EUROPE VIS-À-VIS ITS ENLARGEMENT

Director-Coordinator:

José Manuel González-Páramo

Impact of the European Union enlargement on trade and on migratory and direct investment flows in Spain
Carmela Martín y Jaime Turrión

Consequences of the enlargement for the European Regional Policy: the Spanish perspective
Carmela Martín e Ismael Sanz

Eastern enlargement of the European Union: Agricultural implications
José M.ª Sumpsi e Ignacio Atance

Budgetary challenges of the European Union enlargement
Ignacio Zubiri

EUROPE VIS-A-VIS ITS ENLARGEMENT

(4 reports prepared by the EASA, Spanish Delegation)

Assuming that the Union is the best political instrument for peace and development and the answer to globalisation, the Enlargement is a new project that opens up great opportunities in the political and economic fields.

Once the Academy's research on the impact and consequences of the Enlargement is over, Working Papers will be drawn up that are expected to be concluded late in 2003. A work plan is being structured already with various Autonomous Communities in order to analyse its content throughout 2004. After these analyses, the Academy will hold an International Meeting to discuss their content under this Project's title.

The conclusions reached by our researchers as well as by international experts on these issues, which were discussed behind close doors, will enable the holding of a subsequent open Meeting. The four sectorial studies *"Impact of the European Union enlargement on trade and on migratory and direct investment flows in Spain", "Consequences of the enlargement for the European Regional Policy: the Spanish perspective", "Eastern enlargement of the European Union: Agricultural implications"* and *"Budgetary challenges of the European Union enlargement"* with their analysis will be imbricated in the White Book **"Europe vis-à-vis its enlargement".**

INDEX

IMPACT OF THE EU ENLARGEMENT ON TRADE AND ON MIGRATORY AND DIRECT INVESTMENT FLOWS IN SPAIN

Impact of the EU enlargement on trade and on migratory and direct investment flows in Spain

Carmela Martín
Professor of Applied Economics
and Director of the European Economic Group, UCM
Member of the European Academy for Sciences and Arts

Jaime Turrión
Junior Research
Of the European Economic Group, UCM

EUROPEAN ACADEMY FOR SCIENCES AND ARTS
SPANISH DELEGATION

Impact of the EU enlargement on trade and on migratory and direct investment flows in Spain

Published by:
European Academy for Sciences and Arts

printed by: Sociedad Anónima de Fotocomposición
Talisio, 9. 28027 Madrid

CONTENTS

1. Introduction

As decided at the *Copenhagen Council Meeting* of December 2002, in May 2004 the fifth and most important episode of European Union (EU) enlargement will take place with the accession of eight Central and Eastern European Countries (CEECs) – Poland, Hungary, Czech Republic, Slovakia, Slovenia, Estonia, Latvia and Lithuania – besides Malta and Cyprus. And another two CEECs, Bulgaria and Romania, will probably joint in 2007. Among other changes in the framework in which their economic relations take place with the present members of the EU, the accession of these countries will mean the removal of all barriers to trade and to the mobility of capital and labour in the EU of the Twenty-five. In this regard, it may be claimed that the enlargement represents a great opportunity for the creation of new export markets and direct investment projects for the companies of the Fifteen, among them the Spanish ones.

However, at least from the viewpoint of Spain – and other less developed members of the EU-15 – it should be borne in mind that the exports of the CEECs may eventually become a serious threat to Spain's ability to export to the Community market, insomuch as the multinationals set up there may use them as production and exportation platforms. Likewise, we should not rule out the possibility that there could be a shift in direct investment towards the candidate countries in detriment to those received by Spain and other members of Southern Europe. Finally, and in view of the substantial per capita income gap of the CEECs, the enlargement may also bring about an intensification of migrations coming from the East.

In this context of likely opportunities and challenges related to readjustments in trade and factors of mobility that may bring about in the EU-15 the accession of the new partners, the aim of this paper is to assess its nature and scope as regards to the Spanish economy. This assessment will be based on both the view of the most significant theoretical ideas on the consequences of the international integration processes and the analysis of the events that have taken place during the last years in response to the gradual liberalisation process of trade and direct investment –though not of migrations – provided in the Association Agreements signed in the early 1990s between the EU-15 and each candidate country. It should be noted that in this study the term candidates or CEECs will be used indistinctly to refer to the ten countries whose accession to the EU is foreseen for 2004. The study will be structured as follows.

We will start off by giving a brief economic description of the candidates and of the changes that their economic system has experienced since they began the road towards integration in the EU, which for most of them (all except Cyprus and Malta) has moved alongside their transition towards a democratic market system. Section 3 provides a summary of the most significant hypotheses held by specialised economic literature on the consequences of international integration processes on both trade and flows of factors of production; in particular, we will focus on processes that involve direct investments and migrations. The next three sections deal with the assessment of the nature and scope of the adjustments that may take place in each candidate country, as well as the impact for the Spanish economy. Thus, section 4 analyses the likely impact on trade and sections 5 and 6, in this order, cover direct investment flows and migratory movements. Finally, section 7 summarises the main conclusions of this study and puts forward some proposals aimed at devising a strategy vis-à-vis the enlargement that enable to make a better use of the opportunities and to minimise the costs that it may entail for the Spanish economy.

June 2003

2. Economic features of the candidates and of the enlargement process

The fifth episode of the EU enlargement, that presumably will take place in 2004, with the accession of ten new members, eight countries of Central and Eastern Europe (CEECs) plus Malta and Cyprus, has a special significance for several reasons. Among them we should highlight the following:

- The number of future members is much larger than in previous accession processes, which entails an enormous challenge for the EU governability and the good performance of the Community institutions. In order to face it, the EU undertook an institutional reform whose results have so far taken form in the Treaty of Nice, but that will have to be completed with reforms taken at the Intergovernmental Conference called together for 2004, where the proposals submitted by the so-called *Convention* (chaired by Valéry Giscard d'Estaing and composed of 105 representatives of Community institutions, member State governments and various social organisations) created *ad hoc* will be discussed.
- Most candidates – all except Malta and Cyprus – are countries in transition from a dictatorial system of centralised planning towards a market democracy. This unusual fact in the sequence of EU enlargements has a special significance, not only political but also economic, inasmuch as, among other reasons, it means the irruption in the international market of countries under an autarkic regime within the framework of the COMECON.
- This time the candidates have a more noticeable per capita income imbalance in relation to member States, which entails greater pressure on community budget spending aimed at the implementation of economic and social cohesion policies. I particular, as underlined in table 1, the ten future members average per capita income does not reach 46% of the EU-15 average.
- Finally, and in agreement with their lower level of development, agriculture still has a significant weight in the productive activity in the economies of most candidates, especially in terms of employment. Thus, farm employment accounts for about 13% of total employment in the ten candidate countries that will accede first to the EU, whereas the EU average is less than 2%. This entails an additional pressure on the community budget, in this case on the most polemic item: the funding of the Common Agricultural Policy.

In other regards, the special circumstances of the candidates has given a greater complexity to the negotiation process, which has called for the compliance with three types of requirements: 1) political: the establishment of a stable institutional framework ensuring democracy, the rule of law, human rights and respect and protection of minorities, 2) economic: the creation of a market economy capable of facing both the competitive pressure and the Union powers, and 3) the adoption of the Community acquis[1].

[1]In this regard, it should be stressed that the accession to the EU does not call for the compliance with the requirements to take part in the Economic and Monetary Union (EMU): the Maastricht criteria. The new EU partners will only be able to be members of the Monetary Union after at least two years from their accession to the EU as full members. However, insomuch as their accession to the EU is considered as an intermediate step to their future accession to the EMU, it seems advisable that the candidates become ready to overcome such criteria.

Table 1

Basic data of the candidate countries, Spain and the European Union in 2002*

	Area		Population		GDP		Per capita GDP in PPP		Farm employ-ment
	Km²	EU %	Thousands	EU %	Thousand million euro	EU %	Euro	EU %	Total employ-ment %
Czech Republic	78.866	2,4	10.252	2,7	71,1	0,8	15.000	62,5	4,9
Estonia	45.100	1,4	1.428	0,4	6,8	0,1	10.500	43,8	7,1
Hungary	93.032	2,9	10.195	2,7	65,8	0,7	12.500	52,1	6,1
Latvia	64.600	2,0	2.364	0,6	9,2	0,1	7.800	32,5	15,1
Lithuania	65.200	2,0	3.693	1,0	14,7	0,2	8.700	36,3	16,5
Poland	323.250	10,0	38.647	10,1	213,2	2,3	9.400	39,2	19,2
Slovakia	49.012	1,5	5.401	1,4	24,0	0,3	11.800	49,2	6,3
Slovenia	20.256	0,6	1.986	0,5	22,3	0,2	17.000	70,8	9,9
Cyprus	9.251	0,3	774	0,2	10,6	0,1	18.000	75,0	4,9
Malta	316	0,0	392	0,1	4,3	0,0	13.400	55,8	2,2
Bulgaria	110.990	3,4	8.178	2,1	15,9	0,2	7.100	29,6	13,2
Romania	238.391	7,3	22.388	5,9	49,7	0,5	6.200	25,8	45,2
Candidates (10)**	748.883	23,1	75.132	19,7	441,9	4,8	11.000	45,8	13,3
Spain	505.992	15,6	40.546	10,6	684,7	7,5	20.100	83,8	3,5
European Union	3.244.233	100,0	381.815	100,0	9.152,1	100,0	24.000	100,0	1,7

* European Commission estimations.

** All candidate countries except Bulgaria and Romania.

Source: European Commission and European Economy Group of the UCM (EEG).

However, as we have said above, the communist background of most candidates gives this enlargement a special political benefit, which probably explains both the great interest shown by the EU and the CEECs to bring their relations closer after the fall of the Berlin Wall and the relative speed in the negotiation of their accession, in spite of its difficulty. Indeed, and in order to lay the foundations for their future incorporation to the EU, in the early 1990s the EU signed Association Agreements[2] with each one of the Candidates which provided, *inter alia,* a gradual removal of barriers to trade and direct investment flows between them (though not of migrations) that, with some exceptions, have been implemented already.

Therefore, the liberalisation process implemented with the Association Agreements, together with the reforms undertaken by the CEECs in their transition towards a market system, have made possible that these countries – with the exception of Bulgaria and Romania – experienced both a strong growth – enabling them to bring their income levels closer to those of the EU, though the gap between them is still substantial – and a deep change in their productive systems. At the base of this change we find a considerable increase in trade and, above all, the great reception of foreign capital in the form of direct investment that has taken place in response to liberalisation. In fact, the huge flow of direct investments received by the CEECs, as a result of the privatisation process as well as the implementation of generous incentive policies, has not only been useful as a funding source but it has also played a key role in the improvement of production and management techniques of companies enabling them to give a boost to their productivity. Likewise, the sectorial strategy of foreign investors has been – and still is – basic for the transformation of these countries' productive and commercial structure, where farm products are losing their economic significance in favour of manufactures and services, especially in Hungary, Czech Republic and Slovenia.

