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EU CAP REFORMS RELATED TO PRODUCTION AND MARKETING OF HOPS

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Abstract

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Since its inception, the common agricultural policy (CAP) has been under constant internal and external reform pressures. This study belongs to a Health Check of the EU's latest CAP reform phase, which started in 2007. It analyzes the main effects of the CAP reform in 2003 (decoupled aid, as established by Council Regulation 1782/2003) on the hop industry sector. The research results demonstrate to what extent the CAP measures supporting hops have affected the production decisions of farmers in the EU's traditional hop production areas. There were three judgment criteria considered and discussed: (i) the extent to which the CAP reform has influenced the profitability of hops (production areas, capital investments); (ii) the extent to which the effects on production vary between, on the one hand, countries adopting fully decoupled support and, on the other, countries adopting partial coupling; and (iii) the extent to which producer groups contributed to stabilizing markets. The results illustrate that there was no evidence that CAP measures introduced after the reform had a significant influence on the production decisions of farmers in the traditional hop production areas from 2004 to 2008.

Key words: CAP reforms, health check, farmers' decisions, hop industry, IHGC

Abbreviations: CAP common agricultural policy; CNDPs complementary national direct payments; HC health check; IHGC international hop growers' convention; NGO nongovernmental organization; NMS new member states; SAPS single area payment scheme; SPS single farm payment scheme

Introduction

Besides cohesion policy, agricultural policy has been the only significant budgetary policy of the European Union (EU); this policy was determined entirely at the Community level and predominantly receives its funds from the EU budget (Erjavec et al., 2011). The common agricultural policy (CAP) receives the biggest portion of the EU's budget pie and, as a result, is a disputed issue. EU integration processes and development have been constantly changing since the 1980s (Erjavec and Erjavec, 2009). Historically, the CAP has been endowed with five overall objectives, which were specified in Article 33 of the Treaty of Rome and can be summarized as follows: (i) to increase productivity by promoting technical progress and ensuring the optimum use of the factors of production, in particular labor; (ii) to ensure a fair standard of living for farmers; (iii) to stabilize agricultural markets; (iv) to secure the availability of supply (food security); and (v) to ensure reasonable consumer prices (Munisteri et al., 2009).

Since its origins, the CAP has been under constant internal and external reform pressures (Yrjölä and Kola, 2001; Garzon, 2006). EU decision makers have tradi-

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tionally used the results of a wide range of quantitative tools to evaluate their options among various alternative policy instruments. Quantitative assessments of the impact of CAP reforms and policy effectiveness have also been catalysts for public debate (Bartosova et al., 2008).

The 2003 CAP reform constitutes a step towards providing income support for farmers that is not linked to production (decoupling), with the intent that there should also be no - or, at most, minimal - effects on trade and production. Thus, European agriculture will become more market oriented; the old system of price support is gradually being replaced by direct payments organized around a Single Payment Scheme (SPS), introduced by Council Regulation (EC) No 1782/2003. The main aim of the single payment is to guarantee that farmers have incomes that are more stable. Farmers can decide what to produce in the knowledge that they will receive the same amount of aid, allowing them to adjust production to suit demand. Figure 1 presents a synthetic view of the intervention logic, linking the CAP measures to the specific, operational, and global objectives of the intervention. The CAP measures discussed in this study relate to (i) decoupled aid, (ii) partial coupling, and (iii) complementary national direct payments.

Decoupled aid

The June 2003 CAP reform, as introduced by Council Regulation No 1782/2003, was a logical continuation of the Agenda 2000 reform and, together with the Single Area Payment Scheme (SAPS), introduced fully decoupled support integrated into SPS. The new single payment is not related to what a farmer produces. The payment is neutral with respect to current and future production levels. However, in 2003, decoupled aid was not fully implemented for all sectors. Countries that so wished could keep some subsidies linked with production. These subsidies are called "partial decoupling payments." Farmers receiving the SPS have, in principle, the flexibility to produce any commodity on

