

# The comparison of agricultural support policies in the OECD and the EU countries from the perspective of economic globalization processes

## *Komparácia podpornej politiky krajín OECD a EÚ v procese ekonomickej globalizácie*

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**Abstract:** The paper analyses the evaluation of agricultural and farm support in the OECD countries and its differentiated development in the respective countries. This is important, because the effect of subsidies on production, trade, income as well as environment, directly depends on the way how this subsidies are disbursed to the farmers. Another object of the analysis are the differences in the level of support between different commodities that may lead to deformations.

**Key words:** globalization, producer subsidy estimator, agricultural support policy, Doha Development Agenda, producer nominal assistance coefficient (NAC)

**Abstrakt:** Príspevok analyzuje hodnotenie podpôr poskytovaných poľnohospodárskym výrobcami v OECD a ich diferencovaný vývoj v jednotlivých krajinách. Skúmajú sa rozdiely vo výške podpôr medzi jednotlivými komoditami, tie by totiž mohli následne viesť k deformáciám. Odhady sú rovnako poskytované aj pre úroveň a skladbu podpory všeobecných poľnohospodárskych služieb a celkovej výške podpôr, ktorá je výsledkom príslušných poľnohospodárskych politík.

**Kľúčové slová:** globalizácia, ekvivalent produkčných subvencií, dotačná politika, Doha Development Agenda, koeficient nominálnej podpory výrobcov (NAC)

The diversity of state interfering in agriculture causes problems within the range of agriculture expenses protection. The international comparing conception of agriculture sector subsidization comes from the FAO studies since the year 1970. The group of scientists within the OECD composed during the 80's a sector subsidization unified classification methodology. The indicator Production Subsidy Equivalent (PSE) was used to compare the measure of agriculture subsidization (Svatoš et al. 1999).

The discussion about the level of direct payments was the most controversial point of negotiation about agriculture. The European Commission claimed that subsidies decoupled from production have not influence on production neither on competitiveness and at the other hand, high level of subsidies will hinder branch transformation. But the direct payments are not efficient decoupled from production. The direct payments should not have any impact on the

farmer's behavior in the perfect markets (Pokrivčák et al. 2004).

Since the end of the 90-ties in the last century, the agricultural financial support for farmers changed very little in the OECD countries. Between years 2002–2004, the total support decreased from the level of 37% of sales value in the period 1986–1988 down to 30% (in fact, that level was already reached in the period 1995–1997). Every year fluctuations in the level of agricultural support have been influenced mainly by political motivations standing behind the measures like limitations in the process of reflection of price development from international markets into domestic ones. Political reforms aimed at the change of agricultural support scheme for farmers especially targeting its decoupling from production. While this process is still going on, the support directly related to production still dominates in most member countries. They support agricultural output, cause international

trade deformation and price distortion in international agricultural markets. Some agricultural sub-sectors remained relatively unreformed, so there is a need for a substantial change in these aspects. The policies which are not decoupled have a negative influence on partnership countries. Banse et al. 2000 defined full decoupling, effective full decoupling and degree of decoupling. The full decoupling means that the policy affects not farmers' production decisions, which obtain subsidy and allows market to determine the level of prices. The effective full decoupling is when the level of production and trade is the same as without subsidiary policy. Another important issue in this discussion is the need for more transparency in the applied agricultural support scheme, as well as the necessity of directing this scheme toward specific goals and increasing its flexibility toward changes in the priorities of agriculture policies in different countries and regions.

The common trade organization was based on administratively specified prices over the level of market prices. To avoid excessive imports, there were used also import duties while surpluses were exported on world markets with export subsidies support. The support of market price caused incomes transfer from consumers and taxpayers to farmers (Bielik, Pokrivčák 2001).

Important questions are the extent of the Common Agricultural Policy, role of the EU to help realizing changes in structure and productivity of the new members' states and also expecting position of agriculture in new members' states economy (Svatoš et al. 1999).

