Community Support for Agriculture in EU Member States

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Abstract

This paper considers community support for agriculture in EU member states. First, the existing distribution system was studied followed by the summary of the three main problem areas around the system (inequality, hindering productivity and sustainability). It was found that CAP subsidies do not enhance productivity, furthermore, the distribution system can only be considered unequal if we disregard that the old and the new member states belong to different income level groups. If income level and capital stock are considered, then on average, twice as much subsidy for old member states might be justifiable.

Key words: community support, income level, production factors, CAP, sustainability

Jel classification: Q10

Introduction

The Common Agricultural Policy (CAP) is a policy area of vital importance, as the European Union member states devoted approximately 45% of the total EU budget to support agricultural production, on 14 million farms, providing livelihood for nearly 30 million people. We have now reached a critical juncture for the future of a policy that absorbs more of the EU's budget than any other policy area, but one that also influences the management of almost 80 per cent of Europe's total land area. There is broad consensus that the policy needs to evolve. Earlier, agriculture expenditure represented half of the EU budget, but the share of traditional CAP spending is projected to decrease significantly. Agriculture is not only a productive sector which provides adequate quality and quantity of food to the population, but the multifunctional European model also performs eco-social functions (NAO, 2008).

Forty years of common market policy and more than thirty years of community structural accompaniment policy have not – or barely – reduced the structural differences between agricultural landscapes within Europe. The physical, social, cultural, etc. factors causing and reiterating this heterogeneity are still in place. Therefore, it is important to pay attention to these factors and to take them into account when the future of the CAP is considered all the more so as European enlargement will exacerbate the structural heterogeneity.

The Common Agricultural Policy plays a crucial role in ensuring the long-term sustainability of agriculture. Since its formation, the CAP is at the heart of a series of reforms. The agricultural policy was first protectionist, anti-competitive, aiming at mass production, but now it is gradually providing increasing emphasis on environment-friendly, multifunctional models, on market needs and on the needs of consumers.

In our study, community support for agriculture in EU countries was considered then we endeavour to justify the common belief of the new Member States that the distribution system is unfair and distorted, absurdly generous to some countries.

Results and Discussion

Determinants of agricultural politics

Interests are determined by political and economic policy factors. The political economy of agricultural policy places the decisive factors in two main groups: the interest group theories focus on the determinants of interest groups and coalitions, while the politicians-voters models put emphasis on the analysis of the relations between politicians and voters. Agricultural economists suggested the like-minded analysis of the CAP following the game theoretic approach of the GATT negotiations (Roé 1996, Mahé – Roe, 1996). The CAP is a complex, transnational decision-making system, therefore, in addition to the political economy models it can be described as a three-level (national, European Union, international) system. The long-term survival of the CAP may be explained by the strong asymmetry of interests for the benefit of agriculture (Fertő, 1999).

The forces shaping the common agricultural policy largely embody political interests, often in the form of economic, social and moral values. According to Daugbjerg and Swinbank (2009) until the 1980s the evolution of the CAP was determined by the common budget. The 1992 MacSharry reform has two guiding principles, the WTO and the financial issues. As the main motivation of the CAP reforms paradigms have emerged since the beginning of the 90s. Garzon (2005) believes that shift occurred from the paradigm of the publicly supported agriculture towards a paradigm of multifunctionality and, consequently a stronger emphasis should be placed on public goods services.

Problems in the current distribution system of the CAP

The current CAP is not conducive to increasing productivity, the system of distribution is unequal, and furthermore, it is not conducive to sustainability either. The current funding system is expensive, complicated, over bureaucratic, in many respects unequal among countries, regions, economies and farmers, and does not place enough emphasis on the long-term thinking and the protection of the environment. The current system of the CAP is not sustainable, though it still provides the largest share of the total EU budget, 42.5% for the 2007-2013 budget period (Eurostat, 2010).