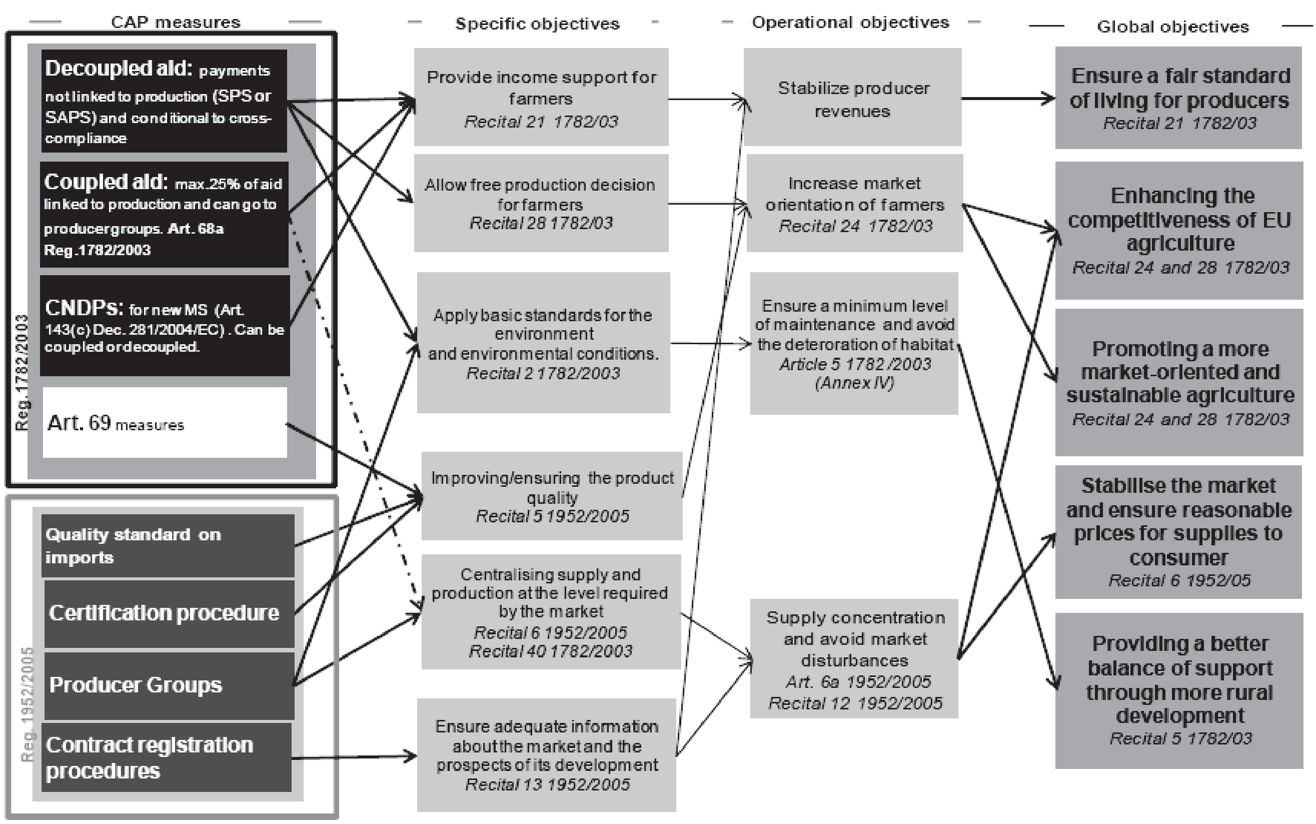

Fig. 1. Intervention logic of the CAP reforms after 2003

their land. In addition, they are obligated to keep their land in good agricultural and environmental condition (called "cross compliance").

New Member States can opt for the SAPS, which involves payment of uniform amounts per hectare of agricultural land in the Member State concerned, up to a national ceiling. Slovenia and Malta decided to adopt SPS at once. Under the Health Check, Member States applying for the simplified SAPS are allowed to continue to do so until 2013 instead of being obliged to opt into SPS by 2010 - or by 2012, in the case of Bulgaria and Romania. Table 1 provides an overview of the way the CAP reform was implemented among various Member States.

