

## UKRAINE: ESTIMATES OF SUPPORT TO AGRICULTURE

Contact person: Olga Melyukhina

Email: Olga.Melyukhina@oecd.org

Tel: 33 (01) 45 24 95 61

Fax: 33 (0)1 44 30 61 01

### DEFINITIONS AND SOURCES

**Table 1. Agricultural Support Estimates / Total Transfers** contains country Total Support Estimate (TSE) and derived indicators, which cover all agricultural production, i.e. all agricultural commodities produced in the country. Definitions of basic data sets refer to the specific programmes applied in the country. For the Producer Support Estimate (PSE) and Consumer Support Estimate (CSE), each policy measure is classified according to implementation criteria, which include: the *transfer basis* of support (output, input, area/animal numbers/receipts/income, and non-commodity criteria); whether support is based on *current or non-current basis*; whether *production is required* or *not* to receive payment. Each policy measure is also assigned several “labels” indicating additional implementation criteria. “MPS commodities”, which vary across countries, are those for which the market price support is explicitly calculated in Tables 4.1 – 4.10.

**Table 2. Breakdown of PSE by Commodity and Other Transfers** provides a breakdown of the total PSE into four categories reflecting the flexibility given to farmers regarding which commodity to produce within the various policy measures. These categories are: Single Commodity Transfers (SCT); Group Commodity Transfers (GCT); All Commodity Transfers (ACT); and Other Transfers to Producers (OTP). All data sets in Table 2 come from Tables 1 and 3.1 – 3.11 where definitions are included.

**Tables 3.1 – 3.11 Producer Single Commodity Transfers** contain producer SCT by commodity, which are calculated for Ukraine for the following commodities: wheat, maize, other grains (barley, rye and oats), oilseeds (sunflower), sugar, milk, beef and veal, pigmeat, poultry meat, and eggs (Tables 3.1-3.10) provided that the value of production of that commodity exceeds 1% of the total value of production. In addition, SCT for “other commodities” is also calculated (Table 3.11), which covers transfers *to single commodities other than MPS commodities*. All data sets in the calculation of producer SCT by commodity come from Tables 1 and 4.1 – 4.11 where definitions are included.

**Tables 4.1 – 4.10** contain **Market Price Support (MPS)** and **Consumer Single Commodity Transfers** (consumer SCT) by commodity, calculated for the same set of commodities as **Tables 3.1 to 3.11**: Definitions are provided only for basic data sets from which all the other data sets in this table are derived.

Definitions of the indicators, criteria for classification of policy transfers included in support estimation, and methods of calculation are contained in the PSE Manual (*OECD’s Producer Support*

*Estimate and Related indicators of Agricultural Support: Concepts, Calculations, Interpretation and Use* [<http://www.oecd.org/tad/support/psecse>].

## **TABLE 1. UKRAINE: Agricultural Support Estimates / Total Transfers**

### **Definitions:**

**I. Total value of production (at farm gate):** Total agricultural production valued at farm gate prices, i.e. value (at farm gate) of all agricultural commodities produced in the country [1].

*I.1. Of which share of MPS commodities (%):* Share of commodities for which MPS is explicitly calculated (in Tables 4.1-4.10) in the total value of agricultural production.

**II. Total value of consumption (at farm gate):** Consumption of all commodities domestically produced valued at farm gate prices, and estimated by increasing the value of consumption (at farm gate) of the MPS commodities according to their share in the total value of agricultural production [(II.1) / (I.1) x100].

*II.1. Of which MPS commodities:* Sum of the value of consumption (at farm gate prices) of the MPS commodities as indicated in Tables 4.1-4.10.

**III.1 Producer Support Estimate (PSE):** Associated with total agricultural production, i.e. for all commodities domestically produced [Sum of A to G; when negative, the amounts represent an implicit or explicit tax on producers].

### **A. Support based on commodity output**

*A.1. Market Price Support:* On quantities domestically produced (excluding for on-farm feed use -- *Excess feed Cost*) of all agricultural commodities, estimated by increasing the MPS for the MPS commodities according to their share in the total value of agricultural production [( $\Sigma$ MPS for MPS commodities listed in the rows below) / (I.1) x 100].

#### *A.2. Payments based on output*

*Per tonne payments for crops* (up to 1992): provided for grains (wheat, maize, rye, barley, oats, buckwheat millet, rice and other cereals), sunflower, sugar beet, potatoes and other crops.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payments are included in the commodity SCTs for wheat, maize, other grains, oilseeds, sugar, and “other commodities”.

*Per tonne payments for hops* (from 2002).

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payments are included in the commodity SCT for “other commodities”.