Factors hindering productivity

Defects of the existing direct payment system

The direct payment system is based on historical reference periods or area size. The EU spends about 70% of the agricultural budget on direct subsidies, in 2009, for example, nearly 40 billion Euros. The direct subsidies were 25 billion in the year 2000 and by 2009 it reached 39 billion Euros. The most important problems in the existing direct payment system are as follows:

a.) It is wrong that farmers receive support simply because they are farmers. Jámbor and Harvey (2010) consider the system of the agricultural subsidies incoherent since continuous and sustained support to land owners is not economically justifiable, subsidies do not serve economic rationality and do not enhance the quality of farming.

b.) In the existing system, direct payments are not optimally distributed. Some countries receive more subsidies although their use is less efficient (the level of direct per hectare payments were EUR 652 in Greece whereas 427 euro in the Netherlands, 118 euro in Hungary, while Romania received only 39 euro in 2009 (Eurostat, 2010). The support provided is not commensurate with the size and geographic location of farms. Approximately 80% of the subsidies are received by 20% of the beneficiaries in accordance with the Pareto principle (also known as the 80-20 rule), (Zahrnt (2009), Gorton et al., (2009), and small farms are at a disadvantage.

c.) Swinnen (2009) pointed out that direct subsidies are inefficient since in the new member states, despite the growing support, employment problems persist. The farmers' incomes are often derived from activities outside the farm, so the role of direct income support payments is not justified.

Factors discouraging innovation

According to Schumpeter (1920) the engine of economic growth is innovation. The Lords sub-committee (2011) said that innovation unlocks agricultural productivity which has remained static for so long, and within the CAP, should be considered alongside R&D funding. Innovation in agriculture involves introducing a new product or implementing a new practice with beneficial economic or societal outcomes. Productivity should be encouraged by more developed technologies and by encouraging research and development to be able to produce added value (Bureau and Mahé, 2008).

Income distribution among land owners and tenants

Subsidies are not realized at the producers, but at the raw material producers and landowners, because the prices are designed by these interest groups to take into account the subsidies granted to farmers and so farmers' income will not increase (Jámbor, 2010). The distribution system among tenants and landowners is unfair. In the USA farm policy benefits are provided to the tenants (Goodwin, et al. (2009), Bakucs – Fertő, 2006), however, in the EU distribution depends on the type of the subsidy and in a well-balanced market economy it is the land owners who gain profit since land is a scarce resource with low elasticity (Ciaian, et al., 2010).

Factors hindering sustainability

Modern farming techniques have been associated with a number of harmful environmental effects, modernisation and intensification of agriculture in the EU countries is expected to bring about an increase in the loads of agricultural pollutants.

The delivery of the required public environmental services and environmental standards for water, soil, atmosphere, landscape and biodiversity do not match the set standards.

According to the cross-compliance principle, all the farmers receiving direct payments will be subject to environmental rules, including new requirements regarding public, animal and plant health, animal welfare, and the maintenance of all agricultural land in good agricultural and environmental condition. However, biodiversity decline has not been halted, far less reversed, water quality objectives have not been reached, further collective policy action is needed to put right the pervasive environmental market failures.

Inequality in the subsidy system

a. There are discrepancies between the two pillars of the CAP. Rural development policies receive not enough resources to be able to support the upholding of thriving rural communities, infrastructure building and the creation of workplaces, providing income and fighting against rural poverty health education.
b. The current subsidy system gives advantage to the old member states or countries having a strong lobby presence. Furthermore, it supports the less efficient member states, so the system does not provide any rationality. As it was mentioned in chapter 1, interests are mostly determined by political and economic policy factors.
c. Further inequality of the system is, as it was mentioned above, the unfair distribution among landowners and tenants.

Comparative analysis of the current EU subsidy system

This paper focuses on the second level of the three-level decision-making system described by Fertő (1999). Only the second, i.e. the EU level, was examined and the distribution system between the two member states groups was primarily considered. Due to the unchanged motivation and interest groups, significant changes cannot be expected in the near future.

The main problem areas around the subsidy distribution system (inequality, hindering productivity) were examined by empirical studies. Twelve EU member states, six old and six new members, were compared. The period between 2005-2009 was studied because the six Eastern European member states joined the EU not earlier than in 2004 in its biggest ever expansion, and then Romania joined in 2008. The performance of the 12 countries and the subsidies provided for them were compared with the aim of highlighting the discrepancies in the distribution system. The performance of the twelve countries in the given period was measured by the difference from their potential output figures. The averages of the two country groups and the average deviations were calculated. The results are depicted in Table 1.