Partial coupling

Direct aid for hops has been decoupled from production since January 1, 2005 (except in countries that applied for a transitional period lasting until December 31, 2005). However, in order to deal with "specific market situations or regional implications," Member States may retain a certain percentage of coupled aid (an amount equaling up to 25 percent of their national ceiling). Council Regulation (EC) No 864/2004 (the so-called Mediterranean package") that amended Council Regulation (EC) No 1782/2003 provides for this. According to Article 68a of Council Regulation (EC) No 1782/2003 (as amended), "In the case of hops payments, Member States may retain up to 25 percent of the component of national ceilings […] corresponding to the hops area payments and the temporary resting aid […]". Concerning hops, the article continues as follows: "In this case and within the limit of the ceiling […] the Member State concerned shall make, on a yearly basis, an additional payment to farmers and/or a payment to producer groups." The referenced amount for the calculation of the aid is 480 Euros per hectare, for which aid was granted during the reference period of 2000 to 2002. Article 68a provides that "the payment to recognized producer groups shall be granted to finance the activities referred to in Article 7(1)(a) to (d) of Council Regulation (EEC) No 1696/71." The provision of payments to producer groups is intended, therefore, to fulfill the objectives of the producer groups, such as concentrating supply and stabilizing the market by adapting production to market needs.

In the case of hops, Council Regulation (EC) No 1782/2003 allows Member States to grant part of the hop area payments to recognized producer organizations. In order to allow the producer organizations to continue their activities as before, Council Regulation (EC) No 1234/2007 provides for equivalent amounts to be used within the Member State for the same activities. Therefore, such amounts should be deducted from

Table 1
CAP reform implementation for hops in Member States

Country	Start	Payment scheme	CNDP	Coupling/CNDP
Austria	2005	SPS	No	Hop payments 25% coupled
Belgium	2005	SPS	No	
Bulgaria	2007	SAPS	No	
Czech Republic	2004	SAPS	Yes	
France	2006	SPS	No	Hop payments 25% coupled
Germany	2005	SPS	No	Hop payments 25% coupled
Hungary	2004	SAPS	Yes	
Poland	2004	SAPS	Yes	
Portugal	2005	SPS	No	
Romania	2004	SAPS	Yes	
Slovakia	2004	SAPS	No	
Slovenia	2007	SPS	Yes	Hop payments 25% coupled
Spain	2006	SPS	No	
United Kingdom	2005	SPS	No	

the national ceiling of affected Member States, as provided for in this regulation.

Complementary national direct payments

Art addresses complementary national direct payments (CNDPs). 143 (c) of Council Decision 281/2004. These provisions are valid for new Member States only. These additional payments to SAPS (top ups) are financed by the national budgets of new Member States and, in some countries, are co-financed with Rural Development Regulation funds. This opportunity was provided because direct subsidies were being phased in over ten years following accession by new Member States. They received 25 percent of the full EU rate in 2004, rising to 30 percent in 2005, 35 percent in 2006, and 40 percent in 2007. They will receive ten percent per year until 2013. This time schedule differs from that of Bulgaria and Romania, which will have to wait until 2016. The new Member States had the opportunity to top up the direct payments in order to reach 55 percent of the EU-15 level in 2004, 60 percent in 2005, and 65 percent in 2006 as well as up to 30 percentage points above the ceiling established for new Member States in Article 143a as of 2007.

Health Check in the hop industry

The Health Check (HC) is the EU's latest CAP reform phase. It formally began in autumn of 2007, with the European Commission (EC) presenting its policy reform package. The process was concluded by a European Council agreement in November of 2008. According to a speech on May 20, 2008, given by the Commissioner for Agriculture, Marianne Fischer Boel, the EC's central HC agenda was to end the compulsory set aside, to further phase out the price-support mechanisms, and to gradually reform the dairy quota regime (Lovec and Erjavec, 2011). However, the CAP has generally come to be described as a 55 billion Euro dinosaur with fundamentally misplaced financial allocation - labeled as such not only by trade-liberalization supporters and environmental NGOs but also by prominent European agricultural economists and several Member States (Sapir et al., 2003; Begg et al., 2008; Zahrnt, 2009). Even the HC seems to have slowed down the development of proper European objective financial targeting.