The CAP with support instruments is able to eliminate the regional differences. On the other side, it is needed to notify that the farmers should contribute with configuration of their expense and producing structure and marketing strategy. The CAP will not create in new members states conditions for loss compensation as a consequence of ineffectively production (Blaas, Božik 2002). Eastern enlargement of the EU implies integration of the agricultural economies of the new member states in the CAP. As a consequence, farmers in the new member states will receive area payments for the land they use, gradually increasing over a transition period (Ciaian, Swinnen 2005).

## MATERIAL AND METHODS

To analyze the supporting policy of the OECD and the EU countries during the process of globalization we used the indicators constituted by the OECD as PSE, CSE and TSE.

The PSE (Production Subsidy Equivalent) is the indicator which measures the yearly financial value of consumers and taxpayers transfers for support of agriculture producers. This Transfer creates at the farm level as a consequence of agriculture supporting policies.

The CSE (Consumer Subsidy Equivalent) is the indicator which measures yearly financial value of gross transfers from consumers of agricultural commodities, measured at the farm level.

The TSE (Total Subsidy Equivalent) measures yearly financial value of gross transfers from taxpayers and consumers minus budgetary incomes of agricultural policy.

## RESULTS

### The differences in agricultural support policies between the OECD and the EU countries

The value of Producer Subsidy Estimate in the OECD countries in 2004 is estimated approximately at 279 billion USD, or 226 billion EURO. This support represents the level of 30% of agricultural sales value. Together with other elements of support like for example agricultural services such as infrastructure, inspection, marketing and advertising, the total agricultural support represents 1.2% of GDP in the OECD countries.

However, there are huge differences in the level of agricultural support between the OECD countries. The level of support for farmers in the OECD countries in 2004, varied from less than 5% of agricultural sales value in Australia and New Zealand, to approximately 20% in Mexico, USA and Canada, 25% in Turkey, while exceeding the OECD average (30%) in the EU member states (34%), and reaching up to the level of 60% in Japan and South Korea, or even above 70% in Island, Norway and Switzerland.

Since 2004, the estimated total agriculture support for the EU countries includes also new member states, taking into account all 25 members though. Six EU members that are not the OECD members (Cyprus, Estonia, Lithuania, Latvia, Malta and Slovenia) are included in the estimated support of the EU 25 but not that of the OECD.

In most of the OECD countries, the total level of agricultural support compared to the period 1986–1988 decreased. It remained unchanged only in Norway and increased in Turkey. A remarkable decrease was registered in Canada, as well as Mexico (in the period 1991–1993) and in New Zealand.

In the group of countries with high level of support, Switzerland registered the biggest decrease. In the average, the total agricultural support expenditures in the OECD countries were reduced from the level of 2.3% of GDP in the period 1996–1988 to the level of 1.2% of GDP in the period 2002–2004. Such trend is common for most of the OECD members with the exception of Turkey, where the share of agricultural support expenditures in GDP increased.

In the periods between years 1986–1988 and 2002 to 2004, the differentiation in the level of commodity support was reduced in all the OECD members (the slightest changes were registered in the EU, Japan and Korea while the biggest in Canada and in Switzerland). The biggest reduction was registered in the case of support for sheep and cereals (excluding rice). The support remained unchanged for commodities like sugar, milk and the above mentioned rice.

### **Changes in payment schemes**

In the framework of the Common Agricultural Policy reform, in 2003 most of the EU member states (exactly 15 MS) decided to implement the so called direct payment scheme starting from 2005. The rest (Finland, France, Greece, Holland and Spain) started from 2006. Germany, Ireland, Italy, Luxembourg and Great Britain decided to make major changes, while France choose to make the slightest changes in the framework of the common payment scheme. For the majority of member states, payments will be based on the historical reference period, combined in some countries with regional support payments (like Denmark, Finland, Germany, Luxembourg, Sweden and Great Britain). With the exception of Malta and Slovenia, new member states (NEMS) use single area payment subsidies (SAPS), since 2004. The payments are disbursed per hectare of agricultural land (in average 48 Euro per hectare for 8 mentioned countries), while all 10 NEMS contribute with the so called “top-up” payment as well. This increased support after the accession of the NEMS contributed to the increase of agricultural income in all NEMS except Malta, Slovenia and Cyprus. After a preliminary phase, the NEMS will have to switch from SAPS to a single farm payment scheme (SFPS).