Table 1: Agricultural performance in 12 EU member states (2005-2009) as the ratio of the output and the potential output

Y/Y'	DK	DE	FR	IT	NL	A
2005	1.019	1.205	1.236	0.869	1.906	0.512
2006	1.089	1.282	1.166	0.868	2.113	0.550
2007	1.227	1.503	1.338	0.933	2.247	0.618
2008	1.231	1.597	1.377	0.987	2.262	0.642
2009	1.127	1.435	1.294	0.870	2.175	0.596
Period average	114%	140%	128%	91%	214%	58%
Country group average	124%	124%	124%	124%	124%	124%
Average deviation	-10%	16%	4%	-34%	90%	-66%
Y/Y'	**CZ**	**HU**	**PL**	**RO**	**SI**	**SK**
2005	1.101	0.941	1.016	1.056	1.094	0.861
2006	1.112	0.984	1.029	1.104	1.078	0.880
2007	1.355	1.032	1.256	1.046	1.126	0.941
2008	1.329	1.222	1.221	1.394	1.054	1.006
2009	1.094	0.858	1.076	1.045	0.951	0.919
Period average	120%	101%	112%	113%	106%	92%
Country group average	107%	107%	107%	107%	107%	107%
Average deviation	13%	-7%	5%	6%	-1%	-15%

Source: own compilation

Based on the results shown in Table 1, the subsidy distribution system was assessed and it was found that within the old member states the Netherlands, Germany and France should be given more subsidies than for example to Austria. In the case of the new member states the Czech Republic should be given the biggest amount of subsidies while Hungary or Slovakia based on the performance should receive fewer subsidies.

Subsidies and productivity

The relationship between the output figures and the subsidies provided for agriculture was studied with the aim of finding significant and justifiable relationship. The output of the sector was calculated in purchasing power standard and also at current prices.

Table 2. The relationship between the output figures and the subsidies provided for agriculture.

Output in PPS. Millions of Euros						**Subsidies, Millions of Euros**				
Country /year	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
DK	5658.39	5890.79	6486.01	6401.09	5785.05	1228.3	1164.8	1168.8	1234.9	1062.9
DE	37342.5	39052.6	45080	47418.3	42151	6522.3	6566.9	6905.7	6606.4	6679.7
FR	56231.8	53489.1	59022.8	59895.2	55844.6	10011.5	10091.7	10360.1	10014.2	9749.4
IT	41163.4	41310.7	43167.1	44931.5	39002.4	5528.1	5486	5913.3	5407.3	5287.1
NL	19317.7	20940.9	22025.3	21983.9	20908.7	1268.3	1220.1	1211.3	963.6	1013
AT	4845.85	5102.69	5664.19	5820.57	5348.97	1237.3	1274.9	1130	1217.8	1307.7
CZ	5840.42	5781.17	6865.92	6646.01	5441.62	428.5	498.3	717.1	655.1	867
HU	9620.2	9772.99	10079	11727.5	8252.57	651.5	840.9	956.2	681.1	1279.9
PL	26913.1	27525.8	32887.9	32260	27971.8	1542.1	2141.6	3114.3	2658	2858.7
RO	25645.7	26497.2	23628.4	31281.4	24210	0	0	23.9	1060.1	1167.9
SI	1458.45	1428.56	1453.13	1373.1	1231.14	102.6	159.9	179.5	143	190.8
SK	2901.53	2871.6	3070.8	3275.38	2897.92	220.6	277.5	380.5	357	513
Output at producer price. Millions of Euros						**Subsidies to output in PPS**				
Country/ year	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
DK	7787.48	8072.78	8929.87	9019.47	8124.08	22%	20%	18%	19%	18%
DE	38648	40150	46147	49717.6	42711	17%	17%	15%	14%	16%
FR	61987.7	59278.7	64923.9	67291	61974.9	18%	19%	18%	17%	17%
IT	42590.9	42267	43593.6	46135.3	41210.9	13%	13%	14%	12%	14%
NL	20668.2	22318	23232	23719.7	22549.7	7%	6%	5%	4%	5%
AT	5128.21	5365.32	6032.87	6354.38	5710.36	26%	25%	20%	21%	24%
CZ	3351.86	3515.13	4245.44	4676.5	3714.82	7%	9%	10%	10%	16%
HU	5954.29	5833.69	6495.03	7638.09	5627	7%	9%	9%	6%	16%
PL	14928.5	15995.6	19787.4	21680.2	17397.8	6%	8%	9%	8%	10%
RO	12033	13227	13191.9	16877.6	13077.9	0%	0%	0%	3%	5%
SI	1065.27	1066.13	1126.95	1106.32	956.75	7%	11%	12%	10%	15%
SK	1530.18	1583.35	1853.69	2166.87	1884.86	8%	10%	12%	11%	18%
Subsidies to output						**Correlation coefficients**				
Country/ year	2005	2006	2007	2008	2009	Country/ year	Subsidies and output in PPS	Subsidies and output	Subsidies to output and output in PPS	Subsidies to output and output
DK	22%	20%	18%	19%	18%	DK	0.277	0.231	-0.611	-0.638
DE	17%	17%	15%	14%	16%	DE	0.554	0.471	-0.986	-0.99
FR	18%	19%	18%	17%	17%	FR	0.333	0.237	-0.878	-0.907
IT	13%	13%	14%	12%	14%	IT	0.400	0.179	-0.691	-0.829
NL	7%	6%	5%	4%	5%	NL	-0.511	0.657	-0.758	-0.861
AT	26%	25%	20%	21%	24%	AT	-0.485	-0.45	-0.914	-0.892
CZ	7%	9%	10%	10%	16%	CZ	0.043	0.435	-0.317	0.129
HU	7%	9%	9%	6%	16%	HU	-0.743	-0.514	-0.836	-0.62
PL	6%	8%	9%	8%	10%	PL	0.727	0.739	0.437	0.505
RO	0%	0%	0%	3%	5%	RO	0.392	0.594	0.249	0.464
SI	7%	11%	12%	10%	15%	SI	-0.561	-0.315	-0.76	-0.529
SK	8%	10%	12%	11%	18%	SK	0.125	0.600	-0.045	0.460