This course of intense and rapid economic streamlining experienced by most CEECs in the last few years has also benefited from the implementation of stabilisation policies which, with varying results, have been able to take macroeconomic imbalances towards levels closer to those exhibited by present EU countries.

[2]For more details on the nature of these Association Agreements – also called European Agreements – and their consequences see Martín (1995) and the references provided in this paper.

3. Adjustments in trade and in the mobility of factors in the Regional Economic Integration Agreements: brief summary of the evidence

In order to venture the impact that the EU enlargement may have on trade, direct investment flows and migrations in Spain, it should be borne in mind the ideas provided by specialised literature in the analysis of the Regional Economic Integration Agreements. In particular, we should examine those involving, as is our case, the formation (enlargement actually) of a single market among the members, inasmuch as the accession of the ten candidates, that will presumably take place in 2004, entails the incorporation of new members to a market free of barriers to trade and to the mobility of capital and labour[3].

Thus, the present theory on Regional Economic Integration Agreements still follows the ideas put forward by Viner in his pioneering work (1950). In particular, the concepts of trade creation and trade diversion[4] that he defined to argue that these type of agreements entail *second best* situations and that, accordingly, it is not possible to make theoretical propositions with general validity on their economic effects for the countries that reach them. In other words, those effects depend in large measure on the circumstances associated to each agreement which, as a result, will have to be analysed empirically. However, taking as a basis this work and subsequent developments (see Lipsey, 1960; Baldwin and Venables, 1995; Panagariya, 2000 and Pomfret, 2002), some ideas can be sustained on their most plausible effects. We will go on to summarise them in an intuitive manner and with reference to the case in question. In this regard, and since the EU enlargement does not entail so far the incorporation of new members to the monetary union, the summary will not take into account the models that analyse the implications of the monetary unions.

Therefore, it can be stated that Regional Integration Agreements that, as in this case, entail the removal of barriers to trade and to the mobility of factors among the signing countries, encourage trade and capital and labour flows among them. As regards to trade, the reorientation towards the integrated area (in this case the EU-25) is the logical answer to the reduction of import prices of products from the new partners, in relation to both internal output and products imported from the rest of the world that, *ceteris paribus,* entails the removal of tariff and other barriers associated with the accession of the new members. As regards to capital flows and migrations, their foreseeable growth is just the reaction to the removal of controls to their mobility in the single market. The aforementioned, it is pointed out, will enable a better allocation of resources within the integrated area (here the enlarged EU) and, accordingly, the improvement of the economic welfare of all member countries as a whole, though this may not benefit third parties due to the effect of trade diversion.

[3]Although in this case, as it was stated in the introduction, the Fifteen have left open the possibility of establishing a transitional period in which they will continue to keep control to the entrance of emigrants.

[4]*Effect of trade creation* means the substitution of the least efficient domestic output by imports from other member countries (and sometimes from the rest of the world) as a result of the tariff changes that entails the creation of a Customs Union or other more developed agreement of regional integration. For its part, the *effect of trade diversion* is defined as the substitution of imports coming from the rest of the world by imports from member countries that, even when they take place in a less efficient manner, turn out to be cheaper as a result of the preferential removal of tariffs associated to the creation of the regional integration agreement.

In any case, the larger the integrated area the larger the benefits of integration, inasmuch as it will enhance the effect of trade creation and reduce that of trade diversion. Besides – as stated in the models that emerged in the early 1980s emphasising the imperfections that characterise markets (Baldwin and Venables, 1995) – in a framework of imperfect competition, where businesses have the possibility to tap economies of scale and to develop product differentiation strategies, the benefits of the integration become larger. Indeed, the removal of trade restrictions within the area enables a greater development of economies of scale, exerts a pro-competitive effect (by reducing the ability of businesses to segment markets and to implement collusive practices) and provides access to consumers to a wider range of products.

We can also add the benefits that may bring to the integrated area the likely improvement in the real trade relation with third countries that stems from its greater weight in the international market.

Likewise, as argued in the models that appeared after Krugman's seminal work (1991) emphasising the importance of the geographic location of economic activity, it seems that the Regional Integration Agreements reached among countries that are located geographically close, as is the case in Europe, are easier to carry out and provide greater advantages. There are three main reasons that can be used in this respect. Firstly, the proximity among members entails lower transport costs which encourages the Agreements' effect of trade creation.
Secondly, geographical nearness usually entails cultural proximity, which also encourages trade creation. Lastly, it should be borne in mind that in a single market we can make a better use of the economies of agglomeration (or positive externalities associated with the spatial concentration of productive activities).

In short, specialised literature in Regional Integration Agreements from the pioneering book by Viner (1950) to our days provides a wide range of arguments to explain the gains in efficiency and economic welfare that the laying down of this type of agreements brings to the integrated area.

However, this literature provides very few specific ideas on the distributive dimension of such agreements, i.e., on the way benefits for the integrated area are distributed among the member countries. Only the most traditional models, that imply contexts of perfect competition and are based on the proposals of the theories by Heckscher-Ohlin and Mundell to explain the patterns of trade and of capital and labour flows, respectively, provide a more or less accurate forecast on the nature of the adjustments that bring about the Regional Integration Agreements and their impact on each member countries. This forecast indicates, as we know, that market unification among member countries will bring about a reassigning of both trade and capital and labour flows among themselves in terms of their relative endowments of factors, until they even up their prices and incomes. However, this picture on trade and factor adjustments among countries in response to the shaping of a single market, which foresees a fair distribution of earnings among themselves, is not very realistic, as is apparent among other experiences in the market unification of the present EU-15.

There are more realistic theoretical approaches: the new Trade and Economic Geography models, that assume the existence of imperfect competition and stress the significance of geographic location. In this type of models neither the trade patterns nor those of international flows of factors are explained only by the differences in the factorial endowment of countries, but by a wider set of factors: disparities in technological capacity, differences in the structure of demand and geographic location, among others. Likewise, it is acknowledged in these models that the location strategies of multinational enterprises have a strong impact on the commercial pattern of countries and on their changes in the face of integration processes. Although these more complex models do not provide precise forecasts on the dynamics of changes that the integration may bring about in trade and factor flows among the members – as in the case of the traditional neo-classical models aforementioned – their hypotheses provide a better guide to

carry out the analysis of a specific and complex integration process as the one we are dealing with in this paper. Therefore, in this work we will use their hypotheses as a base of empirical analysis.

4. Impact of the enlargement on trade

As argued in the previous section, the accession of the candidates to the EU will presumably bring about an increase in trade among new and present members, which will naturally entail the consolidation of intra-community trade – the one that takes place within the twenty-five countries of the enlarged EU – as opposed to trade with the rest of the world. However, this commercial expansion will not affect the Fifteen equally. In fact, on the one hand, not all of them will take advantage of the free access of their exports to the emerging markets of the new partners in a like manner and, on the other, the competition of products coming from the latter will not have the same impact on all the EU-15.

In this section we will try to venture the likely impact of the accession of the CEECs on the Spanish trade. In this regard, the main ways of trade adjustment will be basically two: one, the most direct, is the likely increase of bilateral trade with the new members in response to the price reduction of mutual imports and exports as a result of the removal of tariffs. The other, not promising at all for Spain, is the likely substitution of Spanish exports to the EU by products exported by the CEECs. Lets see the scope of each one of them separately.

4.1. Effects on the bilateral trade of Spain and the CEECs

As argued in the previous section, in theory, it may be predicted that the accession of the CEECs will encourage Spain's bilateral trade with these countries, regarding both imports and exports. Moreover, and since the candidates tariff rates seem to be higher than the common external tariff (Heijdra, Keuschnigg and Kohler, 2002), a greater growth of our exports as opposed to our imports could be expected.

In other respects, this prediction can be based and detailed by observing the results of Spain's bilateral trade with the candidate countries during the last few years, inasmuch as there has been – within the framework of the Association Agreements – a substantial reduction of their mutual trade barriers. Accordingly, it seems reasonable to expect that what has happened so far becomes an indicator of what will happen after the accession of these countries and, as a result, that the tariff removal is completed.

Thus, the first thing to be seen is that Spain's trade with the CEECs has undergone a significant acceleration since the mid-1990s. In spite of it, in comparison to other member States, Spain's role as supplier and customer of the future members is still quite modest. Thus, our export quota in the market of the ten candidate countries that will presumably accede in 2004 is 2%, a figure that contrasts not only with Germany's 25%, their main supplier, but also with that of countries with a more similar productive structure, as is the case of Italy, whose share accounts for almost 9%. On the basis of these data – see Table 2 – it cannot be said, therefore, that Spain is among the EU members that has been able to make a good use of the export opportunities offered by the candidates. In the light of this situation, the question raises whether Spain will be able to make a better use of them in the future. In order to answer it, it seem appropriate to analyse, first of all, Spain's course of imports and exports and the resulting trade balance and , in second place, the trading structure, both geographic and by products.

Table 2

The candidate countries (10) main trade suppliers and customers in 2001

	Mains Suppliers		Main Customers	
	2001	**%**	**2001**	**%**
1	Germany	24,9	Germany	32,1
2	Russia	8,7	Italy	5,7
3	Italy	7,8	United Kingdom	5,1
4	France	5,9	France	5,0
5	Austria	4,2	Austria	5,0
6	United Kingdom	3,8	The Netherlands	3,5
7	United States	3,2	United States	3,4
8	Czech Republic	3,0	Czech Republic	3,3
9	China	2,9	Belgium and Luxembourg	2,8
10	The Netherlands	2,8	Poland	2,7
11	Japan	2,5	Russia	2,5
12	Belgium and Luxembourg	2,4	Slovakia	2,4
13	Spain	2,1	Sweden	2,0
14	Slovakia	2,1	Hungary	1,7
15	Poland	2,1	Spain	1,6
16	Sweden	1,9	Finland	1,5
17	Finland	1,7	Ukraine	1,4
18	Switzerland	1,3	Denmark	1,4
19	Hungary	1,3	Switzerland	1,1
20	Korea	1,2	Croatia	1,0
	Others	14,3	Others	14,7
	European Union	60,0	European Union	67,1
	OECD	76,4	OECD	81,7
	Spain (millions of dollars)	3.572		2.106
	Total (millions of dollars)	169.413		132.331

Source: IMF: Direction of Trade Statistics Yearbook and European Economy Group of the UCM (EEG)

When examining the course of trade flows between Spain and the CEECs we can observe that, after experiencing similar growth rates during most of the 1990s, since 1998 imports have grown at a much higher rate than exports, bringing about a decline in Spain's trade balance with the rest of the CEECs on the whole. Thus, though it is still positive for Spain, it is increasingly less so and, besides, it shows a deficit with some of them, especially Hungary.