Low prices forced institutions in the USA toward a remarkable increasing agricultural support in the form of loans or periodical payment programs. The EU decided that payments granted for specific commodities like olive oil, hops, cotton and tobacco has been included gradually into SFPS program since 2006 (in case of hops since 2005). In case of Canada,

the local Canadian Agricultural Income Stabilization program substituted and changed certain instruments for income support. Insurance programs have been formulated in France, Italy, Korea and Spain. Certain countries reduced taxes or offered compensation for high fuel prices. Many countries also paid compensation for the damages caused by floods.

An important element of the program Swiss AP 2004–2007 is the gradual elimination of milk product quotas. The USA announced the abolition of quotas on tobacco since 2005 and substituted them with ten year purchasing payments. More flexibility introduced the new system of rice production regulation in Japan, where the government organizes purchases based on tenders and not prices determination. Norway liberalized milk market by increasing the opportunities for private traders. Australia, Canada, Mexico and USA introduced measures aimed at improving access to water resources. Norway introduced a new system, in order to secure better coordination and placement of agro-environmental payments. Ecological conditions have been co-opted as a mean of support payments in EU, while Japan plans to do so, soon. Denmark and Norway increased taxes for agricultural polluters. Some countries started implementing monitoring system, including GMOs (genetically modified organisms), or restructured their food regulation policy and administration.

Since 2004, almost all OECD countries were bound by bilateral or regional trade agreements. Regarding agricultural issues, sensitive products are often excluded from these agreements. After a temporary stagnation of the negotiation process in the framework of the Doha Development Agenda (DDA) in 2003, negotiations started anew in 2004.

Progress has been made in the introduction of a certain system for agriculture, but still many questions remain unsolved. If bilateral or regional agreements speed up certain changes in political thinking, then the progress achieved at the multilateral level will promote reforming processes in agricultural policy.

Due to delays in the DDA framework, conflicts aroused in certain agricultural issues in WTO. The OECD countries have been always identified as the cause of problems. Committees had to deal with problems ranging from domestic payments, export subsidies, market access barriers, and state trade companies to phytosanitary requirements. The outcome from the agricultural committee has an important impact for domestic reform policies, as well as for multilateral agreements.

The evaluation of agricultural and farm support in the OECD countries and its differentiated development in respective countries, causes as a consequence