Hops are essential for the brewing industry, as they make a considerable contribution to the taste of beer (Pavlovic et al., 2011). As well, the hop industry is one of the highest capital- and work-intensive areas of agricultural production (Pavlovic and Pavlovic, 2011). The European Union is the main player in the world hop market. Indeed, fourteen EU Member States produce hops, although Germany and the Czech Republic together account for more than 80 percent of total EU production by volume (IHGC, 2009). Poland is the only other member state to account for more than five percent of total EU production. This study of the HC of the CAP reforms after 2003 discusses the effects of those main CAP measures that are relevant to the hop sector after the 2003 reform (Council Regulation 1782/2003). The results are based on specific provisions relevant to hop production under Commission Regulations No 1952/2005 and No 1557/2006 and Council Decision No 281/2004.

Methodology

The research was carried out in 2009 and 2010, as part of the Evaluation of the CAP Measures Related to Hops projects under framework contract No 30-CE-0219319/00-20 for the EU DG-AGRI; it was assisted by the member countries of the International Hop Growers' Convention (IHGC). To collate data about the effects of the CAP reforms related to the production and marketing of hops in EU countries, various methods were used.

First, questionnaires - related to CAP effects on hop production structure changes, the profitability of the hop sector, and the role of producers' groups in stabilizing markets in the hop industry - were sent to the fourteen EU national representatives of the IHGC member countries and then were analyzed.

Second, field trips to two of the most important EU hop producing countries - Germany and the Czech Republic - were organized and carried out by the author in order to collect additional detailed information by means of six interviews (Munisteri et al., 2009).

The author also conducted third, supplementary telephone interviews with national hop experts. In addition, business reports for 2001 to 2009 from hop merchant companies and hop industry organizations were analyzed (Joh.Barth&Sohn, 2009; IHGC, 2009; Hopsteiner, 2010).

Results and Discussion

The evaluation questions focused on to what extent the CAP measures supporting hops affected the production decisions of hop farmers in the EU's traditional hop production areas. The results demonstrate how the CAP measures affected the production decisions of farmers producing hops as well as the possible market entry of new growers. Judgments are based on the following criteria: (i) the extent to which the reform influenced the profitability of hops (production areas, capital investments); (ii) the various ways in which production was affected, comparing, on the one hand, countries adopting fully decoupled support and, on the other, countries adopting partial coupling; and (iii) the extent to which producer groups managed to stabilize markets.

Judgment criterion 1: ***The extent to which the CAP reform has influenced the profitability of hops (re: production areas and capital investments)***

Two indicators such as production area and capital investments were used as a measure of profitability. If growing hops becomes more profitable compared to growing other crops, **production area**, the first indicator, will increase, assuming that farmers want to maximize their profits. The global area used for producing hops declined from 60,405 ha in 2001 to 59,285 ha in 2008 (a decrease of two percent). However, the year 2008 saw a sharp increase in area after years of decline, an increase that was driven by the exceptionally high prices of spot hops in 2007. The increase in area of about 8,000 ha from the previous year - mainly in the U.S., Germany, and China - demonstrates a reversal of the previous, declining trend. In all other countries, changes in production area were not relevant. Table 1 shows the development of production area worldwide.

The main reason for the decrease in production area in most of the EU Member States is that small farms are no longer competitive in the global market. Given this problem, the Czech Republic stands out because the average hop farm area is very large (41.0 ha) by European standards. In other countries, the grouped averages of hop producing areas in 2008 were less than 5 ha (Spain 2.0 ha, Poland 2.1 ha, Austria 3.3 ha), between 5 and 10 ha (Belgium 5.8 ha, France 9.3 ha), and over 10 ha (Slovenia 11.0 ha, Germany 12.5 ha, England 18.5 ha) (IHGC, 2009). However, these remain well below the U.S. average size of 267 ha per holding (Table 2). Because of the shrinking hop area, the alpha-acid production share of Europe has also declined, in spite of yield improvements. The European share in world hop production also declined as a result of the U.S. planting new hop gardens in 2008.