Correlation coefficients were calculated for the 12 countries for the period of 2005-2009 as can be seen in Table 2.

Table 3. Correlation coefficients: the relation of output and subsidies in 12 Member states (2005-2009)

Countries	Subsidies and output in PPS	Subsidies and output	Subsidies to output and output in PPS	Subsidies to output and output
DK	0.277	0.231	-0.611	-0.638
DE	0.554	0.471	-0.986	-0.99
FR	0.333	0.237	-0.878	-0.907
IT	0.4	0.179	-0.691	-0.829
NL	-0.511	-0.657	-0.758	-0.861
AT	-0.485	-0.45	-0.914	-0.892
Group Average	**0.095**	**0.002**	**-0.806**	**-0.853**
CZ	0.043	0.435	-0.317	0.129
HU	-0.743	-0.514	-0.836	-0.62
PL	0.727	0.739	0.437	0.505
RO	0.392	0.594	0.249	0.464
SI	-0.561	-0.315	-0.76	-0.529
SK	0.125	0.6	-0.045	0.46
Group Average	**-0.003**	**0.256**	**-0.212**	**0.068**

Source: own compilation

a) The relationship between the output at purchasing power standard (PPS) and the subsidies provided for agriculture:

A weak correlation, 0.095 for the old member states, while -0.003 for the new member states was found, i.e. the subsidies did not enhance the increase in production.

b) The relationship between the output at current prices and the subsidies given:

The correlation in the case of current prices was 0.0017 for the old member states, while correlation was 0.2564 for the new member states. Calculating at current prices the subsidies resulted in a slight increase in production. A significantly different result was received when support to output and output (%) was studied.

c) Support to output and output (%) at purchasing power standard (PPS):

A very strong negative correlation (-0.8064) was found for the old member states, while it was weak for the new member states (-0.2121). The results can be interpreted as follows: the bigger rate of the output is the subsidies the smaller the output figures will be. In other words, the subsidies are too much for the inefficient countries, whereas the more subsidies a country receives the worse its performance is.

d) Support to output and output (%) at current prices:

A very strong negative correlation (-0.8528) was found for the old member states at current prices while the relation was weak for the new member states (0.0681). In the old member states the subsidies are less efficiently utilized, and even result in the opposite effect. However, in the new member states subsidies although slightly but enhance the output. The results obtained show that among the western countries Germany receives a relatively high proportion of the agricultural subsidies but it is well utilized. Romania joined the EU not earlier than 2007, therefore the figures are distortive. It can be concluded. However, that there is no strong positive relationship between the subsidies and the output. Our results indicate that the subsidy system is not based on economic sense.