*Per tonne payments for crown flax* (from 2002).

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payments are included in the commodity SCT for and “other commodities”.

*Per tonne payments for livestock* (from 1986): provided for beef and veal, milk, pigmeat, poultry, eggs and sheep meat; between 1998 and 2002, payments for beef and veal, pigmeat, poultry and milk were provided through processors, whereby the latter directed their VAT due on processed milk and meat products to supplying producers as purchase price top-ups (the so-called “redirection of processors’ VAT”). After

2002 (after 2001 for beef and veal) and up to 2008, these payments have been financed both from the “redirected” processor VAT, as well actual budgetary allocations within the programme of *Financial Support to Animal Husbandry*.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payments are included in the commodity SCTs for beef and veal, milk, pigmeat, poultry, eggs and “other commodities”.

*Payments to silkworm breeders* (in 2003-05): payments per one kilogram of silkworm cocoons and per one kilogram of silkworm eggs produced.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payments are included in the commodity SCT for “other commodities”.

*Non-specified per tonne payments for crop and animal production* (1999-2001): ad hoc non-specified per tonne price top-ups, allocated to all commodities in proportion of their shares in the total value of agricultural output.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payments for the MPS commodities are included in the respective commodity SCTs and the remaining sum is allocated to SCT for “other commodities”.

*Pledge loan benefit* (from 2004) – implicit transfer to grain producers who receive reduced-interest loans against the pledged grain (wheat, barley, rye, maize, and oats); the transfer is calculated as follows: Amount of Pledged Loan x (Annual Commercial Interest Rate – Annual Pledged Loan Interest Rate) / 12 x Number of Months of Loan].

Production limits: NO; Variable payment rates: YES; Input constraints: NO.

Payments are included in SCTs for wheat, maize, and other grains.

Estimated implicit transfer.

## ***B. Payments based on input use***

### ***B.1. Based on variable input use***

*General electricity subsidy* (1986-2002): up to 2002, implicit subsidy arising from the reduced administered price of electricity for agricultural producers. The subsidy is estimated by multiplying the differential between the electricity price charged per kilowatt/hour to industrial and price charged to agricultural users, multiplied by the amount of kilowatt/hours of electricity consumed by agricultural producers in a given year.

Production limits: NO; Variable payment rates: YES; Input constraints: NO.

Payments are included in ACT.

Estimated implicit transfer.

*Electricity for irrigation subsidy* (2003-05): partial budgetary reimbursement of cost of electric power for irrigation of agricultural crops and for flooding the rice fields.

Production limits: NO; Variable payment rates: YES; Input constraints: NO.

Payments are included in ACT.

Estimated implicit transfer.

*Insurance subsidy* (from 2005): budgetary compensation of 50% of insurance payments made by agricultural enterprises under insurance contracts related to full or partial output loss.

Production limits: NO; Variable payment rates: YES; Input constraints: NO.

Payments are included in ACT.

*Fertiliser subsidy* (up to 1991): budgetary transfers to fertiliser plants to compensate the difference between fertiliser prices charged to agricultural producers and “normative” manufacturer prices, the former being set below the manufacturer prices.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for all crops.

*Fertiliser subsidy* (from 2004): partial reimbursement to agricultural producers of cost of purchased fertilisers produced domestically.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for all crops.

*Mixed feed subsidy* (1986-1991): partial compensation of cost of feeds purchased by large feedlots.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for all livestock.

*Fish meal subsidy* (1990): *ad hoc* partial compensation to agricultural enterprises of cost of fish meal purchased by large feedlots.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for all livestock

*Ad hoc fuel subsidy* (1990): partial compensation of cost of fuel (gasoline and diesel fuel) and motor lubricants.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in ACT.

*Disaster relief subsidy* (2003-04): budgetary subsidy for purchase of fuel and lubricants, spare parts, seeds, fertilizers and plant protection chemicals; a special disaster assistance provided in 2003 and 2004 with respect to an exceptional grain harvest loss in 2003.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for grains.

*Input subsidy based on "VAT accumulation"* (from 1998): input subsidy to agricultural producers whereby producers are enabled to retain their VAT payments due on agricultural goods and services of own production. The VAT payments are accumulated on special bank accounts of agricultural producers and can only be used for purchases of agricultural inputs, such as fuel, seeds, fertilisers, pesticides, and agricultural machinery and equipment; until the end of 2008, milk and meat producers have not been eligible for this regime as they were eligible to support based on “redirection of processors’ VAT” (see above, support classified to category A.2. Payments based on output).

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for “all commodities excluding meat and milk”.