The second indicator of hop profitability relates to **capital investments**. Starting a new hop garden requires big investments. The total investment for a 25 ha hop farm may reach 47 000 Euros per ha, taking into account a trellis i.e. wirework system (18 000 Euros/ha), buildings (6000 Euros/ha), field equipment and installation (17 000 Euros), and an irrigation system (6000 Euros/ha) (Fuss et al., 2007). Such a big investment is only carried out when the hop farmer is dedi-

Table 2
Evolution of worldwide hop production area from 2001–08 (ha)

	2001	2002	2003	2004	2005	2006	2007	2008
Europe (EU-27)	36259	34942	33019	33370	31020	29881	30167	31300
Europe (other countries)	3004	3346	2404	2308	1886	1884	1373	1452
America	14536	11776	11314	11232	11817	11912	12509	15889
Asia	4918	6109	5642	4400	3486	3544	5796	9369
Africa	512	510	503	503	506	438	438	444
Oceania	1176	1288	865	957	852	717	791	831
World	60405	57971	53747	52770	49581	48376	51074	59285

cated to continuing production for a long period. As well, the yearly depreciation percentage for the planting and trellis system is 3.5 percent; this implies a depreciation period of 30 years.

Quitting hop production before the investment has fully depreciated and grubbing up the hop fields implies a huge loss of capital. Not only is the trellis system worthless in such a case but so are some of the buildings and the hop harvesting equipment. Moreover, the farmer has to allow for the cost of grubbing up the field and removing posts and wires. Grubbing up a 25 ha hop garden after fifteen years instead of 30 ads up to a capital loss of at least 250 000 Euros, which makes premature grubbing up very unlikely. Not only is the capital loss important, but the necessary investment in a new crop should also be considered. If a farmer were to switch to the cultivation of fresh vegetables, for example, he or she has to invest in crop-specific knowledge, machinery, buildings, marketing, etc.

The results indicate that the decoupling of EU support leads to a 400-Euros-per-ha decrease in the gross margin (Munisteri et al., 2009). In principle, a loss in his or her gross margin may prompt a hop farmer to grub up his or her garden in spite of a capital loss. This option might be considered if starting another crop would have better financial prospects than continuing hop production. That said, 400 Euros per ha is far too low a change to play a decisive role in deciding to grub up a garden. The main reasons for this are that untimely grubbing up would imply a big loss of capital, hops still has good profitability compared to alternative arable crops (even after decoupling), and there exist all kinds of barriers to starting up high-margin horticultural crops.

Judgment criterion 2: ***The extent to which effects on production vary between, on the one hand, countries adopting fully decoupled support and, on the other, countries adopting partial coupling***

To answer the question of whether the degree of decoupling did influence we analyzed the development of the production area among three groups of Member States since the introduction of the CAP reforms. Some Member States opted for a full decoupling of CAP support, while others maintained the maximum allowed coupling of 25 percent to support hop production (Table 3). The four Member States who opted for partial decoupling (Austria, France, Germany, and Slovenia) have all succeeded in maintaining a more-or-less stable size regarding its hop production area. In 2008, the area producing hops was 20,113 ha. This represents no decline compared to the year before the CAP reform. These countries have even managed to expand their area since 2006. On the contrary, and on average, the Member States with full decoupling (Belgium, Portugal, Spain, and the United Kingdom) showed a sharp decline of 21 percent. Over the same period, in New Member States such as the Czech Republic, Poland, and Slovakia, the hop production area shrank by sixteen percent.

The areas producing hops have declined both in Member States that have chosen partial decoupling and in Member States with full decoupling. However, on average the Member States with full decoupling have shown a sharper decrease in the size of their production area since 2003. It is not likely that the extent of decoupling is the only factor causing these developments. The decline had begun before the implementation of the CAP reform. This can be clearly seen in the last two columns of Table 3. For almost every country, the decrease in acreage in the period from 2004 to 2008 was lower than the decrease during the period from 2001 to 2008, thus confirming a downward trend and that the decrease cannot be entirely attributed to the policy reform. Decoupling only played a minor role. Other external conditions, such as market demand, price, and local production circumstances, played significantly more important roles in the declining size of the hop production area.