Subsidies and equality

We endeavoured to examine whether the EU agricultural subsidies provide an unfair advantage to the old member states, particularly the net contributors or the countries with a strong lobby power, as can be seen in Table 4.

Table 4. Summary table of CAP subsidies in the old and new Member States (2005-2009 average)

Categories	**average of old member states (EU15)**	**average of the newly accessed member states**	**rate (old/new)**
Rate of subsidies received to all CAP subsidy per share of EU agricultural output	1.18	0.92	1.28
Subsidies to land use (euro/UAA)	411.26	228.23	1.8
Subsidies to labour force (1000 euro/AWU)	10.04	2.17	4.62
Subsidies to agricultural capital	0.1	0.1	1
Per capita subsidies (euro)	146.68	67.23	2.18
Per capita subsidies to per capita GDP in PPS (%)	5.11	4.31	1.18

Source: Eurostat

First, we investigated whether the received share of subsidies is proportional to the contribution to the output of agriculture. Therefore, for the 27 countries in the period of 2005-2009, the EU Budget agricultural subsidies figures were compared to the output of the sector published by Eurostat. As can be seen in Table 5, the subsidies received to all CAP subsidies per share of EU agricultural output ratio was more than 30% in the case of the old member states which can be interpreted as being unfair.

Table 5. Subsidies received to all CAP subsidies

Per capita subsidies (Euro)						Per capita subsidies to per capita GDP in PPP (%)				
Countries / years	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
BE	97.46	89.63	83.13	77.88	29.7	3.46	3.01	2.74	2.62	1.02
DK	223.1	212.72	214.57	227.53	196.42	7.49	6.95	6.94	7.34	6.66
DE	79.54	79.87	83.89	80.14	80.97	3.04	2.92	2.93	2.64	2.78
IE	409.32	394.52	408.74	402.02	263.09	12.4	11.44	10.78	11.29	8.17
EL	244.72	273.88	326.22	309.63	259.47	12.42	11.7	13.26	12.64	11.09
ES	140.35	147.55	156.8	161.87	153.62	5.92	5.97	5.79	6	5.86
FR	155.54	157.67	162.78	158.96	155.31	5.96	5.8	5.77	5.68	5.75
IT	92.07	92.02	100	92.04	90.44	3.74	3.67	3.89	3.51	3.53
LU	92	95.7	115.92	112.99	118.16	1.55	1.42	1.65	1.6	1.74
NL	76.93	74.37	74.05	58.99	62.13	2.58	2.33	2.2	1.68	1.89
AT	148.09	153.26	136.42	147.54	159.45	5.04	4.93	4.24	4.6	5.18
PT	84.36	89.6	122.62	129.94	104.73	4.9	4.98	6.49	6.6	5.29
FI	169.74	154.36	184.35	159.79	146.41	6.24	5.49	6.23	5.33	5.25
SE	103.38	100.69	121.23	106.04	97.18	3.76	3.39	3.81	3.37	3.23
UK	70.58	70.41	69.65	62.95	61.81	2.56	2.44	2.34	2.06	2.11
BG	0	0	0.86	54.43	46.57	0	0	0.09	5.13	4.35
CZ	40.94	48	69.71	63.91	84.83	2.31	2.5	3.38	3.06	4.2
EE	57.07	56.38	90.29	72.43	116.21	3.96	3.44	5.04	4.07	7.36
CY	55.84	65.12	78.34	71.63	78.35	2.75	2.87	3.53	2.85	3.17
LV	52.36	60.15	81.62	82.89	89.4	4.63	4.46	5.55	5.68	7.33
LT	79.29	91.73	142.69	74.34	136.78	6.34	6.6	9.21	4.68	10.21
HU	64.95	83.71	94.99	67.59	126.75	4.42	5.3	5.9	4.12	8.02
MT	21.76	22.91	21.33	29.38	17.14	1.3	1.25	1.15	1.49	0.86
PL	40.44	56.19	81.69	69.66	74.89	3.37	4.39	6.01	4.64	4.89
RO	0	0	1.11	49.06	53.92	0	0	0.11	4.02	4.65
SI	50.48	79.54	89.29	71.38	95.52	2.62	3.72	3.87	3.01	4.34
SK	40.76	51.38	70.55	66.24	95.27	3.09	3.34	4.15	3.54	5.32

However, this interpretation can be justified if input side of agricultural production was not considered. Therefore, we examined the asymmetry in subsidising the production factors i.e. land, labour force, capital.