*Seed subsidy* (from 1993): partial reimbursement to agricultural producers of cost of purchased fuel and lubricants, spare parts, seeds, fertilisers and plant protection chemicals. Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for crops.

*Interest-free cash advances for purchase of inputs* (1994-97): implicit transfers from interest-free 6-month loans provided to producers who delivered their products to state procurement system; products covered include wheat, maize, rye, barley, oats, and sunflower seeds; calculated as follows: Amount of Interest-Free Cash Advances x (Annual Commercial Interest Rate / 12) x 6 (months).

Production limits: NO; Variable payment rates: YES; Input constraints: NO.

Payments are included in GCT for “grains and oilseeds”.  
Estimated implicit transfer.

*Debt write off on state commodity credit* (1994-99; 2002 and 2004): implicit transfer arising from the write-off of the overdue debt on state commodity credit.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in GCT for “grains and oilseeds”.  
Estimated implicit transfer.

*Restructuring of debt on state commodity credit* (1994-99): estimated implicit transfer arising from restructuring of the overdue debt on state commodity credit; transfer is calculated as the difference between the average market interest rate for short-term credit and preferential interest rate set for repayment of the restructured debt, multiplied by the estimated outstanding credit in a given year.  
Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in GCT for “grains and oilseeds”.  
Estimated implicit transfer.

*Interest rate subsidy for short-term loans* (from 1994): partial budgetary compensation of interest rates on short-term agricultural loans provided by commercial banks to agricultural producers; the borrower is to cover the difference between the bank lending rate and the government-subsidised part of the interest. The amount of transfer is assumed to comprise two thirds of total budgetary allocations for compensation of interest rates to agricultural producers in a given year, the remaining one third is classified to B.2 category (Payments based on fixed capital formation) as interest rate subsidy on long-term loans  
Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in ACT.

*Support for family farms* (from 1992): provision of financial support to family (individual) farms; the majority of funds were provided for subsidising interest rates on commercial bank loans taken by farms.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in ACT.

*Agricultural chemicals subsidy* (2003): partial compensation of the cost of plant growth control chemicals and chemicals for protection from low temperatures.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in GCT for grains.

#### *B.2 Based on fixed capital formation*

*Subsidy for agricultural machinery and equipment* (from 2002): 30% reimbursement of cost of purchased domestically produced agricultural machinery and equipment.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in ACT.

*Public capital grants for construction and re-construction of production structures on farms* (agricultural organisations) (from 1986).  
Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in ACT.

*State programme for livestock breeding* (from 1992): partial reimbursement of expenses involved in improvement of livestock genetic potential, acquisition and keeping of own pedigree livestock on farms, introduction of biotechnology methods and purchase of sperm. of total budgetary expenditures for this

programme, 75% are allocated to category B.2 Payments based on on-farm investment, while the remaining 25% are allocated to GSSE category H. Research and development (see below).

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for all livestock.

*Support for orchards, vineyards and berry fields* (from 1995): subsidies for layout planning, preparation of ground, planting and maintenance of perennial plantations, and trickle irrigation; payment rates are established on the basis of normative regional costs per hectare. Seventy percent of allocations are directed for development of viticulture and 30% for horticulture.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in GCT for “other crops”.

*Interest rate subsidy for long-term loans* (from 1994): partial budgetary compensation of interest rates on long-term agricultural loans provided by commercial banks to agricultural producers; the borrower is to cover the difference between the bank lending rate and the government-subsidised part of the interest. It is assumed that the amount of transfer is equal to one third of total budgetary allocations for compensation of interest rates to agricultural producers in a given year, the remaining two thirds are allocated to category B.1. Payments based on variable input use as interest rate subsidy on short-term loans (see above).

Production limits: NO; Variable payment rates: YES; Input constraints: NO.

Payments are included in ACT.

*Machinery leasing subsidy* (2005): transfer arising from reduced leasing rate for machinery from *UkrAgroLeasing* company. The amount of transfer is the estimate of the Ukrainian Ministry of Agrarian Policy.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in ACT.

### *B.3. Based on use of on-farm services*

*Improvement of irrigated land* (1993 and 1999-2001): partial compensation of costs incurred in various works on land reclamation and improvement of irrigated lands.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in ACT.

*Payments for fundamental soil improvement* (up to 1991): partial compensation of costs incurred in various works on fundamental improvement of soils, such as adding lime and gypsum to soils.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in ACT.

*Payments for fundamental soil improvement* (from 1992): partial compensation of costs incurred in various works on fundamental improvement of soils, such as adding lime and gypsum to soils; financed within the programme on *Fundamental Soil Improvement*; of the total amount of expenditures reported, only the part of payments made to agricultural enterprises is included, the remaining part is allocated to GSSE category N. Miscellaneous (see below).

