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EVALUATION OF AGRICULTURAL SUPPORT IN THE REPUBLIC OF MOLDOVA

OLGA SHIK[1], ALEXANDRU STRATAN[2], ANATOLIE IGNAT[3], EUGENIA LUCASENCO[4]

Summary: *This paper presents the outcome of the study conducted by the Food and Agriculture Organization of the United Nations in collaboration with the National Institute for Economic Research in the Republic of Moldova. The paper assesses the level and structure of government support to agriculture in Moldova by using a combination of formal quantitative, informal quantitative and qualitative analysis. Application of the PSE methodology by OECD provides a standardized quantitative method of measurement of support to agricultural sector. The methodology is based on comparing output producers' prices (farm gate prices) with prices expected without policy interventions, e.g. market equilibrium or reference prices. Reference price must be selected in a way that best represents the opportunity costs of producing the commodity domestically. The effect of the public policy is measured by the difference between market and reference prices. If the difference between market and reference output prices is positive, policy causes benefits to producers, and if negative – policy leads to implicit taxation of the farmers. The paper suggests strategies and policy actions in order to increase efficiency of public support to agriculture with the focus on export growth.*

Keywords: *agricultural support, Producer Support Estimate, Market Price Support, evaluation*

JEL:

INTRODUCTION

The agricultural sector plays a key role in the Moldovan economy. In 2015, agriculture accounted for 11.7% of GDP and for 31.7% of total employment; approximately 2 million people (57.5% of the total population) live in rural areas.

Moldova's mild favourable climate and high quality soils determined Moldova's agricultural specialization, particularly in the production of high value crops like fruits and vegetables.

Large scale agricultural companies produce mostly low value-added crops (such as cereals, oilseeds, sugar beet). About two thirds of agricultural land is cultivated by agricultural farms that cultivate more than 50 ha of land. These companies form the export potential of the agri-food sector.

The agricultural sector of the Republic of Moldova has undergone significant changes in the last years. A specific emphasis has been recently made on the modernization and development of the agricultural sector. Only a limited number of studies evaluating the current state of agriculture support in Moldova have been conducted so far, and this is the first attempt to apply the PSE methodology to develop policy strategies for agricultural export promotion.

MATERIALS AND METHODS

This paper assesses the level and structure of government support to agriculture in Moldova by using a combination of formal quantitative, informal quantitative and qualitative analysis.

Application of the PSE methodology by OECD provides a standardized quantitative method of measurement of support to agricultural sector. The methodology is based on comparing output producers' prices (farm gate prices) with prices expected without policy interventions, e.g. market equilibrium or reference prices. Reference price must be selected in a way that best

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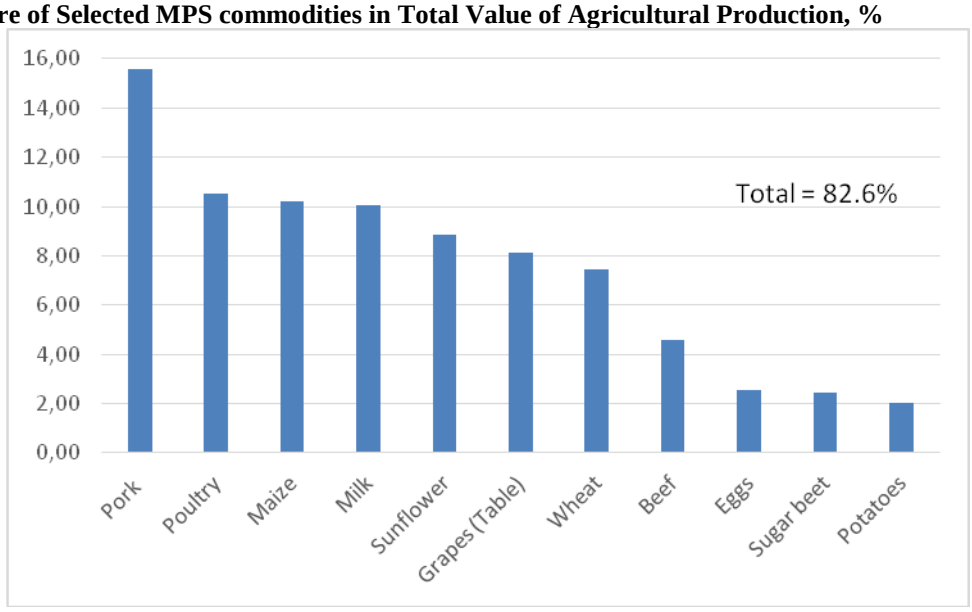
represents the opportunity costs of producing the commodity domestically. The effect of the public policy is measured by the difference between market and reference prices. If the difference between market and reference output prices is positive, policy causes benefits to producers, and if negative – policy leads to implicit taxation of the farmers.