Table 1. The Production Subsidy Equivalent in the OECD countries

Country	Variable	1986–1988	2002–2004	2002	2003	2004
Austria	EUR mil.	1 219	980	1 123	941	876
	percentage PSE	8	4	5	4	4
	producing NPC	1.05	1	1	1	1
	NAC	1.09	1.05	1.06	1.04	1.04
Canada	EUR mil.	5 548	5 020	5 091	5 357	4 613
	percentage PSE	36	22	21	25	21
	producing NPC	1.4	1.14	1.12	1.16	1.13
	NAC	1.57	1.29	1.26	1.34	1.27
CR	EUR mil.	1 097	1 012	1 026	1 031	n.c.
	percentage PSE	31	26	25	29	n.c.
	producing NPC	1.54	1.2	1.21	1.22	n.c.
	NAC	1.49	1.35	1.33	1.4	n.c.
EU	EUR mil.	92 308	103 050	96 989	104 474	107 686
	percentage PSE	41	34	34	36	33
	producing NPC	1.8	1.32	1.31	1.34	1.29
	NAC	1.71	1.52	1.52	1.56	1.49
Hungary	EUR mil.	716	1 592	1 986	1 492	n.c.
	percentage PSE	16	28	33	28	n.c.
	producing NPC	1.15	1.19	1.19	1.22	n.c.
	NAC	1.2	1.39	1.49	1.39	n.c.
Island	EUR mil.	177	177	175	180	175
	percentage PSE	77	70	70	72	69
	producing NPC	4.37	3.15	3.13	3.28	3.03
	NAC	4.36	3.37	3.36	3.53	3.23
Japan	EUR mil.	44 408	42 861	46 859	42 377	39 346
	percentage PSE	61	58	58	59	56
	producing NPC	2.47	2.27	2.29	2.33	2.2
	NAC	2.58	2.37	2.39	2.43	2.28
Korea	EUR mil.	10 840	16 672	18 648	15 344	16 025
	percentage PSE	70	63	65	61	63
	producing NPC	3.33	2.59	2.76	2.46	2.55
	NAC	3.39	2.72	2.88	2.59	2.67
Mexico	EUR mil.	6 718	6 602	9 508	5 896	4 401
	percentage PSE	28	21	26	19	17
	producing NPC	1.35	1.17	1.27	1.14	1.09
	NAC	1.39	1.26	1.35	1.24	1.2
New Zealand	EUR mil.	451	164	109	176	208
	percentage PSE	11	2	2	2	3
	producing NPC	1.02	1.02	1.01	1.02	1.02
	NAC	1.13	1.02	1.02	1.03	1.03

Table 1 continued

Country	Variable	1986–1988	2002–2004	2002	2003	2004
Norway	EUR mil.	2 545	2 653	2 923	2 651	2 385
	percentage PSE	71	71	74	72	68
	producing NPC	4.29	2.8	3.27	2.73	2.41
	NAC	3.45	3.52	3.88	3.54	3.12
Poland	EUR mil.	1 180	2 161	2 844	1 084	n.c.
	percentage PSE	11	14	19	8	n.c.
	producing NPC	1.08	1.15	1.19	1.1	n.c.
	NAC	1.13	1.17	1.23	1.09	n.c.
SR	EUR mil.	440	346	364	415	n.c.
	percentage PSE	28	21	21	25	n.c.
	producing NPC	1.17	1.13	1.14	1.2	n.c.
	NAC	1.4	1.27	1.27	1.34	n.c.
Switzerland	EUR mil.	4 925	4 865	5 184	4 723	4 688
	percentage PSE	78	71	73	71	68
	producing NPC	5.1	2.57	2.81	2.54	2.36
	NAC	4.59	3.41	3.66	3.4	3.16
Turkey	EUR mil.	2 868	8 317	5 957	9 601	9 393
	percentage PSE	16	25	20	29	27
	producing NPC	1.17	1.28	1.2	1.36	1.3
	NAC	1.2	1.34	1.26	1.4	1.36
USA	EUR mil.	33 295	36 855	41 493	31 527	37 544
	percentage PSE	22	17	18	15	18
	producing NPC	1.14	1.09	1.1	1.07	1.11
	NAC	1.28	1.21	1.22	1.18	1.22
OECD	EUR mil.	220 776	231 072	240 279	227 268	225 670
	percentage PSE	37	30	31	30	30
	producing NPC	1.57	1.29	1.3	1.29	1.28
	NAC	1.6	1.44	1.44	1.44	1.43

Source: Organisation for Economic Cooperation and Development (2005), Decoupling – policy implications

changes in the payment structure. This is important, because the effect of subsidies on production, trade, income as well as environment directly depends on the way how these subsidies are disbursed to the farmers. Another object of the analysis is the differences in the level of support between different commodities that may lead to deformations. Estimations have been made also for the level and structure of support for general agricultural services and the total level of agricultural support that is a result of the respective agricultural policies. The reforms of agricultural policies implemented in the OECD countries are oriented, from the aspect of reduction of support

level, as well as its restructuralization, toward the change such that agricultural support systems are less coupled to production as well as toward reduction of the differences in the support between different commodities.