As regards to the geographic structure, Spain's trade with the candidate countries concentrates particularly on three of them: Hungary, Czech Republic and Poland – which on the whole are responsible for over 75% of the Spanish imports and over 65% of its exports in this market. As we will see later, these three countries are the main recipients of the Spanish investment in the area. By contrast, it is surprising the poor participation of the three Baltic Republics.

As to trading by sectors, Table 3 provides information on its development and present situation. As regards to Spanish exports to the CEECs we should highlight transport equipment which, because of the car industry, is gaining in importance, machinery, producer goods and chemical products, with a quite stable participation and, finally, farm products and consumer goods. Whereas in terms of exports, where there is a greater sectorial concentration, the significant participation of electrical and electronic material and equipment is both outstanding and surprising (almost 32%) as well as the rest of machinery, producer goods and transport equipment (cars) which has increased dramatically during the last few years. As a result, it seems that the comparative advantages of Spain's trade with the CEECs in predominantly technological sectors have decreased these last years.

Table 3

Trade between Spain and the candidate countries (10) by sectors

	31A Classification	Exports		Imports	
		1993	2001	1993	2001
1.	Agriculture, livestock, hunting and forestry	19,0	8,8	5,7	2,2
2.	Fishing	0,1	0,0	0,1	0,0
3.	Mining and quarrying of energy producing materials	0,0	0,0	2,7	0,7
4.	Mining and quarrying of other minerals, except energy materials	0,6	0,2	11,2	1,2
5.	Food, beverages and tobacco	5,8	4,9	5,7	2,2
6.	Textile and clothing	3,5	4,9	6,8	3,3
7.	Leather and footwear	0,8	1,7	3,3	0,8
8.	Wood and cork	1,3	1,3	1,4	2,0
9.	Paper, graphical arts, publishing and printing	1,8	1,9	1,7	2,0
10.	Coke production, oil refining and processing of nuclear fuel	4,2	0,6	8,8	0,7
11.	Chemical industry	7,6	7,7	8,8	5,2
12.	Rubber and plastic material processing	3,0	3,9	3,3	3,2
13.	Other non-metallic mineral products	5,5	5,1	5,6	7,6
14.	Production of metal and metal products	7,4	6,4	7,6	7,0
15.	Production of machinery and mechanical equipment	7,8	8,3	4,0	7,6
16.	Electrical, electronic and optical machinery and equipment	10,8	15,3	11,6	31,8
17.	Transport equipment	19,8	27,2	10,7	21,0
18.	Other productions	1,1	1,8	1,0	1,7
19.	Production and supply of electricity, gas and water	0,0	0,0	0,0	0,0
TOTAL		100	100	100	100

Source: OECE: International Trade by Commodities Statistics and EEG.

In any case, and in order to carry out a better assessment of the changes that have taken place in the nature of trade between Spain and the candidate countries, we should examine the course of commercial flows with a greater degree of sector disaggregation than the one used so far. In this respect, it seems appropriate to see the five digit CUCI classification by trade sectors (where more than 3,800 products are differentiated) and to explore the significance and nature of intra-industry trade (IIT), i.e., trade of products that are so similar that even at the maximum degree of disaggregation allowed by trade statistics are registered within the same item. It is, therefore, a type of trade that has emerged through the ability and interest of companies to pursue product differentiation strategies based either on features (such as colour, size or brand) that do not entail a qualitative difference, the so-called horizontal IIT (HIIT), or on characteristics that do imply a differentiation between the level of quality of the imported and exported product, the so-termed vertical IIT (VIIT), with the aim of satisfying and taking advantage of consumers preferences for products variety[5].

This analysis will enable us, therefore, to assess the significance of these competitive strategies as well as to know to what extent, as is expected give its higher level of development, has Spain been able to specialised in the export of products with a higher quality level.

In order to measure the share of IIT in the bilateral trade of Spain and the CEECs with the EU we have used, as usual, the Grubel and Lloyd index, defined as:

$$CII_i = \left[1 - \frac{|X_i - M_i|}{X_i + M_i}\right] \times 100$$

[5]In Gordo and Martín (1996) the reader can find a more detailed explanation on the meaning of intra-industry trade of horizontal and vertical nature and the measurement of its significance as regards to Spain's trade with the EU and with the rest of the world. In Blanes and Martín (2000) an econometric study is provided on the explanatory factors of these types of trade.

Therefore, the index values are delimited between 0, when the presence of IIT is non-existent, and 100, when the entire trade is of an intra-industry nature[6].

To find out the share of intra-industry trade based on a qualitative or vertical differentiation of products, we have taken into account the mismatches recorded among unity values of imported and exported products, as price approximation. In particular, following the normal practice in specialised literature, intra-industry trade is considered to be of a vertical (horizontal) nature if the unity values of exports differ in plus (minus) 15% from those of imports. In addition, through a similar process we may find out what part of the vertical IIT belongs to trading where Spanish exports to a specific area of countries, in our case the CEECs, have a greater level of quality than the imports made from that area. In other words, intra-industry trade will be of a horizontal nature (HIIT) if:

$$0{,}85 \leq \frac{IVU^{EXP}}{IVU^{IMP}} \leq 1{,}15$$

And, similarly, it will be vertical intra-industry trade (VIIT) if:

$$\frac{IVU^{EXP}}{IVU^{IMP}} < 0{,}85 \text{ ó } > 1{,}15$$

Where:

UVI^{EXP}: unity value index of exports.
UVI^{IMP}: unity value index of imports.

Finally, we will have a vertical intra-industry trade (VIIT) where Spain will specialise in higher quality ranges of products if:

$$\frac{IVU^{EXP}}{IVU^{IMP}} > 1{,}15$$

and, by contrast, it will be a VIIT where Spain exports lower quality products if:

$$\frac{IVU^{EXP}}{IVU^{IMP}} < 0{,}85$$

Thus, table 4 shows intra-industry trade values in Spain and in the candidate countries and their break-down between strategies of quality differentiation (VIIT) and non-qualitative differentiation of products (HIIT). Its analysis enables to see, *inter alia,* the following interesting features.

[6]In order to avoid upward bias in the measurement of intra-industry trade as a result of the use of insufficiently disaggregated data on trade, the estimation of the IIT index has been carried out, as we said, with the maximum degree of disegregation of the CUCI classification (5 digits).

Table 4

Nature of intra-industry trade between Spain and the candidate countries

31A Classification	Total IIT		Horizontal IIT		Vertical IIT					
					Total Vertical IIT		Low Quality		High Quality	
	1993	2001	1993	2001	1993	2001	1993	2001	1993	2001
1. Agriculture, livestock, hunting and forestry	0,62	1,26	0,08	0,26	0,54	1,00	0,16	0,70	0,39	0,30
2. Fishing	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
3. Mining and quarrying of energy producing materials	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
4. Mining and quarrying of other minerals, except energy materials	0,00	0,99	0,00	0,59	0,00	0,40	0,00	0,36	0,00	0,04
5. Food, beverages and tobacco	2,25	3,20	0,51	0,71	1,74	2,49	0,87	1,98	0,87	0,50
6. Textile and clothing	5,48	9,60	0,44	5,09	5,04	4,51	2,01	2,54	3,04	1,97
7. Leather and footwear	19,07	12,43	0,80	0,83	18,27	11,60	5,70	8,76	12,56	2,84
8. Wood and cork	9,53	21,85	1,86	3,18	7,67	18,67	0,74	1,13	6,93	17,54
9. Paper, graphic arts, publishing and printing	3,64	19,02	0,27	10,09	3,37	8,92	0,69	3,35	2,67	5,58
10. Coke production, oil refining and processing of nuclear fuel	0,02	0,15	0,00	0,00	0,02	0,15	0,01	0,00	0,01	0,15
11. Chemical industry	6,49	9,48	0,20	0,51	6,29	8,97	0,95	6,39	5,34	2,59
12. Rubber and plastic material processing	15,34	29,32	10,39	12,28	4,95	17,04	1,07	5,49	3,88	11,55
13. Other non-metallic mineral products	4,24	10,66	0,10	1,73	4,14	8,93	3,51	2,94	0,64	5,98
14. Production of metal and metal products	11,53	17,07	0,38	1,66	11,15	15,41	1,01	6,00	10,13	9,41
15. Production of machinery and mechanical equipment	8,68	20,55	1,45	4,17	7,23	16,37	2,45	9,30	4,77	7,07
16. Electrical, electronic and optical machinery and equipment	5,44	15,52	1,10	1,74	4,35	13,79	1,41	5,24	2,94	8,55
17. Transport equipment	22,88	21,22	0,25	4,55	22,62	16,67	0,17	5,96	22,45	10,72
18. Other productions	10,94	13,66	1,20	0,44	9,74	13,23	4,21	3,52	5,53	9,71
19. Production and supply of electricity, gas and water	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
TOTAL	8,07	15,51	0,75	3,06	7,32	12,45	1,06	5,06	6,27	7,39

Source: OECD: International Trade by Commodities Statistics and EEG.

First of all, we can see that intra-industry trade accounts for a small share, though increasing, of bilateral trade between Spain and the CEECs, which, in 2001, accounted for over 15%. It should be noted, however, that the importance of intra-industry trade is quite greater in some sectors, in particular: rubber and plastic material, machinery and mechanical equipment and transport equipment, which is not surprising given the coincidence of the multinationals that operate in both markets. Besides, we can see within this type of trade the preponderance of the one based on qualitative differentiation strategies of the varieties of traded products. Finally, the breakdown of vertical intra-industry trade enables to find out the grater presence in Spain of transactions where our country exports to the CEECs varieties of products with a higher level of quality than the products imported from those countries. In particular, as we can see in Table 4, of the 12.5 percentage points that in 2001 vertical intra-industry trade accounted for in bilateral trade, 7.4 points (i.e., 59%) involved trading where the Spanish products had quality advantages. However, it should be noted that during the period under study the candidates have improved the relative quality of their products at a much faster rate than Spain.