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments are included in ACT.

### *C. Payments based on current area planted/animal numbers/receipts/income – production required*

*Per hectare payments for crops* (from 2006): fixed payment per hectare of area sown to winter and spring crops; only areas with sprouts are eligible; eligible crops are wheat, maize, rye, barley, oats, buckwheat,

millet, rice, other grains and rapeseeds); subsidy is provided with the objective of preventing reduction in areas sown to cereals and rapeseeds.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payment eligibility: Area

Payments are included in SCTs for wheat, maize, other grains and “other commodities”

*Per animal payments* (from 2003): payments provided for beef and veal and sheep within the programme *Financial Support to Animal Husbandry*.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payment eligibility: Animal head

Payments are included in SCTs for beef and veal and “other commodities”.

Payments for bees (from 2003): fixed payment per bee family if no less than 10 bee families are kept between January 1 and May 1 (before 2006, no less than 20 bee families); provided within the programme *Financial Support to Animal Husbandry*.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payment eligibility: Animal head

Payments are included in SCT for “other commodities”.

*Payments to producers in regions with difficult climatic conditions* (from 2000): payments provided to producers in regions suffering recurrent climatic events such as early frosts, droughts, and ice crusts.

Production limits: NO; Variable payment rates: YES; Input constraints: NO

Payment eligibility: Receipts

Payments are included in ACT.

*Benefits from the “fixed agricultural tax”* (from 1999): according to the Ukrainian legislation, any enterprise receiving over 75% of its gross receipts from sales of agricultural commodities is eligible for the fixed agricultural tax, which is based on the estimated value of land (Law of Ukraine On Fixed Agricultural Tax, No. 320 of 17 December 1998); agricultural enterprises who are eligible for this tax are exempt from payment of a number of taxes, fees and contributions (12 in total); the benefit from the fixed agricultural tax is the value calculated by the Ukrainian Ministry of Agrarian Policy as the difference between the total amount of the fixed agricultural tax collected in a given year and the amount of taxes, fees and contributions which were replaced by the fixed agricultural tax (latter amount is constant and corresponds to the base year 1997).

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payment eligibility: Receipts

Payments are included in ACT

Estimated implicit transfer.

*Exemption from 30-percent profit tax* (1992-1997): between 1992 and 1997, agricultural enterprises were exempted from profit tax (equalling to 30%); the related implicit transfer corresponds to 30 percent of the total amount of profits reported by agricultural enterprises in a given year.

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payment eligibility: Income

Payments are included in ACT

Estimated implicit transfer.

*Debt write-off* (1991-2002): transfer arising from debt write-offs other than debt write-offs on state commodity credit (allocated to category B.1 above).

Production limits: NO; Variable payment rates: NO; Input constraints: NO

Payment eligibility: Income

Payments are included in ACT  
Estimated implicit transfer.

*Debt restructuring* (1992-98): transfer arising from debt restructuring other than restructuring of debt on state commodity credit (allocated to category B.1 above).

Payment eligibility: Income  
Payments are included in ACT  
Estimated implicit transfer.

*Ad hoc* financing of unprofitable farms (1991): subsidies to unprofitable farms to compensate for general increase in administered prices in 1991.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payment eligibility: Income  
Payments are included in ACT.

***D. Payments based on non-current area planted/animal numbers/receipts/income – production required***

***E. Payments based on non-current area planted/animal numbers/receipts/income – production not required***

***F. Payments based on non-commodity criteria***

*F.1. Long-term resource retirement*

*F.2. Specific non-commodity output*

*F.3. Other non-commodity criteria*

***G. Miscellaneous payments***

**III.2 Percentage PSE**  $[100 \times (\text{III.1}) / ((\text{I}) + (\text{Sum of A2 to G}))]$

**III.3 Producer NPC:** For all agricultural commodities the producer NPC is estimated as a weighted average of the producer NPC calculated for the individual MPS commodities and shown in Table 4. For each commodity Producer NPC = [domestic price received by producers (at the farm gate) + unit payments based on output] / border price (also at the farm gate). **[The total PNP is not in the Table 1 of the country template, but we will include it in the version for the public website]**

**III.4 Producer NAC**  $[1 / (100 - (\text{III.2})) \times 100]$

**IV. General Services Support Estimate (GSSE):** total budgetary expenditure to support general services provided to agriculture [Sum of H to N].

***H. Research and development***

*Research and development* (up to 1991): public financing of agricultural research institutions.

*Research and development* (from 1992): public financing of agricultural research institutions carrying out of fundamental research, general and product-specific research programmes.