In 1987, the ministers from the OECD countries expressed the need for reduction in the agricultural support and for redirecting its forms toward supporting of lower production and elimination of market disequilibria, making agricultural sector more open and sensitive toward market signals. The ministers understood that governments need more flexibility while selecting the proper policy measurements and

the pace of reforms regarding differences between the OECD countries, and have to clearly define the extension of their policy goals. Producer Subsidy Equivalent (PSE) and its derived indicators serve as instruments for monitoring and evaluation of agricultural policy developments. It is important to differentiate between the support granted to farmers and its effect on individual production decisions, and, the support granted in the framework of a certain general mechanism designed for agricultural sector as a whole. Measures included in PSE are classified as expression of the way how respective policies are implemented.

Producer subsidy estimate (PSE), is the nominal indicator of transfers from consumers and state budget to support agricultural producers (farmers), and is calculated as the ratio of support to agricultural producers in the total value of gross farm receipts. The total value of PSE in the OECD, defined in %, is estimated at 30% in 2004 and as been at this level since 2000. In other words a third of current gross farm receipts are achieved thanks to transfers arising from agricultural policies.

The level of agricultural support in the OECD countries is possible to analyze also through producer nominal assistance coefficient (NAC), which expresses the ratio between the value of transfers from consumers and state budget to support agricultural producers (farmers) (PSE) and production valued at world market prices without support. Just like % PSE, NAC also changed very little in the OECD countries, during the last three years and in average reached the value of 1.44 (2002–2004). In other words, current gross farm receipts are 44% higher than they would have been in case they would have been evaluated in world prices without support. The comparison between NPC, NAC and PSE coefficients in the OECD countries in the year 2004 is presented in Figure 1.

The PSE in the OECD countries decreased from the level 37% in the period 1986–1988 down to 30% in the period 2002–2004. This affected NAC that shows on the fact that gross farm receipts in 1986–1988 were on average 60% higher. The decrease of NAC to the current level (30%) shows a more market friendly orientation in the agricultural sector, because gross farm receipt increases were generated by the markets, not governmental interventions.

The level of support expressed as % PSE in 2004, increased in Korea, New Zealand and USA but remained unchanged in Australia (Table 1). In the other countries, this level decreased. The biggest decrease was registered in Canada and in the countries with previously high level of support like Japan, Norway and Switzerland. The analysis of factors affecting

changes in the level of support between 2003 and 2004 show many common features, as well as differences between the OECD countries. In 2004, support for producers increased in USA (31%), New Zealand (14%) and Korea (11%) – Table 1. To the contrary, it decreased in Mexico (14%), Canada (12%) and by 10% in Australia. In most countries, there is another important element that affects changes in the annual level of support that is the Market Price Support (MPS). For example in USA an increase in MPS led to an increase in the level of support, similar like in New Zealand and Korea, while in Mexico, MPS led to a decrease in PSE by more than 10%.

The annual changes in the value of (PSE) can be explained by the analysis of support. Such analysis identifies the components of that support and estimates how are changes in these components reflected into the changes of PSE. Such analysis can be made at the level of respective member countries as well as for the whole the OECD and can include one or some selected or all commodities. Exchange rates play an important role. For given rates, the analysis takes into account data given at national currencies. For the purposes of result aggregation at the OECD level, one currency should be selected. For illustration, in 2003 and 2004 PSE in the OECD countries increased by 6% in USD, but decreased by 1%, in Euros.

In order to avoid these problems, the analysis calculates percentage changes in PSE for the OECD as index of changes in respective countries (in national currencies) weighted by the value of PSE in the previous year. An important condition is that different countries are given a weight that reflects their contribution to the value of PSE for the whole the OECD, rather than their share on the total value of production. That means also that the result of the analysis is not equivalent to the percentage change of PSE for the OECD expressed at any national common currency.

From Table 1 it is apparent for example that in case of Australia there is a correlation between the PSE and market price support and budget payments. The value of PSE decreased in 2004 by 9.8%, while the value of MPS slightly increased by 0.4% and the value of budget payments (BP) decreased by 10.2%. In the case of Australia, the change in the value of BP is dominantly affected by the value of payment based on input use.