Table 6. Subsidies and production factors

Subsidies to land use (Euro per UAA)						Subsidies to labour force (1000 Euro per AWU)					Subsidies to agricultural capital
Countries/ years	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	2005-2009 average
BE	756.03	691.62	642.12	595.87	227.22	14.97	14.06	13.33	12.61	4.78	n.a.
DK	452.86	429.45	433.77	460.29	402.77	19.53	19.13	20.08	21.7	17.6	0.11
DE	382.87	387.4	407.31	390.32	395.49	11.19	11.56	12.47	12.14	12.46	0.1
IE	423.41	407.56	412.24	402.89	258.03	12.26	11.36	11.74	11.44	7.38	0.13
EL	724.17	770.92	914.8	846.57	752.97	4.54	5.2	6.34	6.01	5.04	0.15
ES	248.73	270.02	278.9	286.56	273.32	6.32	6.59	6.99	7.49	7.27	0.07
FR	338.36	311.99	352.22	340.79	277.15	10.69	10.99	11.47	11.28	11.19	0.1
IT	375.81	375.55	408.09	405.41	396.4	4.45	4.36	4.86	4.55	4.54	0.1
LU	351.67	358.91	421.7	406.13	416.67	11.35	11.87	14.53	14.72	15.57	n.a.
NL	659.2	642.39	642.12	498.45	527.22	6.53	6.44	6.48	5.24	5.58	0.05
AT	379.2	393.5	348.92	384.04	412.71	7.61	8.1	7.3	8	8.6	0.08
PT	236.79	252.56	353.29	367.87	299.17	2.09	2.37	3.48	3.83	3.21	0.12
FI	397.53	355.66	431.34	365.77	333.94	9.4	8.79	10.7	9.47	8.82	0.13
SE	298.92	293.51	354	311.92	285.5	12.66	12.39	16.1	14.58	13.86	0.19
UK	246.81	240.7	238.69	214.87	214.27	14.61	15.01	15.07	13.49	13.13	0.13
BG	0	0	1.29	82.36	71.85	0	0	0.01	0.95	0.9	0.06
CZ	118.85	139.74	199.38	184.49	244.51	2.82	3.37	5.19	4.84	6.65	0.15
EE	91.74	99.26	132.5	107.45	168.06	2.02	2.02	3.68	3.12	5.34	0.08
CY	259.32	304.32	402.91	370.45	485.53	1.55	1.88	2.36	2.12	2.33	0.09
LV	68.3	73.63	101.24	104.21	112.49	0.86	1.11	1.73	1.96	2.21	0.1
LT	93.62	110.65	179.16	94.68	174.23	1.53	1.86	3.06	1.68	3.18	0.15
HU	111.13	144.76	164.66	117.64	221.31	1.25	1.67	2.08	1.61	3.01	0.15
MT	873.79	912.62	844.66	1155.34	669.9	2.2	2.29	2.07	2.83	1.64	0.12
PL	96.95	134.21	192.51	170.3	182.96	0.67	0.93	1.35	1.13	1.29	0.1
RO	0	0	1.74	77.28	85.18	0	0	0.01	0.49	0.54	0.03
SI	200.9	325.93	360.08	290.41	407.26	1.14	1.8	2.14	1.72	2.33	0.07
SK	113.63	143.09	197.09	184.4	265.76	2.23	3.04	4.17	3.95	5.97	0.12

Source: Eurostat. FAO

As for subsidising land use (UAA), we found approximately twice as big figures (1.8) for the old member states. As for labour force use, the new member states are labour intensive. If subsidies to annual working unit (AWU) are considered, almost 5 times as much (4.62) subsidy can be seen in the case of the EU 15. As for the capital, the findings can be considered only with caution because the applied FAO data are only available for 2002-2003. However, the capital stocks ratios of the two country groups do not change considerably in the short-medium term. It can be stated however, that considering subsidies to capital there is no difference (1.00) between the two country groups. Based on the finding we can conclude that subsidies ensure the replacement of capital goods and in the new member states cheap labour replaces capital.

As for the factors of production, significant inequality can be seen in the case of land and especially in labour force. The difference can be easily explained by difference in the factor productivity.

