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THE ESTIMATE OF AGRICULTURAL SUPPORT IN THE UKRAINE USING ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT INDICATORS

WYKORZYSTANIE WSKAŹNIKÓW ORGANIZACJI WSPÓŁPRACY GOSPDARCZEJ I ROZWOJU DO OCENY WSPARCIA ROLNICTWA NA UKRAINIE

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Streszczenie. Opracowanie przedstawia ocenę polityki rolnej i wsparcia na Ukrainie na podstawie wskaźników, takich jak Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE), Total Support Estimate (TSE) w porównaniu do innych krajów. Badania wykazały, że wsparcie dla rolnictwa na Ukrainie znacznie różni się od aktualnych trendów światowych i charakteryzuje się brakiem stabilności, oraz stałą tendencją wzrostową. Przypadek Ukrainy potwierdził fakt, że obecność bezpośredniego wsparcia budżetowego nie gwarantuje uzyskania pomocy dla rolnictwa.

Key words: agricultural policy, consumer support estimate, general services support estimate, producer support estimate, total support estimate.

Słowa kluczowe: łączna ocena wsparcia, ocena wsparcia konsumentów, polityka rolna, szacunkowe wsparcie dla usług, wsparcie dla producentów.

INTRODUCTION

Historical experience and practice of agricultural enterprises in the Ukraine and abroad have confirmed that its' existence is impossible without state support.

The budget support for agriculture in the Ukraine is realised through budgetary spending, as well as budgetary revenue foregone (special tax regimes).

The budgetary revenue foregone on agriculture, coming from VAT exemptions, remains large compared to other sectors of the economy. Four major types of VAT expenditure are granted to agriculture (Zorya 2006):

 VAT charged on sales of agricultural products remains on farm accounts to be used for purchase of production inputs;

 VAT charged on sales of meat and dairy products is not paid to the budget by the processing plants, but instead returned to the primary milk and meat agricultural producers;

 VAT charged on sales of dairy and meat products produced in on-farm processing capacities remains on farm accounts to be used for livestock support;

Milk and meat sold by agricultural producers is taxed at the zero VAT rate (this was cancelled in 2008). The volume of budget support for agriculture in the Ukraine has increased by 8 times during 2000–2010 and its share of agricultural GDP was 14.7% at the end of 2010 (the share of budget expenditures in agricultural GDP in another countries were 27% in USA, 45% in EU and 63% in Japan), while the gross agricultural output has increased over this period, by only 1.3 times. Thus, significant growth of budget support for the analysed period had no impact on efficiency and competitiveness of agriculture.

Budgetary spending dominated the structure of budget support between 2000–2008, but since 2009, the budgetary revenue foregone has begun to prevail that it was caused by the influence of the global financial crisis. As a result, special tax regimes could substantially increase financial support for agriculture, which is practically impossible to provide directly in budget.

Agricultural support (policy) must be effective, it is important to have indicators that measure this efficiency. The OECD indicators have been developed to monitor and evaluate developments in agricultural policy and to provide economic data to assess the effectiveness and efficiency of policies.

Since the mid-1980s the OECD has published data on the indicators for OECD members and for some non-member countries. OECD's annual estimates provide the only readily available and consistent source of internationally comparable information on levels of support for agriculture. Cahill and Legg (1989–1990) and Legg (2003) provide an overview of the definitions and use of the OECD's support measurements.

Using the OECD indicators will allow more detail in assessing the advantages and disadvantages of agricultural policy in the Ukraine and will compare trends with other countries that allows for a higher quality in identifying weaknesses to make more adequate measures in future.

MAIN TEXT

Different countries use a number of indicators, which are used to evaluate and compare the developments in agricultural policy. The Organisation for Economic Co-operation and Development (OECD) uses some indicators of agricultural support – which are comparable across time and between countries.

The OECD indicators of agricultural support is divided into four groups – indicators of support for producers, indicators of support for general services for agriculture, indicators of support for consumers, indicators of total support for agriculture.

In this paper we will use such OECD indicators for monitoring and evaluating developments of agricultural policies in the Ukraine – Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE) and Total Support Estimate (TSE). More detailed information about these indicators is presented in (OECD 2011a). Producer Support Estimate (PSE) is the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm-gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income. PSE values are calculated by adding the market price support to the value of transfers to producers from other policies (OECD 2011a).