*Financial Support to Animal Husbandry* (from 1992): 25 percent of the actual budgetary expenditures for this programme are allocated to research and development; the remaining 75 percent are allocated to category B.2. Payments based on fixed capital formation (see above).

*State programme for crop selection and variety testing* (from 2003): public financing for formation of stocks and provision of high quality and hybrid seeds.

### ***I. Agricultural schools***

*Agricultural schools* (up to 1991): public financing of agricultural education and training institutions.

*Agricultural schools* (from 1992): public financing of agricultural education and training institutions.

### ***J. Inspection services***

*Inspection services* (up to 1991).

*Inspection services* (from 1992): public financing of general inspection and specific product inspection services for health care purposes, safety, grading or standardization; financing of state veterinary institutions, the State Seed Inspection, state variety-testing stations and the State Bread Inspection.

*Pest and disease control of agricultural plants and animals* (from 1992): public financing of anti-epzootic measures, pest and disease control.

### ***K. Infrastructure***

*Irrigation and drainage systems* (1992-2007): budgetary expenditures for maintenance and construction of irrigation and drainage structures from central and local budgets.

*Land reform* (from 1993): public financing of services related to implementation of the land reform: development of new land legislation, land registry, cadastral survey and land quality mapping.

*Chemical certification of land* (from 1999): public financing of field and analytical works on testing soils for content of heavy metals, pesticide and radionuclide residues; radioactive decontamination of agricultural lands and household plots.

*Rural infrastructure* (1992; 1994-1999; 2002-05): budgetary expenditures for delivery of gas, water and electric power to rural areas.

### ***L. Marketing and promotion***

*Marketing and promotion* (from 1994): budgetary expenditures for organisation of agricultural state exhibitions, fairs and promotion events.

### ***M. Public stockholding***

*State purchases for food security purposes* (from 2003): budgetary expenditures for purchases of foodstuffs for Derzhchrezerv (State Reserve Fund).

*Formation and keeping of sate stock of high quality seed* (from 2002).

### ***N. Miscellaneous***

*Non-specified expenditures* (up to 1991).

*Environmental programmes* (from 1993-2007): budgetary expenditures by the Ministry of Water Management and by the Ministry of Forestry reduced by one third to exclude non-agricultural payments; include partial compensation of costs incurred in various works on soil improvement, such as adding lime and gypsum to soils, maintenance of field-protective forest belts, soil protection from harmful water action; financed within the programme of *Fundamental Soil Improvement* and includes part of payments under this programme not allocated to category B.3. Payments based on use of on-farm services (see above).

**V.1 Consumer Support Estimate (CSE):** Associated with agricultural production, i.e. for the quantities of commodities domestically produced, excluding the quantities used on-farm as feed -- excess feed cost. [Sum of O to R; when negative, the amounts represent an implicit tax on consumers].

**O. Transfers to producers from consumers:** Associated with market price support on all domestically produced commodities, estimated by increasing the transfers calculated for the MPS commodities according to their share in the total value of production  $[(O.1) / (I.1) \times 100]$ .

*O.1. Of which MPS commodities:* Sum of the values of transfers from consumers to producers associated with market price support for the MPS commodities as calculated in Tables 4.1 to 4.10.

**P. Other transfers from consumers:** Transfers to the budget associated with market price support on the quantities imported of domestically produced commodities, estimated by increasing the transfers calculated for the MPS commodities according to their share in the total value of production  $[(P.1) / (I.1) \times 100]$ .

*P.1. Of which MPS commodities:* Sum of the transfers to the budget associated with market price support on the quantities imported of the MPS commodities as calculated in Tables 4.1 to 4.10.

**Q. Transfers to consumers from taxpayers**

*Q.1. Commodity specific transfers to consumers:* Sum of commodity specific transfers from taxpayers to consumers (farm gate level) from commodity MPS Tables 4.1-4.10.

*Q.2. Non-commodity specific transfers to consumers:* Sum of non-commodity specific transfers from taxpayers to consumers (farm gate level). The descriptions of policies inducing non-commodity specific transfers are provided below:

*Price difference compensation to processors* (up to 1991): direct budgetary transfers to processors to compensate for the difference between administered prices paid by processors to agricultural producers and lower administered prices received by processors; the compensation was provided for livestock commodities, grains, sugar beet, oilseeds and potatoes.

*Price difference compensation to retailers* (up to 1991): direct budgetary transfers to retailers to compensate for the difference between administered prices paid to food processors and lower administered prices set for retail consumers; the compensation was applied to principal foodstuffs.