OECD recommends, that the average share of the sum of the values of the selected set of representative commodities (MPS commodities) in the total value of agricultural production for the last 3 years is not less than 70%, and the share of each selected commodity is >1%. The representative set of commodities selected in Moldova is presented in Figure 1.

Figure 1. Share of Selected MPS commodities in Total Value of Agricultural Production, %



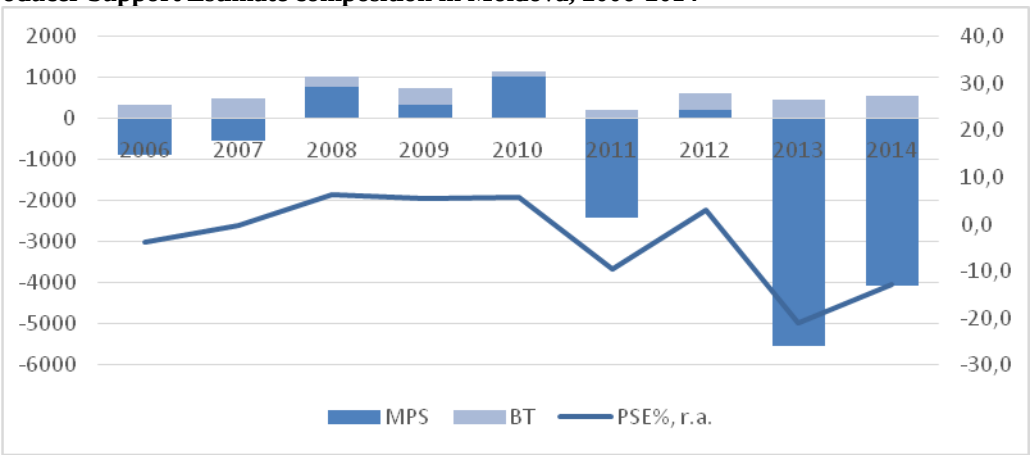
Source: authors estimation based on National Bureau of Statistics, Moldova

RESULTS AND DISCUSSION

The level of support to agricultural producers measured by PSE is low and volatile, fluctuating between +6% and -21% in the period of study (Figure 2). Both market price support and budget transfers components of PSE were volatile, however, the share of MPS in PSE was much higher, and in some years the level of budget transfers was not high enough to compensate for negative MPS, resulting in negative PSE. However, in some years, namely in 2009 and 2012 the level of budget transfers was higher than MPS.

Average percentage PSE in 2012-2014 equalled -10%, which means that implicit taxation of the producers arising from agricultural policy was equal to ten percent of total farm receipts.

Figure2. Producer Support Estimate composition in Moldova, 2006-2014



Source: authors' estimations

In Moldova, like in most developing countries, the major component of the PSE is price support (MPS). The development of PSE composition in OECD countries demonstrates that with the development of the economy budget transfers, especially those that are not directly connected to the production and do not distort trade, play more and more important role. Thus, while during the 1980s, MPS was the main component of support for the countries in OECD area, with time the importance of decoupled payments is growing. The same trend is followed by most developing countries, therefore, it is important to monitor and analyze budget transfers to agriculture, even if they do not play a major role in support to producers now, they will most likely play more important role in the nearest future.