In all the OECD countries, increasing world prices reduce the gap between domestic and marginal prices, and as a result reduce the level of MPS (Table 1). Policy measures in 2004 were implemented under the pressure of high meat prices in the world market (with exception of poultry), milk products and

rice. This somehow, made up for the lower prices of cereals, poultry and eggs. Fluctuations were caused also by exchange rates, USD depreciated while Euro appreciated. USD depreciated toward currencies of the OECD members with the exception of Mexico, and this affected for example at a certain extent (mainly in New Zealand) the process of narrowing the gap between domestic and world prices, given the high level of world prices. Only in Norway the average producer prices decreased.

While the average level of support for producers in the OECD countries decreased from 37 to 30%, bigger changes occurred in the components of this support and in the form of apparent switch from transfers from consumers (MPS) to budget payments, as well as between different categories of budget payments to producers (Table 2). Both shares of the MPS and payments based on output fell from 83% on the total OECD support level to 65% (between 1986–1988 and 2002–2004). This is important, because lower support based on output means a broader role for markets in the producer decision process.

The limited growth of the MPS and payments based on output are reflected also in the producer Nominal Protection Coefficient (NPC) that measures the degree of market protection given to producers. In the period 1986–1988, it can be stated based on NPC figures that producer prices in the OECD were 60% higher than border prices. Until the period 2002–2004, this gap was reduced to 30%. This is mainly true for countries with higher level of support like Switzerland (–60%), Norway (–45%), and by one third in Korea and Island. The protection of domestic market in these countries, as well as in the whole OECD fell faster than the overall level of support, even though the total support itself has been falling since mid 90-ties.

The decrease of the MPS is apparent from changes in % CSE, as well. The negative value of % CSE indicates the effect of indirect tax on consumption, as a result of a policy directed toward increasing final consumer prices. In some countries, the consumer benefit arising from decreasing prices as a result of reduction in the MPS, is compensated with a reduction in the level of support granted to producers.

As it is the case for the payments based on output, payments based on inputs as well lead to deformations in production. The share of payments based on inputs (even though not apparent as in the case of payments based on outputs, to the contrary) remained almost unchanged from 8% in 1986–1988 to 9% of PSE in 2002–2004. In total, these forms fell from 91% to 74%.

In the period 1986–1988, most OECD members share of the level of transfers based on inputs and outputs was at or above 90% of the OECD average, including EU, Island, Japan, Korea, Norway, Switzerland and Turkey. Due to the new policy development, the share of these transfers fell in 2002–2004 under the OECD average of 75% in the EU, Norway and Switzerland. It remains above 90% in Japan and Korea.

Such reduction represent a positive step toward long-term reform targets – like the reduction of support induced deformations, be them producer or market subsidies, especially in countries that remarkably reduced the share of such transfers. The trend in the reduction of these forms of support reduces also the pressure on the environmental problem fixing process and creates opportunities for a more effective direction of farmers' income and provisions from specific environmental benefits.

Beside the above mentioned, the current level of market protection is still an important factor in con-