The publication of internationally comparable PSE Figures has increased transparency of the nature and incidence of agricultural policies in OECD countries. The PSE concept has also contributed to establishing a base for internationally binding commitments on domestic support through the Aggregate Measure of Support (AMS) in the Uruguay Round of trade negotiations of the World Trade Organization (WTO). PSE estimates have attracted much public attention and received wide media coverage. The summary measure, relative PSE or %PSE (expressed as a percentage of the value of gross farm receipts) is frequently cited in the international debate on agricultural policies, and used as a yardstick of policy "misconduct", i.e., unfair competition with farmers in unsubsidised countries (Blandford et al. 2008).

The composition of PSE in the Ukraine between 2000–2010 is introduced in Figure 1. According to this data payments based on output (mainly for livestock products) and input subsidies were the Ukraine's principal instruments of support, especially between 2007–2010 accounting for slightly over 70% of the Ukrainian PSE. The bulk of this support is based on budgetary revenue foregone as opposed to actual budgetary spending. This is implemented through specific procedures to use the Value Added Tax (VAT) due from agricultural producers and processors.



Fig. 1. The structure of PSE in the Ukraine between 2000–2010 Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

From the Fig. 1 we can conclude that market price support also significantly affects the total amount of the Ukrainian PSE. Moreover, only this component has been subjected to

negative values as the impact on PSE. For comparison, in OECD countries market price support has never derived a negative value and was 44–60% of total PSE. In the Ukraine only in 2001, 2005–2006 and 2009–2010 did domestic prices exceed world prices.

The main component of payments based on output is per tonne payments, which were provided for livestock products accounting for around 95% of output payments between 2008–2010.

In addition to these payments, which are based on actual budgetary outlays, payments per tonne based on the budgetary revenue foregone were provided. Milk and meat processors "re-direct" VAT due on processed products to their primary suppliers instead of transferring this tax to the state budget. This transfer is implemented in the form of price top-ups to agricultural producers of milk and meat delivered for processing. This mechanism was introduced in the late-1990s to support milk and meat producers, but also worked as a way of binding primary producers to their traditional supply zones. In 2009, there was a proposal to replace this mechanism with a new one, under which processor VAT would be accumulated into a centralised fund and transferred to producers in the form of per cow payment (OECD, 2011b, p. 268).

Ukrainian producers receive a range of input subsidies. In 2008–2010, these comprised 54% of the Ukrainian PSE and 68% of budgetary transfers in the PSE. By far the largest component of input based support, and the largest single payment in the PSE generated through the so-called VAT accumulation mechanism. Agricultural producers can accumulate VAT due on their primary and processed products in a special account and use these funds for production purposes. Until 2008, there was only a general requirement that producers use VAT accumulations for purchase of agricultural inputs. Starting from 2009, the formal requirement is that accumulated producer VAT should be used to cover only the VAT on purchased inputs, while the residual sum can be used for any other production purposes. These VAT-based transfers were the only type of budgetary support that increased in 2009-10: from UAH 2.6 billion (USD 493 million) in 2008 to UAH 7.7 billion (USD 984 million) in 2009 and around UAH 8 billion (USD 1 billion) in 2010. VAT based transfers accounted for 81% of all input support in 2008–2010 (OECD, 2011b, p. 268).

A variety of other input support programmes, which are financed through actual budgetary outlays, operate.. As is the case for other support based on actual budgetary outlays, these transfers were curtailed. Preferential credit is a traditional programme, which provides interest subsidies for short, medium and long-term loans. This is a relatively modest component, comprising 10% of all input subsidies in 2008–2010. There are also programmes that provide investment grants, such as for the purchase of complex agricultural machinery. Two new programmes to support agricultural investments were launched in 2010. One is preferential leasing for pedigree heifers and cows and domestically produced machinery. The other programme supports capital improvements in the livestock sector by 50% cost sharing in the construction and renovation of animal farms and complexes. These two programmes received respectively UAH 120 million (USD 15 million) and UAH 350 million (USD 44 million) in 2010. Other input payments in 2009–2010 included subsidies for insurance premiums, purchased seeds, cost compensation to farms involved in seed production, and pedigree animal breeding. Fertiliser subsidies are also among the traditional input subsidies, but despite being included in the budget, they have not been funded since 2008 (OECD, 2011b, p. 268–269).