**R. Excess Feed Cost:** Associated with market price support on quantities of domestically produced crops and used on-farm as feed as calculated (Sum of *Excess Feed Cost* in the MPS Tables 4.1, 4.2, 4.3.1, 4.3.2, 4.3.3).

**V.2 Percentage CSE**  $[100 \times (V.1) / ((II) + (Q))]$

**V.3 Consumer NPC:** For all agricultural commodities the consumer NPC is estimated as a weighted average of the consumer NPC calculated for the individual MPS commodities and shown in Table 2. For each commodity consumer NPC = domestic price paid by consumers (at the farm gate)/ border price (also at the farm gate).

**V.4 Consumer NAC**  $[(1 / (100 - (V.2)) \times 100]$

**VI. Total Support Estimate**  $[(III.1) + (IV) + (Q)]$  and  $[(S) + (T) - (U)]$

*S. Transfers from consumers*  $[(O)+(P)]$

*T. Transfers from taxpayers*  $[(III.1)-(O)+(IV)+(Q)]$

*U. Budget revenues*  $[(P)]$

**TABLE 2. UKRAINE: Breakdown of PSE by commodity specificity and other transfers**

All data sets in Table 2 come from Tables 1 and 3.1 – 3.11.

**Definitions:**

**I. Producer Single Commodity Transfers (producer SCT):** the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm level, arising from policy measures directly linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the payment. This includes policies where payments are specified on a per-commodity basis [Sum of SCTs for individual commodities from Tables 3.1-3.11].

**Percentage producer SCT:** is the commodity SCT expressed as a share of gross farm receipts for the specific commodities (including support in the denominator). This indicator can be expressed for the total SCT (Table 2), or for a specific commodity (Table 3.1 to 3.11).

$$\%SCT = 100 * SCT / (\text{Value of production}_{COM} + A.2_{COM} + B_{COM} + C_{COM} + D_{COM})$$

$$\text{Share in Total PSE (\%): } SCT_{SHARE} = 100 * SCT / PSE$$

**II. Group commodity transfers (GCT):** the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures whose payments are made on the basis that one or more of a designated list of commodities is produced. That is, a producer may produce from a set of allowable commodities and receive a transfer that does not vary with respect to this decision [GCT = B<sub>GROUP</sub> + C<sub>GROUP</sub> + D<sub>GROUP</sub>].

$$\text{Share in Total PSE (\%): } GCT_{SHARE} = 100 * GCT / PSE$$

**Transfers to specific groups of commodities:** The GCT involve gross transfers to the following groups of commodities: all crops, grains, other crops, all livestock, all except milk and meat.

**III. All commodity transfers (ACT):** 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 place no restrictions on the commodity produced but require the recipient to produce some commodity of their choice [ACT = C<sub>ALL</sub> + B<sub>ALL</sub> + D<sub>ALL</sub>].

$$\text{Share in Total PSE (\%): } ACT_{SHARE} = 100 * ACT / PSE$$

**IV. Other Transfers to Producers (OTP):** the annual monetary value of gross transfers made under policies that do not fall in the above three cases (SCT, GCT, ACT). That is, payments that do not require any commodity production at all. [OTP = E + F + G]

$$\text{Share in Total PSE (\%): } OTP_{SHARE} = 100 * OTP / PSE$$

$$\text{V. Total PSE: } PSE = A + B + C + D + E + F + G = SCT + GCT + ACT + OTP$$

$$\text{Percentage PSE: } \%PSE = 100 * PSE / (\text{Total Value of Production at farm gate} + A.2. + B + C + D + E + F + G)$$

**TABLE 3. UKRAINE: Producer Commodity Specific Transfers by commodity**

Tables 3.1 to 3.11 provide information on producer Single Commodity Transfers (producer SCT) for the following commodities: wheat, maize, other grains, sunflower, sugar, milk, beef, pigmeat, poultry, eggs and “other commodities”. All data sets in the calculation of the SCTs by commodity come from Tables 1 and 4.1 – 4.10 where definitions are included.

**Definitions:**

**I. Level of production:** Data from respective commodity Tables 4.1 – 4.10 (Market Price Support tables)

**II. Value of production (at farm gate):** Data for respective commodity Tables 4.1 – 4.10 (Market Price Support tables)

**III. Producer Single Commodity Transfers:** Sum of transfers to respective single commodity in categories A, B, C and D.