In short, taken as a whole, all the features that have characterised the development of Spain's bilateral trade with the candidate countries over the last few years project a rather disturbing picture. In fact, even though they show that Spain's trade relations with the area are growing, its share of exports is comparatively small, its surplus trade has decreased in the last few years and the development of the nature of the trading shows the greater dynamism that are having in the CEECs – and more precisely in the three countries that are our major trading partners: Poland, Hungary and the Czech Republic – industries with greater technological content and better prospects of demand. Finally, the analysis of intra-industry trade shows that quality product is improving more in the CEECs than in Spain.

4.2. The role of Spain vis-à-vis the CEECs as supplier of the EU

The development of trading with the new partners is just one of the most likely consequences of the enlargement; another, no less significant, is the growing competitive pressure that they will exert on Spanish exports aimed at the community market, for they will be able to enter it free of any kind of tariff barrier. This brings up, therefore, the risk that our sales to the Union may be partly replaced by their export products.

The possibility that such risk comes true and, thus, that the future growth of our exports is put in jeopardy will depend in large measure on the similarity existing in the makeup and competitiveness factors of the exports of both Spain and the CEECs to the Union's market. To assess it we have developed table 5 where the sector structure of both is shown and, with this information, we have created a simple indicator: the Specialisation Index (SI) which, with relation to the exports of both Spain and the CEECs to the EU market and for each sector (i) in the reference year (t), would be defined as:

$$IE^{i} = \frac{X_{it}^{E} / \sum M_{it}^{UE}}{X_{it}^{PECO} / \sum M_{it}^{UE}} \times 100$$

Where:
X_{it}^{E} = Spanish exports of the i sector in the t year to the EU.
X_{it}^{PECO} = CEECs exports of the i sector in the t year to the EU.
$\sum M_{it}^{UE}$ = imports from all industrial sectors by the EU in the t year.

Therefore, when the Specialisation Index (SI) of a sector (i) indicates a value over 100 it means that Spain is specialised in relation to the CEECs in products belonging to that sector in the EU market, and vice versa. Accordingly, this is the way the values resulting from the estimation of such index for the years 1993 and 2000 shown in graph 1 should be interpreted.

Thus, we can see that at the beginning of the period Spain had a preponderant position in the export of sectors with a greater technological content such as producer goods, transport or chemical material, whereas the CEECs showed a specialisation in the export of traditional manufacturing products of lower technological content. The export specialisation pattern of the end of the period is, however, quite different, insomuch as Spain's export specialisation has been undermined by the dramatic growth of the candidates' exports in sectors regarding producer goods, and especially in transport material, due to the significance of the car industry. What is more, there is a tendency in Spain to specialise vis-à-vis the candidates in the export of agro-food goods, which is rather surprising, in view of these countries apparent income imbalance and of the greater importance of farm activity in their economies.

Table 5

Exports of Spain and the candidate countries (10) to the EU (14) by sectors

	31A Classification	Spain-European Union		Candidates-European Union*	
		1993	2001	1993	2001
1.	Agriculture, livestock, hunting and forestry	11,3	11,1	3,2	2,1
2.	Fishing	0,2	0,4	0,1	0,0
3.	Mining and quarrying of energy producing materials	0,0	0,0	4,9	3,4
4.	Mining and quarrying of other minerals, except energy materials	1,0	0,8	2,4	1,4
5.	Food, beverages and tobacco	6,8	8,9	2,7	1,9
6.	Textile and clothing	3,6	4,3	8,6	6,6
7.	Leather and footwear	2,6	2,9	2,3	2,2
8.	Wood and cork	1,2	1,8	8,9	6,8
9.	Paper, graphic arts, publishing and printing	2,4	4,0	2,5	3,5
10.	Coke production, oil refining and processing of nuclear fuel	1,7	1,2	6,3	6,5
11.	Chemical industry	5,8	9,3	4,0	3,6
12.	Rubber and plastic material processing	4,5	5,4	4,1	4,4
13.	Other non-metallic mineral products	3,5	4,4	5,0	4,5
14.	Production of metal and metal products	8,3	10,3	14,3	13,6
15.	Production of machinery and mechanical equipment	4,0	5,5	5,8	6,0
16.	Electrical, electronic and optical machinery and equipment	8,9	10,9	15,2	20,5
17.	Transport equipment	32,9	16,6	6,2	10,8
18.	Other productions	1,3	2,1	1,2	1,2
19.	Production and supply of electricity, gas and water	0,1	0,0	2,3	0,9
TOTAL		100	100	100	100

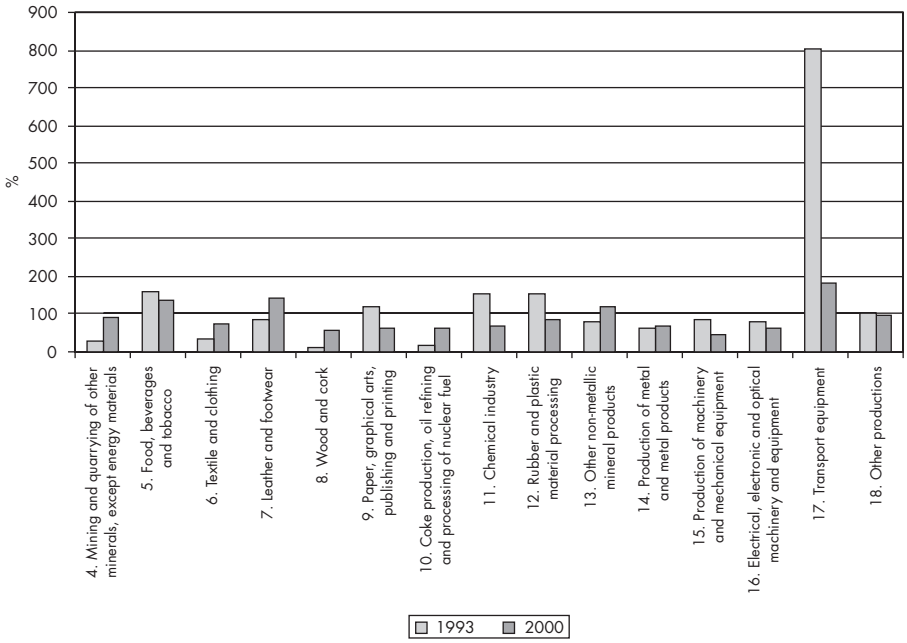
* The data on bilateral trade between the EU and the CEECs belongs to 2000 which is the latest information available.

Source: OECD: International Trade by Commodities Statistics and EEG.

Everything seems to indicate that the main driving force of the major change that has taken place in the structure of industrial goods exports to the EU, which has a greater similarity with that of Spain, has to be found in strategies by companies that have spread out very quickly and considerably in most of the CEECs. In this regard, there are many studies that suggest that, together with the supplying of their domestic markets, the multinationals that have settled in most CEECs have as their main commercial strategy to take advantage of both their wage benefits and their geographic location by using them as production facilities and export platforms to the entire European market (Lankes and Venables, 1997; Landesmann, 2000; EBRD, 2000 and 2001; Martín and Turrión 2003). The case of cars is a paradigmatic example, though not the only one, of the implementation of this type of strategy, which is making possible the change of the structure of comparative advantages of the future members in such a short period of time. As regards to agro-food products, the unexpected increase in the specialisation of the Spanish exports vis-à-vis the CEECs in the EU market seems to be the result of the subsistence of export controls to Eastern products taking place within the framework of the CAP. Thus, it is not difficult to foretell what will happen once the candidates become full members of the Union.

In the case of industrial goods, however, the pattern of increasing similarity, as we have said, between the exports of Spain and the CEECs to the EU market under the encouragement of multinationals, has in fact become an area of concern as regards to the increasing difficulties that Spanish companies are going to find to be able to export to the enlarged EU market.

Graph 1
Export specialisation index of Spain vis-à-vis the candidate countries in trade with the EU (1993-2000)



4.3. Assessment of the impact of the enlargement on Spain's trade: direct and indirect effects

The analysis of the trade adjustments that have taken place between Spain and the rest of the Fifteen with the ten candidate countries that will accede to the EU in 2004, which has been carried out in previous sections, provides valuable information with a view to the estimation of the adjustments that may take place in the future and their impact for Spain.

In this respect, a growth of Spain's export quotas to the new members is expected after the enlargement, as has happened in the last few years, in response to the liberalisation process agreed upon in the Association Agreements. In addition, the products from the CEECs will presumably become increasingly important, and even at a higher rate, within the Spanish imports for, as has been argued, the multinationals located in these countries are contributing to boost competitiveness. In this regard, it should be stressed that we are not only dealing with competitiveness based on prices, but also on substantial improvements in product quality, especially in companies with foreign capital.

Therefore, unless our companies put into practice a more active and efficient export strategy than the one carried out so far, it is likely that in the coming years the growth of the Spanish exports to the future members be lower than its imports, as was in fact the case for the last three years and, as a result, the trend of decline of the Spanish bilateral trade balance with these countries continue. This trend could change, however, if, as we said, Spain intensified its efforts to open and strengthen trading channels in the CEECs. In this regard, in the light of the experience of present members that are being more successful in the supplying of their emerging markets, it seems that the setting up of Spanish subsidiaries in the CEECs would be the most efficient way to strengthen and consolidate exports.

In any case, the enlargement will not only affect Spain's bilateral trade with the future members, but also will have an impact on the course of our exports to present member States. What is more, and given that the latter are the main recipients of the Spanish exports, we have stated in this paper that this may be the enlargement's chief channel of impact on the Spanish trade. In particular, reliable evidence has been provided suggesting that the future of our exports to the EU may be at stake as a result of the competitive pressures of the CEECs, whose productive and exporting ability has been enhanced by the strategies of multinationals.

5. Effects on direct investment flows

Although in previous sections we have put forward some views on the significance of direct investment in the strengthening of the CEECs export ability and the challenge that this means for Spain's exports in the EU, we will analyse here other implications for Spain stemming from the likely adjustments in direct investment flows related to the next accession of candidate countries.

In particular, we will first examine the opportunities of direct investment for Spain and the rest of the Fifteen in the future member countries. In fact, most of the EU-15 countries have been taking advantage of these opportunities since shortly after the fall of the Berlin Wall. Secondly, we will assess the possibility of Spain being displaced by the CEECs as receptor of new projects of foreign direct investment and, even more so, that production of foreign companies working in our country is reduced as a result of investment dislocation transactions towards Eastern countries. In order to do that, we will use the experience of what has taken place in the last few years, for, as in the case of trade, direct investment movements between the EU and the CEECS have also gone through a liberalisation process under the Association Agreements that has given rise to the growth and restructuration of investment flows that somehow can be taken as an example to anticipate those that will take place in the future.