Judgment criterion 3: ***The extent to which producer groups contribute to stabilizing markets***

Producer groups in the hop industry make life easier for farmers because they provide business and administrative assistance. In Member States, the existing producer groups in the EU hop sector are structured differently. In general, the power that producer groups have is related to their production area size and number

Table 3
Development of the hop area from 2001 to 2008 (in ha) as a result of decoupling

	2001	2002	2003	2004	2005	2006	2007	2008	2008 in % of 2004	2008 in % of 2001
Austria	220	215	209	207	196	197	200	210	101%	95%
France	816	816	816	732	801	757	771	773	106%	95%
Germany	19021	18354	17563	17477	17167	16692	16744	17510	100%	92%
Slovenia	1807	1856	1652	1665	1511	1460	1456	1620	97%	90%
Partially decoupled	**21864**	**21241**	**20240**	**20081**	**19675**	**19106**	**19171**	**20113**	**100%**	**92%**
Czech Republic	6075	5968	5942	6116	5672	5305	5193	5125	84%	84%
Poland	2250	2197	2172	2239	2291	2234	2179	2141	96%	95%
Slovakia	350	350	350	350	350	350	300	215	61%	61%
NMS	**8675**	**8515**	**8464**	**8705**	**8313**	**7889**	**7672**	**7481**	**86%**	**86%**
Belgium	250	250	209	194	191	181	176	186	96%	74%
Portugal	38	37	37	37	37	37	37	37	100%	97%
Spain	730	730	730	680	680	600	492	492	72%	67%
United Kingdom	1997	1982	1499	1376	1187	1056	1060	1100	80%	55%
Fully decoupled	**3015**	**2999**	**2475**	**2287**	**2095**	**1874**	**1765**	**1815**	**79%**	**60%**

of members. However, they follow similar objectives to support hop growers towards enlarging their economic sector competitiveness. The groups' tasks include activities such as hop product promotion, technical advisory services regarding production and processing, quality management within the hop certification procedure, EU subsidy transfer assistance, market and cost analysis, and information management based on their active membership within the International Hop Growers' Convention. But one of these groups' most important roles is to concentrate supply by developing forward contracts for quantities of hops that cannot be provided by one grower alone. Thus, a decisive advantage is that producer groups are able to organize forward contracts on behalf of their members. This represents their most significant contribution to the financial stability of their members and to the market as a whole. Having forward contracts with merchants, or even directly with breweries, guarantees a source of stable income for hop growers.

Since there is a significant difference between national hop industries in the EU regarding their sizes and production structures, there is also a difference in the amount and quality of the activities of producer groups in the EU. Linked to the structure and organization, the German growers have a leading position in EU. They have even decided to allocate 25 percent of the EU aid (the coupled part) for common use and draw on it for joint activities according to their national plan. The size of the German and Czech hop sectors allows them to set up well-structured producer organizations (Table 3).

French, Polish, Slovene, British, and Spanish grower organizations also actively support their members in various business activities, such as giving technical and business advice. However, their small size does not allow them to provide the same amount of resources as the German and the Czech producer organizations ones. Slovaks are still very much linked to their Czech neighbors and benefit from their (past) common organizations. Austrian growers are spread out into three areas, sell their hops to local breweries, and benefit from Slovenian and German advising services as well. In Belgium, the number of growers is decreasing, and growers have no special hop organization. In Bulgaria, the whole hop industry is rather small, being owned by one family.

Conclusions

Using the Health Check, EU hop production was analyzed. The main measures introduced by the CAP reforms in 2003 and their effects on the hop industry sector are discussed. The paper illustrates some key sector responses regarding to what extent CAP reforms (i.e., the gradual decoupling of support in EU hop producing countries) influenced the profitability of hops, hop farmers' decisions, and hop producers' organizations from 2004 to 2008.

The results from the questionnaire analysis, field-trip data and expert interviews demonstrated no evidence that the CAP measures had a significant influence on the scale of production area, sector capital investments, or growers' farm-management decisions during the period analyzed. In Member States with full decoupling, a sharper decrease in the hop area occurred compared to Member States with partial decoupling. However, there is no evidence of a causal link between this development and the extent of decoupling.

Therefore, it can be concluded that the volume of hop production in the EU was not significantly influenced by policy measures but was largely, influenced by external conditions (i.e., global market events, such as hop demand from breweries, and consequently the level of contract prices achieved by growers).

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