**A. Support based on commodity output**

*A1. Market Price Support* [Data for respective commodity from Tables 4.1 – 4.10]

*A2. Payments based on output*

Payments based on output (A.2) provided to respective single commodity [Data from Table 1]

**B. Payments based on input use, single commodity** [B.1<sub>COM</sub> + B.2<sub>COM</sub> + B.3<sub>COM</sub>]

*B1. Based on variable input use*

Payments based on variable input use (B.1<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

*B2. Based on fixed capital formation*

Payments based on fixed capital formation (B.2<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

*B3. Based on on-farm services*

Payments based on on-farm services (B.3<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

**C. Payments based on current A/An/R/I, production required, single commodity**

Payments based on current A/An/R/I (C<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

**D. Payments based on non-current A/An/R/I, production required, single commodity**

Payments based on non-current A/An/R/I, production required (D<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

**IV. Percentage producer SCT :** %SCT = 100\*(III) / ((II) + (A.2) + (B<sub>COM</sub>) + (C<sub>COM</sub>) + (D<sub>COM</sub>))

#### **TABLE 4. UKRAINE: Market Price Support and Consumer Single Commodity Transfers**

Tables 4.1 to 4.11, contain calculation of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: wheat, maize, other grains, sunflower, sugar, milk, beef, pigmeat, poultry, eggs and “other commodities”. The data sets used in calculation of the MPS and consumer SCT by commodity are described below:

##### **Definitions:**

##### **I. Level of production [1]**

**Wheat, maize, other grains (rye, barley, oats) and oilseeds:** Total domestic production.

**Sugar:** Total usable production of white sugar obtained from domestically produced sugar beet.

**Milk:** Total production of milk from dairy cows.

**Meats:** Gross indigenous production, carcass weight.

**Eggs:** Total usable production of eggs in shell.

##### **II. Producer prices**

**Wheat, maize, other grains (rye, barley, oats) and oilseeds:** Annual average of farm gate prices (all qualities) [1].

**Sugar:** Annual average of sugar beet prices at farm gate converted to white sugar equivalent by dividing sugar beet price by the sugar extraction ratio from sugar beet [1].

**Milk:** Annual average farm gate prices of cow milk.

**Beef and Veal:** Annual average farm gate prices for all categories of adult bovine animals for slaughter, live weight, converted to carcass equivalent [1].

**Pigmeat:** Annual average farm gate prices for all pigs for slaughter, live weight, converted into carcass equivalent [1].

**Poultry:** Annual average farm gate prices of live chickens, converted into carcass equivalent [1].

**Eggs:** Annual average of farmgate prices of fresh eggs for consumption converted into a per tonne basis by dividing by average egg weight (60 g) [1].

##### **III. Value of production (at farm gate) [(I)\*(II)]**

##### **IV. Level of consumption**

**Wheat, maize, other grains (rye, barley and oats) and oilseeds:** Total domestic use (total production, plus net trade, plus change in stocks) [1, 2, 3].

**White sugar:** Total domestic use in white sugar equivalent (total production, plus net trade, plus change in stocks), [1, 2, 3].

**Milk:** Total domestic use (total production, plus net trade, plus change in stocks) of cow milk, milk equivalent excluding milk used on farm feed [1, 2, 3].

**Meats:** Total domestic use (total production, plus net trade, plus change in stocks), carcass weight [1, 2, 3].

**Eggs:** Total domestic use (total production, plus net trade, plus change in stocks) [1, 2, 3].

## V. Consumption prices (at farm gate)

Implicit prices corresponding to reference prices plus the unit value of market transfers.

## VI. Value of consumption (at farm gate) [(IV)\*(V)]

## VII. Border prices

**Wheat:** for 1986-1993: EU export price of standard quality common wheat to specified zones, f.o.b. Rouen, calendar year [4]; for 1994-2004 Ukrainian unit values of wheat exports (NCM 100190) to all destinations [6], multiplied by the quality adjustment co-efficient (see section 4.5.5 of the *PSE Manual* [www.oecd.org/tad/support/psece](http://www.oecd.org/tad/support/psece) for explanation of derivation of the quality adjustment co-efficient); for 2005-07 weighted average of IGC quotations for feed wheat and food wheat (f.o.b. Black sea) [9], weighted by the shares of feed and food wheat in total Ukrainian wheat production respectively [8].

**Maize:** for 1986-1993: USA Yellow Corn No.3, c.i.f. Rotterdam, calendar year [4]; for 1994-2007: Ukrainian unit values of maize exports (NCM 100590) to all destinations [6].

**Barley:** for 1986-1993: EU export price for feed barley, minimum prices fob Rouen of price ranges at weekly free market tenders, net of export restitutions or taxes, calendar year (4); for 1994-2006: Ukrainian unit values of barley exports (NCM 100300) to all destinations [6]; for 2007 weighted average of IGC quotations for feed barley and food barley (f.o.b. Black sea) [9], weighted by the shares of feed and food barley in total domestic production respectively [8].