5.1. Opportunities of the enlargement for direct investments

1The change of government undertaken by the CEECs, their parallel opening up to relations with Western countries, highlighted in the case of the EU by the Association Agreements, and the generous incentives to foreign investment set up by most of these countries explain largely the intense reception of foreign capital that has taken place there since privatisations started. In addition, there are other factors that make the CEECs appealing for the location of international investment projects. Firstly, these countries have well trained and cheap labour force. Secondly, they provide a market of 75 million people (more than 100 millions if we include Bulgaria and Romania) that – though still small in economic terms, with a per capita income that is still only 46% of the EU-15 average – has an unquestionable growth potential. And finally, only to mention their major advantages in terms of location, these are countries that, in most cases, have an outstanding geographic situation, insomuch as they are comparatively near the EU' economic centres of gravity.

Accordingly, thanks to these factors, most CEECs have received over the 1990s a significant flow of foreign capital as direct investment, which entails that a considerable part of these economies have at present a level of foreign capital penetration similar and even higher than the EU-15 average and, of course, than Spain's. In fact, as we can see in Table 6, this is the case of Estonia, Hungary and Czech Republic which, being a preferential destination of the investments aimed at the CEECs, reach levels of participation of foreign capital stock in the GDP of over 35%.

Table 6

Penetration of foreign capital in the candidate countries

Foreign capital stock/GDP (%)

	1990	1995	2001
Czech Republic	4,3	14,5	43,5
Estonia	–	18,6	50,5
Hungary	1,7	22,4	37,3
Latvia	–	13,8	27,6
Lithuania	4,4	5,8	22,5
Poland	0,2	6,6	22,3
Eslovaquia	0,6	7,3	24,9
Slovenia	3,8	9,4	12,4
Cyprus	20,6	17,9	20,1
Malta	20,1	28,4	65,4
Bulgaria	0,5	3,4	24,3
Romania	2,0	3,2	10,3
European Union	**11,0**	**13,4**	**29,2**
Spain	13,4	23,3	24,7

Source: UNCTAD and EEG.

When analysing the source of the candidate countries large foreign capital stocks we can see that most of them come from the EU, which is reasonable, among other things, because of the encouragement that has meant for community investors the existence of the Association Agreements. However, as we can clearly see in graph 2, there are significant differences within the Fifteen. Germany is by far the main investor in the area, followed by the Netherlands[7], France and Austria. In this context, it is surprising the insignificance of Spain's direct investments in the area, whose share of participation in the stock of foreign capital accumulated by the CEECs, 0.5% in 2001, is little more than symbolic. And it is also symbolic if we assess it in comparison with the volume of Spain's investments over the last few years – note in this regard that the Candidates only absorbed 0.7% of Spain's total direct investments abroad during the period 1993-2001 – . The main recipient countries within the CEECs were Poland, Hungary and Czech Republic.

Our companies obvious disregard for Eastern Europe when deciding the location of their international investment projects, which in other respects have experienced a very strong growth in the last few years, is perhaps the result of the investor's marked preference for Latin America (which absorbed 43% of the investments made in such period), a distant market in geographic terms by with unquestionable cultural and linguistic bonds with Spain.

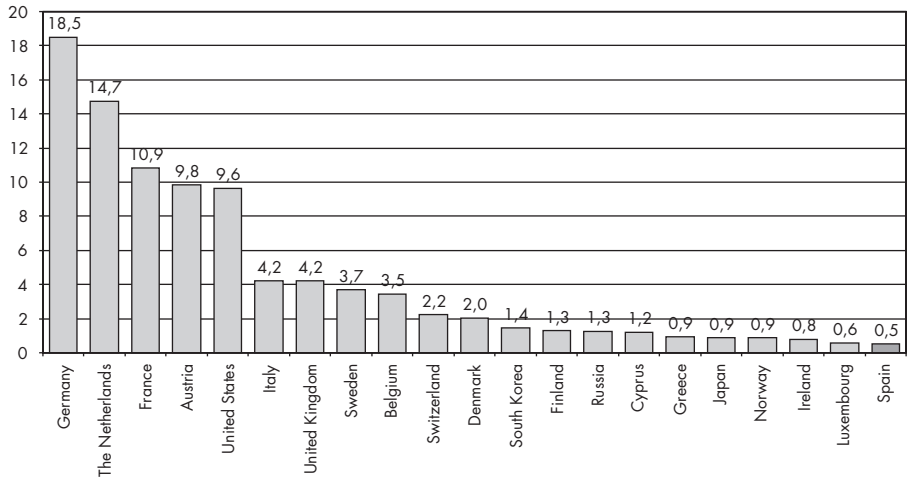
In any case, whatever the reasons for forgetting the CEECs as destination for Spain's investments abroad, it can be stated that this is a strategic mistake that may entail a great loss of economic opportunities for Spain. These opportunities are, on the other hand, being taken advantage of by countries with more investment activities in the area, which are basically of two kinds. On the one hand, the presence in these markets opens and enlarges steadfast export channels of products made in the countries where the investment has taken place, as can be seen by the high correlation existing between major investing countries and those that have the largest export shares (Martín and Turrión, 2003). And, on the other, the setting up of production facilities in the CEECs enables to take advantage not only of the low labour costs but also, at least in the case of those countries with a more centred geographic situation, of the significant advantages involved in the proximity to the main consumption centres, with the resulting saving in transport costs.

[7]It should be noted that the specially advantageous fiscal conditions in the Netherlands entails a likely overvaluation of the investments that are recorded as belonging to this country.

Accordingly, the use of the CEECs as platform for production and exportation to the entire European market seems to be – as we predicted when trade was analysed – a preferential strategy among the host of multinationals that have mobilised their subsidiaries in these countries.

It seems that the Latin American crisis has made the Spanish companies to show an increasing interest in the CEECs, which we hope translates in the future into an increase in the flow of investment business in the area. Obviously, the delay in moving to these countries will make more difficult to take the extraordinary advantages foreign investors have had in the decisive years of privatisations and will also entail the difficulty of opening business in countries where there is a thick net of foreign companies already established. Therefore, our companies will have to make a major effort without delay, or else they won't be able to take advantage of fiscal and other benefits that most CEECs continue offering to foreign investors, but that will have to be done away with once these countries become part of the Union, inasmuch as they contravene EU legislation on defence of competition.

Graph 2
Main investors: participation in the foreign capital stock received by the candidates.
December 2001



Source: UNCTAD

5.2. Assessment of Spain's risk of being displaced by the CEECs as destination of direct investment

So far we have maintained that the CEECs make up an opportunity for the internationalisation of the Spanish companies which, nevertheless, and unfortunately, are not taking the same advantages as their Union counterparts.

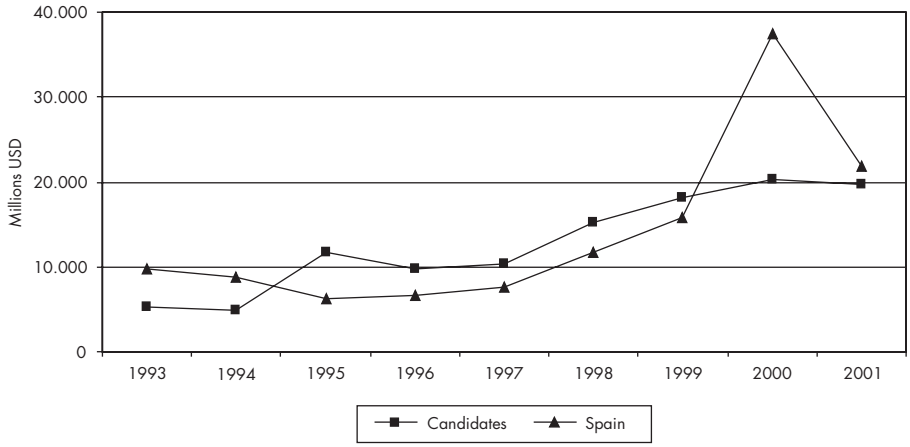
However, nothing has been said as yet on other possible effect of the enlargement on direct investment, no less significant and, undoubtedly, counterproductive for Spain: the likely shift of investment flows received by Southern countries, among them ours, towards the candidate countries. Or, what is almost the same, the likely removal of production facilities of foreign capital set up in Spain as a result of their opening up in these countries. The aim of this section,

therefore, will be to analyse the plausibility that these processes of investment shifting and dislocation towards Eastern countries to the detriment of Spain take place.

In order to assess the probability of this prediction, not at all advantageous for Spain, we will use two types of analysis. The first one is the comparative examination of the course of foreign direct investments received by Spain and the CEECs over the last few years. The second one has to do with the assessment of location advantages provided by Spain vis-à-vis the CEECs for foreign investors.

When comparing the course of investment flows received by Spain and the CEECs – see graph 3 – it may be seen that, after the early 1990s, where direct investment in Spain grew at a higher rate, investments received by the CEECs exceeded those entering Spain, except for the last two years. Accordingly, with the exception of the last two years where the erratic course of investments may be the result of the methodological change that has taken place in the drawing up of the series, the development of the data suggests that, in fact, the CEECs are able to compete with our country in the reception of direct investment. However, this is just an indication that we will try to enhance.

Graph 3
Development of foreign direct investment received by the candidate countries and Spain 1993-2001



An additional way to assess the extent to which Spain may be replaced by the CEECs as destination of direct investment operations is the analysis and comparison of the main factors, according to the most reliable literature on the subject, that determine the decisions regarding the location of companies. In this regard, the works by Dunning (1993, 2000), provide a comprehensive list of the economic, social and political features of the countries that seem to exert greater impact on the election of the location for direct investment and, as a result, on the territorial expansion of multinational enterprises. The models of economic geography developed in the last few years (a reference of them is made in Ottaviano and Puga, 1998; Puga, 2002 and Fujita Krugman and Venables, 2001) have also provided new keys on the role played by geography in the strategies of companies.

The list of location advantages that may be offered by the various countries includes those that affect installation costs (price of land, legal procedures for the creation and purchasing of companies by foreign investors) as well as those that have an impact on profits (like taxes on capital or the regulation on the repatriations of profits of companies where foreign capital has a stake), together with countless factors (wages, labour regulation, infrastructures, geographic location, trade barriers and so forth) that affect the productive and commercial activity of foreign investors.

Obviously, the comparative exploration between Spain and the CEECs of this almost endless list of variables to determine their relative ability to attract international investment projects is a very complex task. And it is even more difficult to give a weighing to the analysed variables, especially if we take into account that the importance of location advantages may vary among sectors, and even among productive stages within the same sector. Let's think, for example, about one of these advantages – labour costs - ; in this regard it is obvious that its significance for multinationals in the determination of location strategies will be greater with sectors whose productive process is labour-intensive. Also, within any sector – for example the production of computers – we may find stages in the production process that use more labour and where labour costs have a more decisive role in production costs as a result. If we also add the problem of the CEECs' lack of homogeneous data available, we can see how difficult it is to answer the question raised in this paper: What is the risk for Spain of being displaced by the CEECs as destination of direct investment?