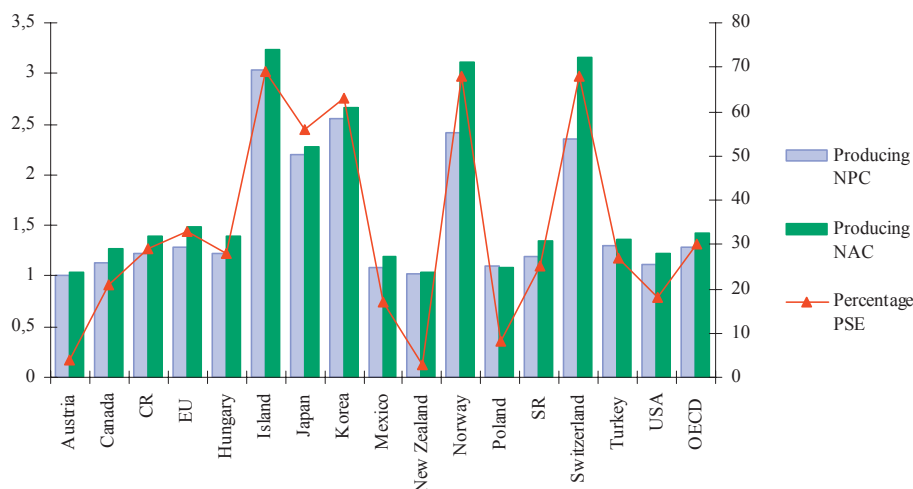


Figure 1. The comparison of coefficients – NPC, NAC, PSE in OECD countries in the year 2004  
Source: Organisation for Economic Cooperation and Development (2005)

solidating domestic production, distorting markets and reducing world prices of agricultural products. It determines prices not only for domestic consumers and taxpayers, but also for other countries, challenging them with increasing competition.

Increasing production and protection rate in the OECD countries increases the pressure toward reduction of production support, affects consumer behavior and food security, as well as limits development opportunities in the developing countries. Market protection has a regressive impact if granted to big farms, and in fact it penalizes low income household groups, for whom the share of food expenditures on total expenditures is huge.

Reduction of old forms of support that cause market deformation was associated with the introduction of their substitutes that have the potential to be better. In years 2002–2004, payments were mainly related to the size of the agricultural land or to the number of animals at the share 16% of producer support, while it accounted for just 7% in 1986–1988. They are important especially for the EU (28% of PSE) and in Norway (18% of PSE). Payments based on historical figures or experiences (area, number of animals, revenues, support, or farm receipts) were introduced for the first time in 1993. In the period 2002–2004, they represented 5% of the total support in the OECD but

are used mainly in Mexico, Switzerland and Turkey (18% PSE) and in the USA (14% PSE).

While payments based on historical figures and experiences are decoupled of recent production decisions (they are formulated based on historical support, farm receipts, land and specific commodity revenues), payments per hectare of land or per animal are derived from the harvested area or number of animals. Regarding the current parameters of production, payments based on the size of agricultural land or on the number of animals cause greater deformations than the payments derived from historical figures. Both forms of payments affect the current production decisions, as well as contribute to the reduction of risk of production and to the changes in the value of land while minimizing deformation effects of these payments, are it based on inputs or outputs. For these reasons, they have to be implemented everywhere when possible, especially regarding big payments, that are characteristic for the EU or USA.

Even though these payments maybe directed toward specific income and environmental targets, they are often implemented in a broader context. Another group that benefits from them are the landowners, who are not farmers, in fact big farm income overcomes that of small ones. They may also support ecologically friendly land usage, even though the

Table 2. Share of the Production Subsidy Equivalent in the OECD countries during the years 2003–2004

Country	PSE <sup>1</sup> % change	Subsidy		The value of budget payments (BP) based on						
		MPS	BP	output	area	historic. claims	used input	decreased output	farms income	others
percentage change of PSE, in case that other variables stay unchanged										
Australia	-9.8	0.4	-10.2	0.0	0.0	0.0	-10.1	-0.2	0.0	-0.2
Canada	-12.5	-7.2	-5.3	-0.5	39 298	-7.7	0.5	0.1	0.0	-2.5
EU <sup>2</sup>	39 085	0.0	3.0	0.2	0.7	39 234	0.7	0.2	0.0	-0.3
Island	-2.1	-0.4	-1.7	-0.5	0.0	-0.9	-0.3	0.0	0.0	0.0
Japan	-4.9	-3.9	-1.0	-0.1	0.0	-0.1	-0.1	-0.6	0.0	0.0
Korea	39 335	39 305	-0.9	0.0	-0.3	0.0	0.2	0.0	-0.9	0.0
Mexico	-14.2	-15.1	0.8	0.5	-0.5	1.0	0.2	0.0	-0.3	0.0
N. Zealand	14.0	39 123	39 328	0.0	0.0	0.0	39 115	0.0	39 234	0.0
Norway	-5.7	-5.0	-0.7	-0.8	0.3	-0.1	-0.3	0.1	0.1	0.0
Switzerland	0.9	0.4	0.5	-0.2	0.2	0.5	0.0	0.1	0.0	-0.1
Turkey	39 235	-0.1	39 265	1.0	0.0	39142	0.4	0.0	0.0	0.0
USA	39 263	39 337	39 250	39 182	12.0	-3.4	0.0	-0.2	-1.3	0.0
OECD	0.9	-0.5	39 173	39 173	39 234	-0.6	-0.4	-0.1	-0.3	-0.2