When the per capita subsidies are considered as the indicator of inequality, a 2.18 ratio was found. The figures are distortive because the differences in income levels are not considered. To able to evaluate the equitability of the subsidy distribution system, the per capita subsidies were expressed in per capita GDP in PPP figures, see Table 7.

Table 7. Income level and subsidies

Per capita subsidies (Euro)						Per capita subsidies to per capita GDP in PPP (%)				
Countries / years	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
BE	97.46	89.63	83.13	77.88	29.7	3.46	3.01	2.74	2.62	1.02
DK	223.1	212.72	214.57	227.53	196.42	7.49	6.95	6.94	7.34	6.66
DE	79.54	79.87	83.89	80.14	80.97	3.04	2.92	2.93	2.64	2.78
IE	409.32	394.52	408.74	402.02	263.09	12.4	11.44	10.78	11.29	8.17
EL	244.72	273.88	326.22	309.63	259.47	12.42	11.7	13.26	12.64	11.09
ES	140.35	147.55	156.8	161.87	153.62	5.92	5.97	5.79	6	5.86
FR	155.54	157.67	162.78	158.96	155.31	5.96	5.8	5.77	5.68	5.75
IT	92.07	92.02	100	92.04	90.44	3.74	3.67	3.89	3.51	3.53
LU	92	95.7	115.92	112.99	118.16	1.55	1.42	1.65	1.6	1.74
NL	76.93	74.37	74.05	58.99	62.13	2.58	2.33	2.2	1.68	1.89
AT	148.09	153.26	136.42	147.54	159.45	5.04	4.93	4.24	4.6	5.18
PT	84.36	89.6	122.62	129.94	104.73	4.9	4.98	6.49	6.6	5.29
FI	169.74	154.36	184.35	159.79	146.41	6.24	5.49	6.23	5.33	5.25
SE	103.38	100.69	121.23	106.04	97.18	3.76	3.39	3.81	3.37	3.23
UK	70.58	70.41	69.65	62.95	61.81	2.56	2.44	2.34	2.06	2.11
BG	0	0	0.86	54.43	46.57	0	0	0.09	5.13	4.35
CZ	40.94	48	69.71	63.91	84.83	2.31	2.5	3.38	3.06	4.2
EE	57.07	56.38	90.29	72.43	116.21	3.96	3.44	5.04	4.07	7.36
CY	55.84	65.12	78.34	71.63	78.35	2.75	2.87	3.53	2.85	3.17
LV	52.36	60.15	81.62	82.89	89.4	4.63	4.46	5.55	5.68	7.33
LT	79.29	91.73	142.69	74.34	136.78	6.34	6.6	9.21	4.68	10.21
HU	64.95	83.71	94.99	67.59	126.75	4.42	5.3	5.9	4.12	8.02
MT	21.76	22.91	21.33	29.38	17.14	1.3	1.25	1.15	1.49	0.86
PL	40.44	56.19	81.69	69.66	74.89	3.37	4.39	6.01	4.64	4.89
RO	0	0	1.11	49.06	53.92	0	0	0.11	4.02	4.65
SI	50.48	79.54	89.29	71.38	95.52	2.62	3.72	3.87	3.01	4.34
SK	40.76	51.38	70.55	66.24	95.27	3.09	3.34	4.15	3.54	5.32

Source: Eurostat. FAO

The ratio of the two country groups is 1.18, which means that in real values only 20% more subsidies are given to the old member states compared to the new ones. Our final conclusion is that taking into account the existing income differences occurring between the two country groups, there is only a 20% difference in the agricultural subsidies. Moreover, disputes about the future of the CAP and the reform objectives will probably further narrow the gap besides. a decrease in the subsidies can be expected.

Conclusion

In our paper we proved that CAP subsidies do not enhance productivity, furthermore, the distribution system can be considered unequal if we disregard that the old member states belong to a high income group. If income level is considered, the on average twice as high level of subsidies in favour of the old member states is justifiable, in particular when the CAP subsidies are considered to guarantee capital replacement. In the old member states the subsidies to land used was 80% more compared to the new members, and the subsidies to labour employed was 5 times higher. These results reflect the differences in capital intensity of the two groups of states. Nevertheless, the CAP fulfils its main objective, i.e. to ensure stable and equitable income for the farmers respective to the current income level of their countries.

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