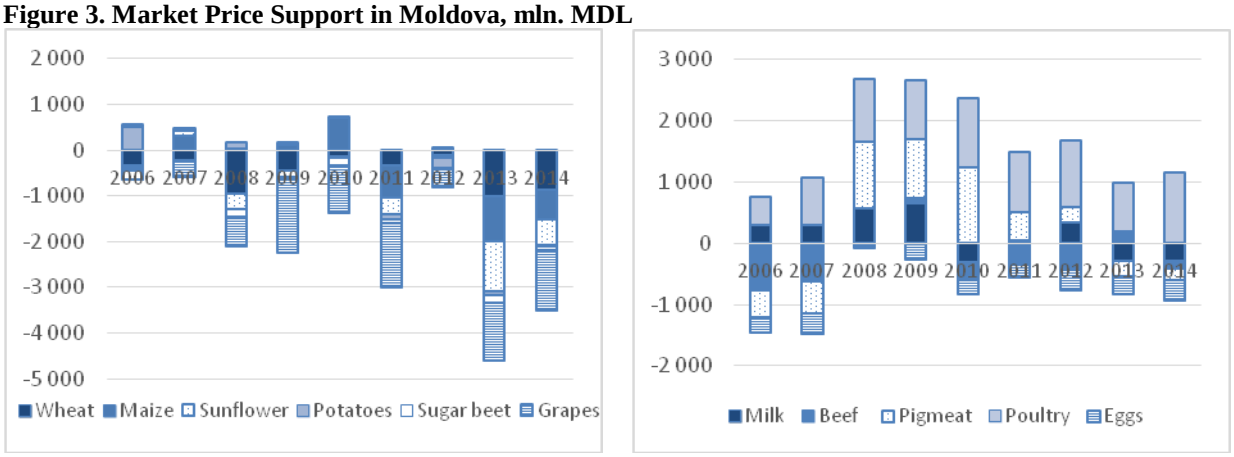
Market Price Support

The level of support by commodity is measured be MPS (transfers from consumers and taxpayers measured by the price difference) and SCT% (MPS plus transfers from taxpayers in the form of budget payments as a share of gross farm receipts).

Market price support is the form of support directly affecting the production decisions, and therefore, distorting markets and trade. Negative market price support in recent years in Moldova is favorable for the consumers of agricultural products and indicates potential price competitiveness for exported commodities.

Government's policy of regulating the price mark-ups along the value chain, is aimed at protecting consumers, and contributes to the negative MPS, or taxation of agricultural producers. In the absence of this type of policy, producers would benefit from better transmission of the world prices to domestic markets.

Figure 3. Market Price Support in Moldova, mln. MDL



Source: authors' estimation

In Moldova, MPS commodities can be grouped into three categories by the level of support: cereals and oilseeds, fruits and vegetables and livestock products. MPS for cereal, oilseeds and sugar beet was mostly negative and very volatile. The volatility of MPS was mostly caused by domestic price fluctuation.

Grapes, an export-oriented commodity, was taxed in all years except for 2006, while potatoes where supported till 2010, and taxed in 2011-2014.

Livestock sector, on the other hand, especially poultry, received higher levels of price support.

High level of support to livestock sector in some years can be partially explained by artificial protection to the market created by underdeveloped infrastructure. Underdeveloped infrastructure creates "natural protection" for the domestic markers (Josling, 2011), and thus PSE results overestimate actual support to producers, who suffer from infrastructure deficiencies. Farmers have to bear additional costs to overcome the infrastructure deficiencies: pay bribes at road checks, pay to access information that is not publicly available, etc.