<sup>1</sup>Percentage change of exchange rate

<sup>2</sup>EU 15 for the year 2003, EU 25 for the year 2004

Source: Organization for Economic Cooperation and Development (2005), Decoupling – policy implications



payments are conditioned upon certain ecologically friendly aspects of farm management, as well as restriction for harvesting or the timing and extends of fertilizers usage.

Some countries started to a greater extent, using payments based on limitations of inputs, also they substituted or eliminated some production resources or changed production techniques in some cases for environmental reasons. Even though the value of these resources tripled since 1986–1988, they still represent just 4% of the total PSE of the whole OECD. They were 1% higher in the period 2002–2004 in the EU and in the USA, while it represented 3% in Japan, 2% in Norway and Switzerland. In other countries, their level was zero.

Payments restricting inputs have a very limited impact on production and trade with specific commodities. These payments are derived from the prices of land leasing or the usage and management of farm activities that increase with payments coupled to production and its level, so the price of ecological services and the control of pollution are remarkably higher than in the case without support for production. Producers must pay for pollution that they cause through taxes as well as through fees from regulation mechanisms, which may lead to the improvement of their attitude toward environment in agriculture.

Some countries implement payments derived from farm income or receipts that represent in fact the most efficient instrument of income distribution for producers and target restriction of production, as well as market distortion. In Canada, these payments represented in the period 2002–2004 up to 17% of PSE, in Australia 10%, in USA 5% and 3% in Norway. However, compared to the total support in the OECD countries, they play a very marginal role at the level of just 1% of total support. Differences between the levels of support for different commodities remain insignificant. Some commodities were below the OECD average of the level of % PSE (i.e.30%), in the case of wool and eggs the figure was below 10%, poultry, pork and oilseeds (20%) and maize (around 25%). On the contrary, some other commodities were slightly above the OECD average like for example beef and wheat (35%), lamb, other cereals and milk (40%) while significantly above average were commodities like sugar (54%) and rice (80%).

## CONCLUSION

The level of agricultural support in the OECD countries can be analyzed also through the producer

nominal assistance coefficient (NAC), which expresses the ratio between the value of transfers from consumers and state budget to support agricultural producers (farmers) (PSE) and production valued at world market prices without support. Just like % PSE, NAC also changed very little in the OECD countries during the last three years and in average reached the value of 1.44 (2002–2004). In other words, current gross farm receipts are 44% higher than they would have been in case they would have been evaluated in world prices without support.

The PSE in the OECD countries decreased from the level 37% in the period 1986–1988 down to 30% in the period 2002–2004. This affected NAC that shows on the fact that gross farm receipts in 1986–1988 were on average 60% higher. The decrease of NAC to the current level (30%) shows a more market friendly orientation in the agricultural sector, because gross farm receipt increases were generated by the markets, not governmental interventions.

While the average level of support for producers in the OECD countries decreased from 37 to 30%, bigger changes occurred in the components of this support and in the form of apparent switch from transfers from consumers (MPS) to budget payments, as well as between different categories of budget payments to producers. Both shares of MPS and payments based on output fell from 83% of the total OECD support level to 65% (between 1986–1988 and 2002–2004). This is important, because a lower support based on output means a broader role for markets in the producer decision process.

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