In spite of the aforementioned limitations, we will try next to carry out a comparative examination, between Spain and the CEECs, on some of the likely determining variables of business location that may cast light on such question. In particular, the following variables will be taken into account: geographic location, availability of transport and communication infrastructures, and cost and training of labour.

As regards to *geographic location*, we should start by saying that the literature developed in the last few years within the so-called "new economic geography" stresses it as one of the determining factors regarding both business location decisions and their internationalisation strategies, either through exports and/or direct investment. In this regard it is argued that the presence of growing returns of scale and economies of agglomeration[8] in production, together with the existence of transport costs makes of the geographic location of countries – especially the distance to the main production and consumption centres – a determining factor in the ability to attract investment to their territory. Therefore, with the aim of assessing the relative situation of Spain vis-à-vis the CEECs in relation to this location advantage, we have developed table 7 which provides information on the distances from their capital cities to what has been taken as an approximation to the Union's economic centre of gravity: the average distance to Paris and Berlin weighted by the population. This table makes evident Spain's peripheral nature as opposed to most CEECs, which have a more centred geographic situation and are closer to the area with greater economic wealth.

Table 7

Economic distances with regards to the economic centre of gravity*

Country	Capital City	Distance (Km)
Czech Republic	Prague	512
Slovakia	Bratislava	760
Slovenia	Ljubljana	817
Poland	Warsaw	853
Hungary	Budapest	920
Lithuania	Vilnius	1.162
Latvia	Riga	1.177
Estonia	Tallinn	1.357
Spain	**Madrid**	**1.555**
Malta	La Valetta	1.817
Cyprus	Nicosia	2.667
Bulgaria	Sofia	1.489
Romania	Bucharest	1.527

*The distances are estimated as an average distance with regards to Berlin and Paris weighed by the population of such capital cities.
Source: www.indo.com and EEG.

Once underlined the privileged geographic location of a large part of the CEECs it must be noted that this advantage should not be magnified for at least tow reasons. Firstly, because the advantages involved in the proximity to centres of economic activity is not determining in the case of most services where, thanks to the dramatic development of information and communication technologies, the barriers associated with geographic distance have been reduced considerably. This is also the case for some manufactures whose transport cost accounts for a very small share of their unit cost. Secondly, because the disadvantages of a peripheral location may be compensated to a large extent by the availability of better transport and communication infrastructures.

Even though the data on *transport and communication infrastructures* are poor, in particular those regarding the CEECs, we have been able to develop a series of indicators – shown in table 8 – with the aim of comparing Spain's inventory with that of the candidate countries. In this regard, the first thing that should be stressed is that the inventory of road transport infrastructures varies widely among the various CEECs, so whereas in some of them is very poor in comparison to Spain, in others is quite better[9]. The indicators on the availability of telecommunication infrastructures show a very similar diagnose.

As to the *cost and training of labour*, the balance of advantages tilts towards the CEECs once again, at least as regards to labour costs, inasmuch as the wage differentials are huge. For instance, in 2001, the average wage per worker in the candidate countries accounted for only 16% of the EU-15 average, as we can see in table 9. However, it should be noted again that the availability of low labour costs seems to be a basic factor for the attraction of direct investment only when the goal is the production of goods or components that are labour-intensive, as is the case with assembling processes. Spain, to the contrary, seems to have an advantageous situation, though not as significant nor extensive to all the CEECs, as regards to the training of its workers,

[8]i.e.: positive external economies associated to the economic activities in space.
[9]In any case, it should be noted that the diagnose on the relative inventory of road infrastructure based on quantitative indicators does not enable to see neither the quality nor the situation of marked deterioration of roads in most CEECs (see EBRD, 2000)

Table 8

Indicators of road transport and telecommunication infrastructure in the candidate countries

	Road Transport Infrastructure (2000)		Communications infrastructure (2001)	
	Kilometres of motorways (EU = 100)		Host per million inhabitants	Spending on information technology/GDP
	Per inhabitant	Per Km²		%
Czech Republic	36,5	40,8	17,2	3,02
Estonia	39,2	10,7	32,6	2,99
Hungary	33,6	31,0	12,9	2,5
Latvia	134,3	42,3	9,8	1,98
Lithuania	84,8	41,2	7,9	1,36
Poland	5,2	5,3	13,4	1,59
Slovakia	40,1	37,9	9,9	2,4
Slovenia	124,7	104,9	14,1	1,81
Cyprus	201,8	142,0	–	–
Malta	12,1	126,5	–	–
Spain	**194,3**	**131,3**	**19,9**	**1,94**
Bulgaria	29,4	18,5	2,9	1,74
Romania	3,8	3,1	2,0	0,96

*For more details on this indicator see Martín and Velázques (2001)
Source: EUROSTAT, OECD, UN and EEG.

Table 9

Cost and training of labour in the candidate countries. 2001

	Monthly average wage per worker in the manufacturing sector (EU = 100)	Average number of years of schooling (population 15-64 years of age)
Czech Republic	15,1	11,0
Estonia	12,6	9,6
Hungary	14,3	9,6
Latvia	10,2	9,8
Lithuania	9,9	9,2
Poland	20,1	10,8
Slovakia	10,2	8,5
Slovenia	35,1	11,3
Cyprus	–	8,6
Malta	–	6,9
Candidates (10)	**15,9**	**9,5**
Bulgaria	4,4	9,6
Romania	5,8	9,6
European Union	100,0	11,1
Spain	76,7	9,1

Source: ILO, Eurostat, UN and EEG.

5.3. Opportunities (risks) of the enlargement for direct investments made (received) by Spain

On the basis of the analysis carried out in the two previous sections we can make an estimate of the consequences that the accession of the CEECs may have on direct investment flows received and made by Spain. In this regard, the dynamics of the adjustments that have taken place during the last few years – when, in accordance with the Association Agreements, there has been great freedom for the mobility of capital between the Fifteen and the CEECs – sets some trends on what is likely to happen in the future, once the CEECs become full members of the Union. Within these trends we can observe both opportunities and risks for the Spanish economy.

The field of opportunities indicates a hopeful future, though not easy, because, unlike their counterparts in most of the present member countries, Spanish companies have barely taken part in the boom of direct investment received by the CEECs, so its presence in the area is little more than symbolic. The facet of this reality open to hope is, of course, the business opportunities that are still left to be taken advantage of, whereas the difficulty is, obviously, that the companies that go to these countries will have to compete not only with autochthonous companies but also with the large number of multinationals that have set up there. Therefore, Spanish companies will have to undergo a deep change in their internationalisation strategies if they want to be able to recover the lag they have in relation to most of the EU-15. This change, very desirable in our opinion, should also take place as soon as possible, for delay in the investment in markets of the future members will be counterproductive, not only because it will take away business opportunities, but also because it will presumably entail the loss of generous incentive policies, fiscal among others, that the candidate countries are implementing to attract foreign investment, and that will be difficult to keep when these countries take on the Union's rules on the regulation of competition.

As for risks, the most likely seems to be the diversion of investments towards the new members to the detriment of those received by Spain. In fact, although it is very difficult to make a realistic forecast on this issue, there are some signs that point out in this direction. Thus, on the one hand, the assessment of the location advantages offered by the candidates vis-à-vis Spain for the location of international direct investment projects that was made in the previous heading proves its considerable appeal. On the other, in some sectors, in particular the car industry, some episodes of investment dislocation towards the candidate countries have taken place which also suggest that they can be a major competitor for Spain in attracting foreign capital.

6. Potential migratory flows of the candidates and their effects

The accession of the candidate countries to the EU will not only entail the removal of barriers to trade and capital but also the suppression of controls affecting migratory movements between the present and future members. In this respect, and given the candidates substantial income gap, the removal of current controls may bring about a migratory flow from the CEECs to the EU-15. However, it is difficult to foretell the scope that migratory pressures from the new candidates may have since, unlike what happened with trade and investment, migrations have not undergone a gradual process of liberalisation over the 1990s within the framework of the Association Agreements.

In fact, given the Union's concern that an avalanche of Eastern immigrants could take place, the compromises stipulated by the Fifteen in such agreements were minimal. The permanence of strict migratory policies explains, therefore, that the population of the CEECs living in the EU be very small on the whole, though there are differences between the Fifteen.

To be specific, according to the most recent available data, those for 2001, the stock of immigrant population from the CEECs living in the EU grew to about 325,000 people, which accounts for less than 1% of the EU-15 population. However, as noted in Martín et. al. (2002), the presence of immigrants varies significantly among the Union members. In this regard, it seems that immigrants distribute themselves among the member States according to a geographic proximity criterion. This seems reasonable for in this way information and transport costs are cut down and, normally, a greater cultural proximity between the countries of origin and destination of immigrants is also reached. In any case, a special concentration of Eastern immigration is observed in Germany and Austria. Spain, to the contrary, is one of the member States with a lower share of immigrants from the CEECs. Table 10 shows detailed data on the number and country of origin of immigrants from the CEECs in Spain.

Table 10

Stock of immigrant population from the candidate countries in Spain. 2001

	No. of people	% of Spain's population
Czech Republic	1.351	0,034
Estonia	34	0,001
Hungary	651	0,016
Latvia	63	0,002
Lithuania	1.813	0,045
Poland	11.342	0,282
Slovakia	873	0,022
Slovenia	99	0,002
Cyprus	34	0,001
Malta	30	0,001
Candidates 2004*	**16.290**	**0,405**
Bulgaria	9.953	0,247
Romania	24.856	0,617
Candidates 2007*	**34.809**	**0,864**
EU-15	**325.511**	**8,084**

* The distribution by age is estimated in terms of the available data

Source: Migration Annual and EEG

The same concern that has resulted in the application of a strict control of immigrants coming from the candidate countries, has made the EU to establish a transitional period of up to seven years after the accession of the CEECs takes place for the removal of controls to the entrance of

immigrants coming from these countries. At this point, however, we should ask ourselves about the point of a measure that goes against the economic doctrine on regional integration processes, which precisely indicates that the full union of the members' market – movement of labour included – is the key to the achievement of a better resource allocation that reflects in economic welfare for all of them. Therefore, it can be stated that only if there were a high probability of an immigrant avalanche taking place, entailing serious strains in the EU-15 labour markets and social protection systems, the permanence of controls to likely migrations of the CEECs after their accession could be justified. In this respect, we will examine next the evidence provided by studies carried out with the aim of estimating the likely nature and features of potential Eastern migrations, paying special attention to those that could head for Spain.