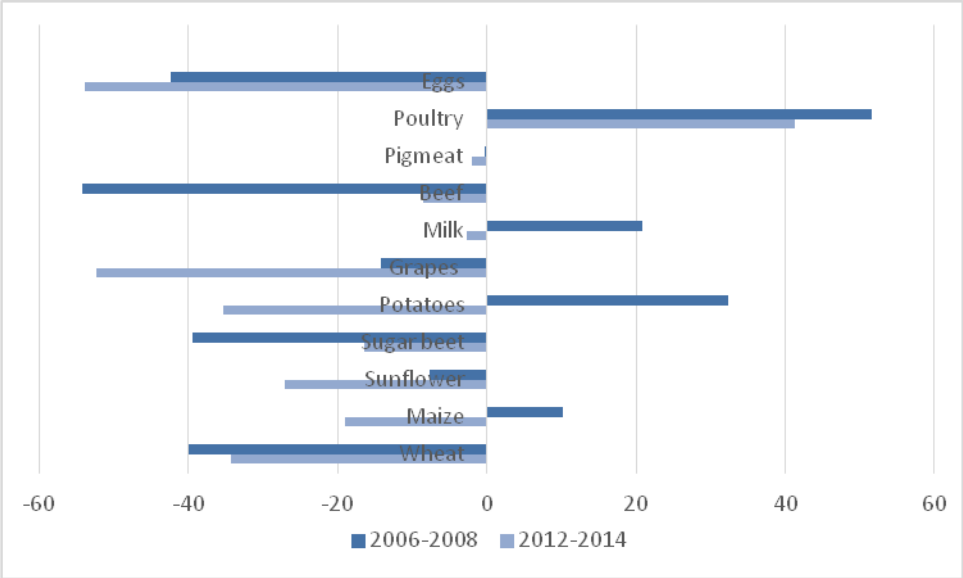
The aggregate national MPS in Moldova is a combination of high level of support in poultry subsector and implicit taxation in the rest of the sector, and therefore, should be interpreted with care.

Support to Producers by Commodity

Single Commodity Transfers (SCT) to agricultural producers in Moldova as a percent share of gross farm receipts are summarized in

Figure 4. The level of support to most commodities reduced in recent years, and poultry remained the only supported commodity in 2012-2014.

Figure 4. Producers Single Commodity Transfers in Moldova, %



Source: authors' estimation.

Cereals, Oilseeds and Sugar

Cereals play an important role in Moldova's agricultural exports. However, the level of production is volatile and vulnerable to climate events (draughts of 2007 and 2012).

Both producers' and reference prices of wheat were volatile, and MPS remained negative during the whole period of study. Maize MPS was positive in most years, but became negative in 2013-2014. Both in wheat and maize subsectors, stable prices at the world markets in the recent years were not transmitted to the local farm-gate level.

Sunflower subsector contributed more than the rest of the subsectors to the level of national PSE. The producers in this sub-sector were taxed and the value of implicit taxation increased in recent years, reaching 23% of total farm receipts in 2012-2014.

Sugar MPS was negative during the whole period of study. Sugar production is considered by the Government as an industry with a large export potential. Domestic market enjoys substantial level of protection from imports (in-quota tariff rate is 10%, above quota – 75%). However, this level of protection is not transmitted to the farm-gate level.

Fruits and Vegetables

Grape and wine sector is very important for Moldovan economy and is a major contributor to export revenues and to national budget. At the same time, grapes production is volatile, and the average productivity is low.

Due to the data availability limitations, only table grapes where included in PSE analysis. MPS for potatoes was positive in 2006-2010 and negative since 2011.

Livestock

Import-competing subsectors, like livestock in Moldova, usually receive more price support than exporting subsectors. Major obstacle to entering European markets is a necessity to comply with strict food safety requirements. Such compliance requires considerable public funds, institutional, administrative and capacity development efforts along the whole value chain.

While farm-gate price of milk followed the reference price trends, MPS for milk was slightly negative in 2010, 2013 and 2014. Pork MPS, while being positive in most years, became negative in 2013 and 2014.

Beef subsector was mostly taxed, however MPS was positive in 2009 and 2013.

Poultry is the only commodity which was supported during the whole period of study, with SCT over 50% in 2007-2010 and close to it in the following years. This means that transfers from taxpayers and consumers constituted about 50% of total receipts of poultry farmers. On the other hand, eggs MPS stayed negative.