The percentage PSE uses for international comparison. Percentage PSE (%PSE) is PSE as a share of gross farm receipts (including support).

A %PSE of 20% means that 20% of gross farm receipts come from transfers due to policy measures supporting producers. A %PSE of 0% indicates that the estimated aggregate value of transfers to individual producers from consumers and taxpayers is zero. A %PSE cannot be higher than 100%, at which level all farm receipts come from policy measures, with no returns from the market (OECD 2011a).

Analysing Fig. 2 shows that the Ukraine belongs to the group of countries like Australia, where the percentage PSE is less than 6%, reflecting a low level of support for agricultural producers.





Consumer Support Estimate (CSE) is the annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. Percentage CSE (%CSE) is CSE as a share of consumption expenditure on agricultural commodities (at farm gate prices), net of taxpayer transfers to consumers (OECD 2011a).

The structure of the consumer support estimate in Ukraine for the period 2000–2010 in is shown Fig. 3. In 2001, 2005–2006, 2008–2010 this support was characterised by the pro-

vision of support for producers only through the transfers from consumers. Instead, 2000, 2002–2004, 2007 Ukrainian consumers received agricultural subsidies. We should consider that this situation was one of the reasons for the decline of Ukrainian farmers, since it is contrary to world trends regulation of the agricultural sector.



Fig. 3. The structure of CSE in Ukraine during 2000–2010 Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

Figure 4 presents the dynamics of percentage PSE and CSE for individual countries. Despite the differences in amounts of support in different countries, an undeniable fact is the symmetry of charts PSE and CSE, i.e. if there is support for producers, it is at the expense of consumers, and vice versa. It is only the U.S., which in most years is characterised by positive support for both consumers and producers. Support in the EU and Canada are similar. Support for producers in Japan is the largest – 46–60%. Producer and consumer support in Australia is characterized by the lowest amounts of the countries represented. Periodic fluctuations characterized PSE and CSE charts of the U.S., which can be explained by reforms.

According to Fig. 4, the producer and consumer support in the Ukraine has a significant difference from the other countries represented: it has significant fluctuations.

This data clearly describes the main shortcomings of the national agricultural policy: unsystematic and lack of stability. That is, it does not allow the state to achieve the desired effect in agricultural support. Moreover, the domestic practice of consumer support through the producers does not meet world tendencies, so it was one of the causes of the decline in agriculture in the Ukraine.

The transfers in the GSSE are payments to eligible private or public services provided to agriculture generally. Unlike the PSE and CSE, the GSSE transfers are not destined for individual producers or consumers, and do not directly affect farm receipts (revenue) or consumption expenditure, although they may affect production or consumption of agricultural commodities in the longer term (OECD 2011a).



Fig. 4. Percentage PSE(dark colour graphic) and percentage CSE (light colour graphic) Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

The composition of the GSSE in Ukraine is presented in Fig. 5. As shown in the data of Fig. 5 the share of budgetary payments financing research and development activities aimed at improving agricultural production has been reduced between 2000-2010 - from 20% to 8%. The share of budgetary payments financing agricultural training and education in Ukraine is a significant part in comparison with the OECD countries (the share of payments to agricultural schools in Ukraine was about 21–33% between 2000–2010, in OECD countries – 3%).

The share of budgetary payments for infrastructure and marketing in OECD countries was very high, respectively 44–60% and 31–16%. While in the Ukraine, these components were only 16–30% and 1–2%. Low budgetary payments financing improvement of off-farm collective infrastructure and budgetary payments financing assistance to marketing and promotion of agro-food products lead to increased production costs and lower competitive-ness of Ukrainian production compared to import. As a result, insufficient funding in infra-

structure, marketing and promotion in the Ukraine led to the negative value of market price support (Fig. 1).



Fig. 5. The structure of GSSE in Ukraine during 2000–2010 Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

Total Support Estimate (TSE) is the annual monetary value of all gross transfers from taxpayers and consumers arising from policies that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products (OECD 2011). As well, Percentage TSE (%TSE) is calculated as a share of GDP. For the period 2000–2010 unsystematic state measures for regulation of agriculture in the Ukraine has caused significant fluctuations in the indicator (Fig. 6).



