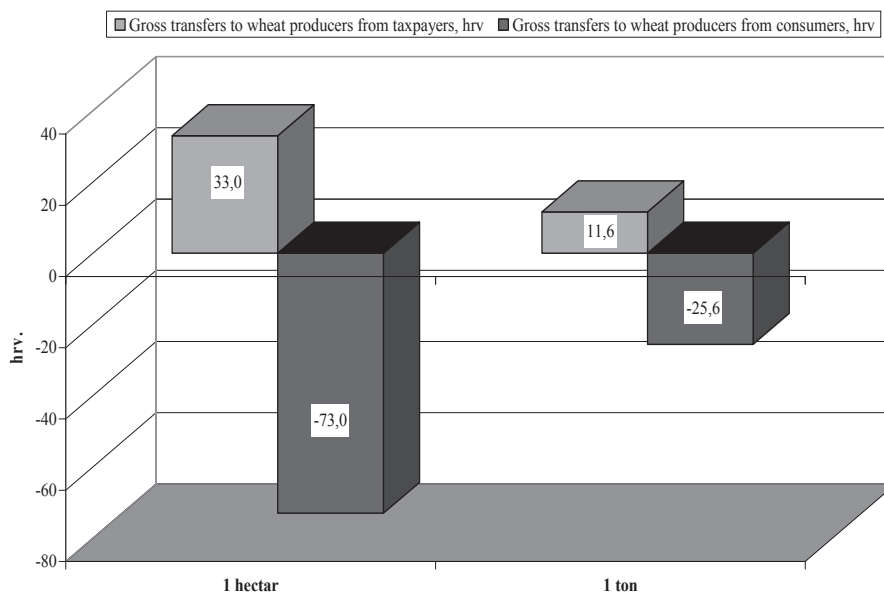


Figure 3. Gross transfers to wheat producers from taxpayers and consumers in Ukraine on the average per 1 hectare of harvested area and 1 ton of grain for a period 2004-2006, hrv.

Source: own calculation on the base of the Ministry of Agricultural Policy of Ukraine data and data of the State Committee of Statistics of Ukraine

On the base of conducted analysis we can make a conclusion that capabilities for improvement of the state regulation mechanism are strongly restricted. The need of changing the approach to the mechanism of state regulation is caused by a need of improving the socio-economic parameters of agricultural development and that of formation of the whole system of state regulation with the aim of prevention of a possibility of appearance of crisis phenomena and of minimizing the influence of negative agricultural results on the economy of Ukraine.

So far, in the situation of current level of agricultural productivity portrayed by the calculated indices, the possibility of its development will be insufficient for improving the standards of living of population, guaranteed meeting the food demand and balanced resumption of branch resource potential. That is why without structural reforms, improvement of pricing system and only at the expense of increasing the volume of state support it will be incredibly difficult to solve this problem.

So far the domestic experience brings a confirmation that even substantial increasing the volume of financial resources transfer to agriculture does not give the desirable productive return and the needed increase in provision of products.

## Discussion

In such a way we can make a conclusion that existing pricing system in makes it impossible to realize expanded reproduction processes in the branch and that the system of state support only partly compensates not fully satisfying receipts from market sale. The analysis testifies that existing market prices do not correspond to the objective needs of producers, taking into account the needed level of equivalence of exchange and of reinvestments in production assets. In the analysis we should avoid using criteria connected with a comparison of support per hectare. When the pricing mechanism is imperfect such support will compensate not fully the lack of receipts from production realization. The commodity producers will not be able to renew their production potential to the level needed for balanced development. We suppose that an improvement of state regulation of agricultural production should be made with taking into consideration its complexity. In particular an improvement is needed of the system of price regulation in agricultural production and of the system of state support of the branch.

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