The quite numerous studies on the subject have made use of three methods: a) polls, b) extrapolation of similar cases and, c) econometric estimation of equations where migratory flows depend on a series of socio-economic variables. We will briefly examine the possibility of these approaches and the main results achieved when they have been applied in order to foresee the potential immigration of the CEECs involved in the enlargement.

a) Polls are aimed at a sample of individuals or homes that are asked whether they have intention to emigrate. Obviously, the problem with this approach is that it tends to overvalue the size of migratory pressures inasmuch as only a small share of the surveyed people that state their intention to emigrate end up emigrating, as has been confirmed in studies carried out in other countries.
b) The second approach used to estimate the migratory potential of the CEECs involves the simple extrapolation of preceding cases that are considered to have certain similarities, especially those of Southern Europe – Greece, Portugal and Spain – either during the 1950s and 1960s or during the years after their accession to the EU. These studies – referenced in Martín et. al. 2002 and Boeri et. al. 2000 – have the disadvantage of drawing conclusions of migratory experiences that took place in very different economic contexts, especially as regards to the situation of the labour market in the countries of destination of the potential migratory flows. In particular, those that take as a reference migrations that took place from Southern to Northern and Central Europe in the 1950s and 1960 seem to provide clearly farfetched estimations, in view of the full-employment situation of the recipient countries then, quite different from today's. On the other hand, the experience of the accession of Spain and Portugal that, contrary to what was expected didn't entail an increase in migrations – but rather the return of emigrants – may be inappropriate insomuch as it undervalues the CEECs migratory potential, among other reasons because these countries still have a higher per capita income differential than Spain and Portugal had in relation to the average of the twelve members that then made up the European Community.
c) Finally, we have the forecasts carried out through the econometric estimation of models that try to explain migrations taking as a reference variables such as: income differential, differences in unemployment rates, geographic distance and some other socio-economic differences between the countries of origin and destination of emigrants. Although the studies that have used this type of analysis can provide a more realistic projection, their forecasts involve a high degree of uncertainty.

In any case, it should be underlined that, as a whole, the available evidence does not justify the fear on the avalanche of immigrants from the CEECs that would take place should controls be removed. Furthermore, the studies carried out help to support that the geographic patterns followed by Eastern emigrants within the EU will be a prolongation of present ones. Therefore, the enlargement is expected to increase the concentration of future migratory flows in member States sharing borders with the CEECs, where the existence of ethnic enclaves of immigrants will make easier the arrival of new immigrants coming from the same countries.

In theory, Spain is one of the EU countries with less chances to experience migratory pressures from the CEECs, the reasons being: its economic situation – lower level of per capita income than the EU-15 average and higher unemployment rate – as well as its peripheral geographic location. Besides, the experience of these years corroborates this idea for, as we have seen, our country is, together with Portugal and Ireland, the one with a lower share of inhabitants from those countries.

In short, the chances are that migratory pressures from the candidate countries be moderate, especially in Spain. Accordingly, it seems appropriate that the transitional period of permanence of immigration controls the EU has decided to establish is used only with precautionary ends and is not prolonged for a long time, otherwise it would be counterproductive. In this regard, it can be argued that, as long as reasonable numbers are kept, the reception of immigrants from future member countries may be a good incentive to overcome some of the limitations that affect the EU-15 labour market. Likewise, immigrants may contribute to soothe the funding problems of the Welfare state that, as a result of the gradual ageing of the population pyramid, most present member States will have to face in the future, Spain included.

7. Conclusions and recommendations of economic policy

In the previous chapters we have explored some of the main economic effects of the EU enlargement on present member countries in general and, more specifically, on Spain. In particular, among the likely economic effects of the accession of future members, this paper has focused on the analysis of those stemming from the adjustments that will presumably take place in trade, direct investment flows and migrations within the future EU-25.

In order to see the extent of the opportunities and risks that are about to come, we have examined the events that have taken place over the last few years. The experience of these years seems specially valuable, inasmuch as it explains the changes that have come about in response to the gradual liberalisation process of mutual economic transactions laid down in the Association Agreements endorsed by both the EU and the candidate countries, and that will be completed when the latter become full members of the EU.

The benefits and costs balance resulting from the extrapolation of the events that have taken place so far is not very satisfactory for Spain, especially if compared to the results obtained by most of the present member States.

Indeed, and starting off with trade, it has been confirmed that Spain has made a late and much more modest use of the export opportunities involved in the opening up of emergent markets in the future member countries. Besides, our products have exhibited a relative weakness in relation to the CEECs growing competitive pressures in the domestic market, as was somehow suggested by the gradual decline of Spain's bilateral trade balance with the CEECs, in spite of being still positive. Furthermore, when comparing the course and makeup of the Spanish exports to the EU – our main customer – with those of the CEECs, some alarming facts for the future dynamics of our exports to the community market are pointed up. Thus, seemingly with the support of the numberless multinationals that have mobilised their subsidiaries in these countries, the makeup of their exports has undergone a deep change and has become more similar to the Spanish one, which obviously increases their possibilities to compete with our companies in the supplying of the community market. Furthermore, a very disaggregated analysis of trade – at the five digit level of the CUCI classification, which enables the differentiation among over 3,800 goods – has shown that over the last few years the quality of export products has improved comparatively more in the CEECs than in Spain, which consolidates the prediction on the likely displacement of our exports in the Union's market as a result of the competitive power of the future members.

In the field of direct investment we also have to state and regret Spain's poor use of the business opportunities provided by the CEECs. Unlike most member States, which have a considerable presence in the area, the participation of Spanish companies is little more than symbolic. In other respects, our comparative analysis on the location advantages provided by the CEECs and Spain to foreign investors makes think about the risk that an investment diversion to their territory may take place to the detriment of Spain. In this regard, the processes of investment dislocation that are taking place in the car industry could be only the tip of the iceberg of those that may come about in the future.

Less significant, however, is the expected effect on migrations, at least in the short term, inasmuch as the EU has left open the possibility of keeping controls to check immigration from the CEECs over a period of up to seven years from their accession to the Union. In addition, in the light of the experience of these last few years, Spain is one of the countries where the CEECs migratory pressures will have a lower impact.

In short, there is much left to do in Spain both to materialise the economic opportunities and to limit the risks for our economy involved in the enlargement, in view of the evidence found on the likely shift of direct investments towards the candidate countries and their growing competence in the supplying of the enlarged EU market. In this regard, our companies should penetrate the markets of the future members without delay to open up and secure exports to their dynamic emergent markets and, no less important, to benefit from their lower labour costs and greater proximity to the Union's production and consumption centres, as their counterparts in most of the EU-15 have been doing for a long time now, using these countries as production centres and export platforms for the entire European market. Obviously, this means a drastic change in the strategies carried out by our companies over the last few years, where our foreign investments have focused on Latin America, barely paying attention to the Eastern markets. In this respect, it would be desirable for the companies that participate in this markets to have a greater support from the trade policy since, up to the present time, it has paid very little attention to the area.

The economic policy may also play a major role with a view to enhancing Spain's appeal as setting for the location of international investment projects and, as a result, limiting the risks that they divert to the future member countries. On the one hand, the aim would be to compensate through the improvement of transport and communication infrastructures for a geographic location that becomes more peripheral with the enlargement and, on the other, to consolidate the elements that are at the base of the companies' productivity and competitiveness. Education and I&D activities seem basic for such an end.

References

Baldwin, R. And Venables, A. (1995): «Regional Economic Integration», in GROSSMAN, G. M. And ROGOFF, K. (eds.): *Handbook of International Economics* (3): 1597-1644.

Blanes, V. And Martín, C. (2000): «The Nature and Causes of Intra-Industry Trade: Back to the Comparative Advantage Explanation? The Case of Spain», *Weltwirtschaftliches Archiv* 136 (3): 423-441.

Boeri, T. Et al.: *Who is afraid of the big enlargement?* CEPR Policy Paper n. 7.

Dunning, J. H. (1993): *Multinational Enterprises and the Global Economy,* Addision Wesley, Reading, Massachusetts.

Dunning, J.H. (2000): «The eclectic paradigm as an envelope for economic and business theories of MNE activity», *International Business Review,* 9.

EBRD (2000): *Transition Report 1999,* London.

EBRD (2001): *Transition Report 2000,* London.

Fujita, M., Krugman, P.R. and Venables, A. (2001): *Spatial Economics.* MIT Press, Cambridge, M.A.

Gordo, E. And Martín, C. (1996): «Integración económica, comercio intra-industrial y costes de ajuste», *Revista de Economía aplicada,* IV (12): 151-164.

Heijdra, B. J., Keuschnigg, Ch. And Kohler, W. (2002): «Eastern Enlargement of the EU: Jobs, Investment and Welfare in Present Member Countries», febrero, *mimeo.*

Krugman, P. R. (1991): Geography and Trade, MIT Press, Cambridge, Massachusetts.

Landesmann, M. (2000): «Structural Change in the Transition Economies, 1989-1999», in *United Nations: Economic Survey of Europe* 2000 No. 2/3. Capítulo 4. Naciones Unidas. Nueva York.

Lankes, H. P. And Venables, A. J. (1997): «Foreign direct investment in Eastern Europe and the former Soviet Union: Results from a survey of investors», in Zecchini, S. (ed.): *Lessons from the economic transition. Central and Eastern Europe in the 1990s.* Kluwer Academic Publishers and OECD, Norwell, Massachusetts.

Lipsey, R. (1960): «The Theory of Customs Unions: A general survey». *Economic Journal,* 70: 496-513.

Martín, c. (1995): «El impacto comercial de los Acuerdos de la UE con los países del Este» , *Papeles de Economía española,* 63: 269-284.

Martín, C. Herce, J. A. Sosvilla, S. and Velázquez, F. J. (2002): *La ampliación de la Unión europea. Efectos sobre la Economía Española.* La Caixa. Colección de Estudios Económicos, n. 27.

Martín, C. And Turrión, J. (2003): «The Trade Impact of the Integration of the Central and Eastern European Countries on the European Union», *Journal of Economic Integration,* 18 (2), 234-265.

Ottaviano, G. And Puga, D. (1998): «Agglomeration in the Global Economy: A Survey of the "New Economic Geography"», *The World Economy,* 21 (6): 707-731.

Panagariya, A. (2000): «Preferential Trade Liberalization: The Traditional theory and New Developments. » *Journal of Economics Literature,* 38: 287-331.