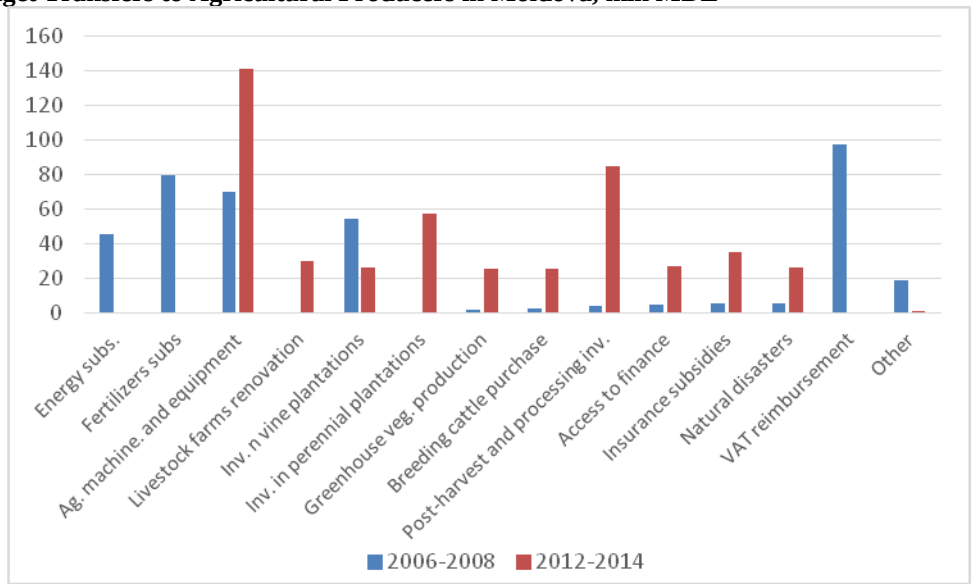
Budget Support Evaluation

Budget transfers are included in PSE as a separate component, however, since domestic agricultural policy affects producer's prices by implicitly or explicitly preventing price transmission, their effect is also reflected in MPS.

The break-down of budget expenditures according to the PSE methodology was designed in order to facilitate the evaluation of the share of the most distorting measures in the budget, as well as the share of budget expenditures to the general services – the least distorting measures.

On-farm infrastructure development and support to purchase of machinery and equipment is the main focus of the transfers to producers in Moldova (Figure 5). Output-based and other most distorting measures are not currently applied.

Figure 5. Budget Transfers to Agricultural Producers in Moldova, mln MDL



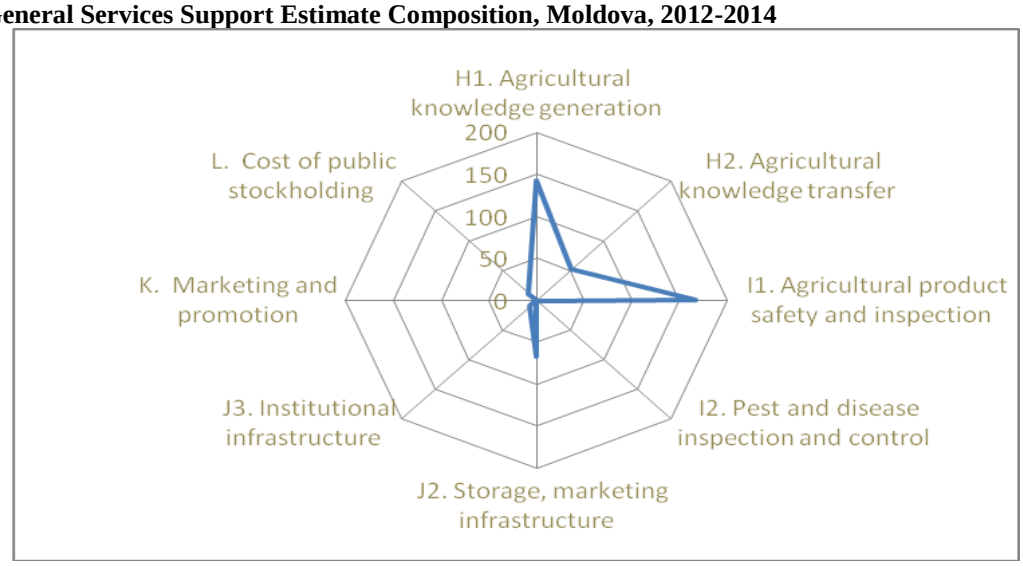
*VAT reimbursement subsidy was not estimated in 2012-14

Source: authors' estimation based on BOOST and AIPA data

Support to General Services and Total Support Estimate

The majority of support to general services is transfers to inspection and control. It is understandable because acquiring access to EU markets requires strict inspections to confirm compliance with food safety standards.