Fig. 6. Percentage TSE in Ukraine and other countries (%) Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

As shown in Fig. 6, the difference between the two graphs is the significant fluctuations TSE (%) in the Ukraine compared to a stable situation in OECD countries. Thus, we argue

that support for agriculture in the Ukraine differs significantly from the current global trends and is characterised by both a lack of stability and a steady upward trend.

The composition of total support by recipient of transfer shows to which economic group the transfer is provided. According to the Fig. 7, the transfer to consumers was not provided in Ukraine between 2001–2010. There are various trends in the change of the composition of TSE in the Ukraine and OECD. Whereas the share of GSSE in total support in OECD increased from 18% of total support in 2001–2005 to 24% in 2006–2011, in the Ukraine support for general services provided to agriculture decreased from 34% of total support to 17% at the same time.



Fig. 7. Composition of TSE by recipient of transfer in Ukraine and OECD (average) Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

The composition of total support by source of transfer shows from which economic group the transfer originates, i.e. who is bearing the cost of the support policies.

In most OECD countries, consumers have traditionally borne the largest share of the cost of total support. Policy reforms have almost always emphasised a desire to reduce the consumer cost of agricultural policies, and to offset the reduction in producer returns by increased budgetary payments. This would be shown by a decrease in the value of transfers from consumers and an increase in transfers from taxpayers. As can be seen in Fig. 8, the share of transfers from consumers decreased in OECD from 48% in 2001–2005 to 36% in 2006–2011.

There is the reverse trend in Ukraine. In particular, the consumer cost of agricultural policies increased sharply from 4% in 2001–2005 to 35% in 2006–2011.

The analysis showed a significant fluctuation of the composition of TSE, as well as opposite trends compared to other OECD countries. Analysis performed argues about the instability and inefficiency of agricultural policy in Ukraine.

Thus the main strategic objective of the Ukraine should be developing a long-term strategy of agricultural development that would allow a stable agricultural policy to be carried out.



Fig. 8. Composition of TSE by source of transfer in Ukraine and OECD Source: OECD, http://stats.oecd.org/Index.aspx?DataSetCode=MON20113_1

CONCLUSIONS

Analysis of the producer support estimate in the Ukraine showed that an unsuccessful price regulation caused the decrease in producer support in 2000, 2002–2003 to zero.

The Ukraine belongs to a group of countries like Australia, where the percentage PSE is less than 6%, reflecting a low level of support for agricultural producers.

The producer and consumer support in the Ukraine has a significant difference from developed countries. In most countries, the producer support implements due on consumer support. However, in the Ukraine in 2000, 2002–2003 consumer support was carried out due on producer support.

Compared with developed countries not enough attention is paid to development of infrastructure and marketing in the Ukraine, resulting in significant gaps between domestic and world prices and thus causes inefficient budgetary spending on agriculture.

Significant fluctuations in the total support in comparison with global trends showed an unsystematic and unstable agricultural policy in the Ukraine. The case of the Ukraine confirmed the fact that the existence of budgetary spending, its growth dynamics cannot guarantee the final result in obtaining assistance to agriculture.

The main strategic objective of the Ukraine should be developing long-term strategy of agricultural development that would allow a stable agricultural policy to be carried out.

REFERENCES

Blandford D., Brunstad R., Gaassland I., Vardal E. 2008. Optimal agricultural policy and PSE measurement: an assessment and application to Norway. *The 82nd Annual Conference of the Agricultural Economics Society Royal Agricultural College 31st March to 2nd April 2008.*

- **Cahill C., Legg W.** 1989–1990. Estimation of agricultural assistance using producer and consumer subsidy equivalents: theory and practice. *OECD Economic Studies*, No. 13. Paris: OECD.
- Legg W. 2003. Agricultural subsidies: measurement and use in policy evaluation. Presidential Address. *Journal of Agricultural Economics* 54 (2): 175–200.
- **OECD.** 2011a. OECD's producer support estimate and related indicators of agricultural support. Concepts, Calculations, Interpretation and Use (The PSE Manual).
- **OECD.** 2011b. Agricultural Policy Monitoring and Evaluation 2011: OECD Countries and Emerging Economies, OECD Publishing.
- **Zorya S.** 2006. *Improving Agricultural Fiscal Policy in Ukraine.* The World Bank, 2006. http://stats. oecd.org/Index.aspx?DataSetCode=MON20113_1