**Oats:** for 1986-1993: EU import price, c.i.f. Rotterdam and f.o.b. Sweden price, calendar year [4]; for 1994-2007: Ukrainian unit values of oat exports (NCM 100400) to all destinations [6].

**Rye:** German export values rye exports outside the European Union[5].

**Sunflower:** for 1986-1993: EU export price, c.i.f. Rotterdam, calendar year [4]; for 1994-2007: Ukrainian unit values of sunflower seed exports (NCM 120600) to all destinations [6].

**Sugar beet, white sugar:** for 1986-2007: EU export price of white sugar, Bourse de Paris (daily prices), fob Europe, calendar year [4].

**Milk (reference price):** for 1986-1995: New Zealand farm gate price of milk (NZP), calendar year, actual fat content (a %) and protein content (c %),  $(0.5*(NZP)*((b\%/a\%)+(d\%/c\%)))$ . The reference price is New Zealand farm gate price adjusted for Ukrainian fat and protein content plus transport cost for butter and skimmed-milk powder in milk equivalent (56 kg and 82 kg per tonne of milk, respectively) from New Zealand to Europe [4]; for 1996-2005: border price of milk is a calculated implicit value [4, 7]. The calculation method is based on two assumptions. First, world markets for tradable dairy commodities are competitive, which allows the formation of a single price for each of the solid components of raw milk, milk fat and protein, used to make dairy products. Secondly, each type of dairy product contains a unique and fixed amount of each of those solid components of milk. Under this method, the implicit price of milk at the border ( $P_b$ ) is calculated from the prices of those components:

$$P_b = \left(\frac{a}{b}\right)P_{wb} + \left(\frac{c}{d}\right)P_{ws} \text{ where:}$$

$a$  and  $b$  are milk fat contained in one ton of raw milk and butter respectively,  $c$  and  $d$  are non-fat-solids contained in one ton of milk and skimmed milk powder respectively,  $P_{wb}$  and  $P_{ws}$  are Ukrainian unit export values of butter (HS 040210) and skimmed milk powder (HS 040500) respectively [6, 7]. The reference price of milk at farm gate ( $P_r$ ) is the implicit milk border price net of processing costs ( $C$ ):

$$P_r = P_b - C$$

The processing margin is the average of processing margin in Australia, European Union, New Zealand and the United States.

**Beef and Veal:** for 1986-1993: EU unit export values in extra-EU trade of meat of frozen bovine animals, calendar year [5]; for 1994-2007: Ukrainian unit values of exports of frozen beef carcasses to all destinations [6].

**Pigmeat:** for 1986-2007: EU average unit export values of fresh, chilled, and frozen pigmeat in extra-EU trade, calendar year [5].

**Poultry meat:** for 1986-1993: EU export unit values in extra-EU trade of frozen chickens (weighted average of NC 02071015 and NC 02072110 of external trade statistics), calendar year [5]; for 1994-2007: Ukrainian unit values of imports of frozen whole poultry from all destinations [6].

**Eggs:** for 1986-2007: EU unit export value in extra-EU trade in poultry eggs in shell, fresh or preserved, other than eggs for hatching (NC 04070030 of external trade statistics), calendar year [4].

## VIII. Marketing and transportation margins

Border prices are adjusted for marketing and transportation margins to bring the border price to the farm gate level (see section 4.5.3 of the *PSE Manual* [www.oecd.org/tad/support/psecse](http://www.oecd.org/tad/support/psecse) for explanation of the procedure for adjustment of border price to farm gate). The data on margins are derived from:

**Marketing margins:** estimated on the basis of processing and storage costs from the reports by Khlib Ukrainy SJSC (*Bread of Ukraine Corporation*), by other agro-food marketing associations and by the Ministry of Economy. Available technical coefficients are used where required (e.g. to convert sugar beet to sugar or live weight to slaughter weight) [8].

**Transportation costs:** calculated on the basis of tariff instructions and orders by the Ministry of Transport of Ukraine, as well as the tariff directory for works and services by sea-ports of Ukraine [8].

### Sources:

- [1] State Statistics Committee of Ukraine (Derzkomstat).
- [2] FAO database: FAOSTAT.
- [3] USDA Economics and Statistics System: The Foreign Agricultural Service's Production, Supply and Distribution (PS&D).
- [4] OECD PSE/CSE.
- [5] EUROSTAT, COMEXT.
- [6] State Customs Committee of Ukraine.

[7] UN Comtrade database.

[8] Kobouta, Irina (2008), *Ukraine: Agricultural Policy Developments in 2006-08*, report submitted to OECD.

[9] International Grains Council (IGC).