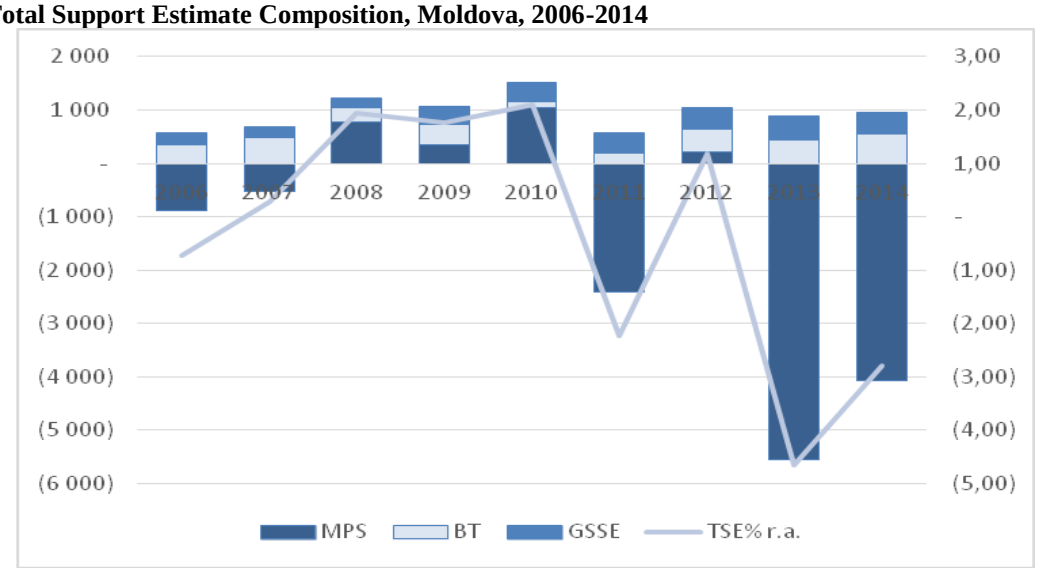
Figure 6. General Services Support Estimate Composition, Moldova, 2012-2014



Source: authors' estimation.

GSSE measures the budget transfers to support infrastructure not only in the form of the investment in physical infrastructure, but also of assistance in production marketing, extension centers, information dissimilation, etc. Underdevelopment of infrastructure refers not only to the physical, but also to commercial and institutional infrastructure. Weak institutions, lack of storage and collecting facilities for fruits and vegetables, unavailability of market information are among the factors affecting agricultural producers which are reflected in PSE. A recent study has demonstrated, that GSSE spending contribute most to the long-term competitiveness and growth in agriculture[5].

Figure7. Total Support Estimate Composition, Moldova, 2006-2014



Source: authors' estimation

Total support estimate is a combination of support to producers individually, collectively and transfers to consumers from taxpayers.

TSE in Moldova in 2012-2014 amounted to -3 bln MDL. It was -2% as a percent share of GDP

Figure. Support to consumers does not exist in Moldova, and like for PSE, MPS remained the main driver of TSE fluctuations during the whole time period.

[5] The results show, that a shift of 10 percentage points of the agricultural budget from private goods to general services, leads to approximately a 5 percent increase in value added per capita. To achieve the same increase would require an increase of approximately 25 percent or more in total spending while holding the mix constant (Anríquez, Foster et al, 2016).

Positive TSE in 2008-2010 and 2012 should be treated with care, as it reflects two opposite trends in agricultural policy: protection of poultry and pork, and implicit taxation of crops.

CONCLUSIONS

The results of PSE estimations in Moldova suggest the following observations:

- The level of transfers to agricultural producers is low or negative during the whole period of study.
- Aggregate national MPS in Moldova is a combination of high level of support in poultry subsector and implicit taxation in the rest of the sector.
- Support to general services plays important role in the structure of budget transfer to agriculture, with a focus on infrastructure development and safety control.
- However, soft infrastructure development, such as contracting support, information system, and marketing and promotion do not get sufficient attention.
- Positive value of TSE in some years should be treated with care as it reflects two opposite trends in agricultural policy, protection of livestock and taxation of crops.

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