Pomfret, R. (2002): «The Economics of Regional Trading Arrangements», Oxford University Press, Great Britain.

Puga, D. (2002): «European regional policies in light of recent location theories», *Journal of Economic Geography,* 2: 373-406.

Viner, J. (1950): *The customs Union Issue,* Carnegie Endowment for International Peace, New York.

List of Tables and Graphs

CONSEQUENCES OF THE ENLARGEMENT FOR THE EUROPEAN REGIONAL POLICY: THE SPANISH VIEWPOINT

Consequences of the enlargement for the European Regional Policy: the Spanish perspective

Carmela Martín
Professor of Applied Economics
and Director of the European Economy Group, UCM
Member of the European Academy for Sciences and Arts

Ismael Sanz
Junior Research
Of the European Economy Group, UCM

EUROPEAN ACADEMY FOR SCIENCES AND ARTS
SPANISH DELEGATION

Consequences of the Enlargement for the European Regional Policy:
The Spanish Viewpoint

Published by:
European Academy for Sciences and Arts

printed by: Sociedad Anónima de Fotocomposición
Talisio, 9. 28027 Madrid

CONTENTS

1. Introduction

The enlargement of the European Union (EU) with up to twelve new members – the ten Central and Eastern European countries (CEECs): Poland, Hungary, Czech Republic, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Romania and Bulgaria, plus Malta and Cyprus – is one of the most significant events in the European construction process, with major effects for both the candidates and the current members. Among them, the implications for the Union's regional policy should be highlighted, especially the one financed with Structural Funds, which will have a special significance for Spain.

Indeed, the acceding countries' significant difference in per capita income in relation to the Fifteen implies that their accession will "statistically" reduce the per capita income levels of the enlarged EU. In particular, if, as decided at the Council of Copenhagen, the enlargement initially affects ten candidates – all of them except Bulgaria and Romania – giving rise to a EU-25, the average community per capita income in purchasing power parity would undergo a drop of over 9% in relation to the EU-15. Therefore, given that the per capita income difference – whether defined in national terms (in the case of the Cohesion Fund) or regional terms (Structural Funds) – in relation to the EU average is the basic variable to determine the eligibility of countries and regions as beneficiaries of the Funds, the enlargement entails two significant effects. On the one hand, pressure on regional policy costs, since, if the same criteria continued to be implemented, most regions of the future member States would benefit from them. In particular, with the latest data available, those for the three-year period 1997-1999, only Prague, Bratislava and Cyprus would be excluded from the most significant regional policy aids, those regarding objective 1, that is, only 2.3% of the population in the acceding countries would not benefit from these funds; and, on the other, the reduction of aids allocated to current member States, as a result of a "merely statistical" rise of their relative per capita income in relation to the EU average.

In anticipation of these effects, and with a view to the preparation of the financial framework of the Community Budget for the period 2007-2013, the Commission is considering various reforms. In this regard, the aim of this study is to assess these likely reforms, attachin special attention to their implications for the Spanish economy, and, on the basis of this, to make the most appropriate proposal.

With this aim, the study is structured as follows. Section 2 provides a brief review of the main recent economic ideas supporting the existence of regional policies, focusing subsequently on the comment of evidence on the course of regional distribution of income in the EU, and how it has been influenced by the European regional policy. Section 3 deals with the objectives and main instruments of the European regional policy at present, for this would be the benchmark for possible reforms that could be carried out as a result of the enlargement. In section 4 we examine the regional policy, taking into account its relative significance within the Community budget, and the participation of Spain vis-à-vis the rest of the EU countries is assessed. The next two sections analyse the impact of the accession of the candidate countries on both Structural Funds and Cohesion Funds. In section 5 the current financial perspectives are taken as a reference, those for the period 2000-2006. Whereas in section 6 the future budgetary period 2007-2013 is taken as a benchmark, which will have to be reformed to a large extent to fit the needs of the ten new members that are expected to accede to the EU in 2004. In fact, the various reform options of regional policy included in the Second Report for Economic and Social Cohesion make reference to this period. Then, a reasoned opinion on the convenience of their implementation will be provided in this section.

Finally, section 7 summarises the conclusions of the study and provides some recommendations on the best way of fitting the new members into the regional policy without unfairly harming the interests of less developed member States, like Spain, that still need this policy.

June 2003

2. Economic justification and aim of the regional policy

The regional policy has an economic justification in the growth models developed from the 1980s that, unlike Solow's model (1957), contemplate the possibility that market dynamics does not imply convergence of per capita income levels among countries (regions) and even sustain, in some instances, that market dynamics may give rise to divergence processes.

The reasons provided in these models regarding differences between levels of development among countries (regions) are numerous and varied. Thus, according to Romer (1986), one of the causes for divergence is that– contrary to what was postulated in Solow's model – returns on physical capital are not decreasing. In such case, it could happen that countries (regions) with lower capital stocks and income levels may experience less intense capital accumulation processes and slower growth rates preventing them from converging towards richer countries (regions). Lucas' model (1988), where human capital is considered the main driving force of growth, mentions the existence of increasing returns regarding this factor and opens the possibility for the movement of human capital from the poor countries (regions) to the rich ones, that is: that a "brain drain" takes place to the detriment of the possibilities of development of less prosperous countries (regions). Similarly, many of the endogenous growth models that, like the one developed by Romer (1990), have stressed the significance for growth of carrying out R & D activities, make it possible to explain the continuing differences in technology and income among countries (regions). Finally, some studies – for example Aschauer (1989, 2000), Easterly and Rebelo (1993) or Argimón et al. (1997) – stress the role played by some types of physical capital, especially infrastructures, in economic growth and, in this respect, they argue how relevant government action is in improving the growth capacity in countries (regions) and to promote their income level convergence. In this regard, investments in transport and communication infrastructures are considered the most significant aspects regarding growth in less prosperous countries (regions).

Furthermore, the recent theoretical developments that have taken place in the field of spatial economy may also provide further justification for regional policy. In fact, these models, which began with Krugman (1991) and have given rise to the so-called "new economic geography"[1], provide various reasons, among them the existence of agglomeration economies, to explain the polarisation phenomena of economic activity in certain areas and, as a result, become the framework for the discussion on the suitability of compensatory policies that provide a more harmonious spatial income distribution.

In particular, agglomeration economies – or positive externalities associated to the spatial concentration of productive activities – may explain that regions with a higher level of development become a focal point of attraction for new activities, giving rise, thus, to processes of wealth accumulation in such regions. In particular, one may argue that the combination of growing returns of scale and transport costs encourages companies to locate close to the largest markets which, in turn, become places of business concentration. Therefore, even when they also admit the existence of factors that foster a more spatially disperse business location – especially the likely increase of labour costs in areas where those business tend to gather – they provide an explanation for the numberless occasions where factors with a tendency to polarisation become prevalent (for more details see the recent study by Puga, 2002).

[1] Otaviano and Puga (1998); Martin (1999), Neary (2001) and Puga (2002) provide good surveys on these type of theories.

Some models formulated by the new economic geography also provide a better guidance for assessing the impact of investments in transport infrastructures on the economic development, insomuch as they inform that such impact is also affected by the conditions of the economic environment. Thus, for example, they warn that in a context of lack of mobility and minor wage differentials among regions, the investment policies in transport infrastructures lose their effectiveness as a means to promote income convergence in less developed areas (Venables and Gasiorek, 1999; Puga, 2002).

Besides the theory, the empirical studies carried out in order to assess the per capita income differences among EU countries (regions), also advocate the advisability of a regional policy in the European Union.

Indeed, the countless studies carried out during the last years using different methodologies share the view that the imbalances are significant – both in absolute terms and in comparison to those observed in the United States – and they have not diminished significantly with time. In particular, the data show that although convergence in per capita income in EU countries is observed, imbalances among EU regions (defined as the level of decentralisation corresponding to our Autonomous Communities, i.e., for the NUT-II) – where the imbalance in much more marked - have barely decreased (see among others: Cánova and Marcet, 1995; Neven and Gouyette, 1995; López-Bazo et al., 1999; Boldrin and Cánova, 2001 and the Commission reports on Social and Economic Cohesion in the EU: EC, 1996 and 2001).

Moreover, the studies suggest that the Community Regional Policy has contributed substantially to the economic cohesion within the EU. Thus, this conclusion is reached in Beutel (1995) after estimating the impact of Structural Funds aimed at objective 1 regions by means of the Input-Output model. Also, several studies based on the simulation of the effects of Structural Funds from the HERMIN macroeconomic model – Herce and Sosvilla (1994 and 1999); Bradley, Modesto and Sosvilla (1995); Bradley (2000) and Christodoulakis and Kalyvitis (1998) – conclude likewise that they have been beneficial for growth in cohesion countries (Greece, Portugal, Ireland and Spain). The same result is achieved in the study by Roeger (1998) carried out on the basis of the QUEST II model. More recently, according to De la Fuente (2001), the effect of Structural Funds allocated to objective 1 regions during 1994-1999 has been both positive and far-reaching.

There are, however, some works that question the effectiveness of the community regional policy, in particular one by Bordin and Cánova (2001), where, after assessing the course of convergence among EU countries over the last two decades, there is no evidence that, with the exception of Ireland, recipient countries have achieved better results. For Ederveen et al. (2001), however, such outcome, contrary to general evidence, may be due to a problem with variables that have been missed out. See Boeri et al. (2002).

To sum up, both in recent literature on economic growth and in the models developed in the area o spatial economy evidence is provided to question that market dynamics may bring about harmonious development among countries and regions, or at least that the trend towards income convergence of both may be carried out within a reasonable time frame. Overall, the available empirical data suggest that the community regional policy has fostered growth in less developed EU countries and regions.

3. The European regional policy. Main goals and instruments

Concern in the EU with the income imbalances among member countries and regions – or, in community terms: the economic cohesion – has continued increasing as time goes by. The regional policy, therefore, has gained increasing significance as the integration process moved on and new members were added to the project. Thus, from being a merely token consideration, the goal of reducing differences in the territorial distribution of income has become one of the basic principles in the European construction process and, as a result, the Union's second most important budget item (the first one is the CAP), accounting for over 30%.

The main milestones in the consolidation process of the European regional policy are, first of all, the establishment of the European Regional Development Fund (ERDF) in 1975, in response to the negative effects of the energy crisis, which were especially serious in some Community areas and as a result of the accession of Ireland, a country with a development level below the average of earlier members. The second most significant step as regards to the European regional policy was taken in 1988, after the approval of the Single European Act to build a single market, with no borders to the movement of goods, services, capital and people, and practically coinciding with the accession of new members, Spain and Portugal that – like Greece, whose accession had taken place some years earlier – also had a lower than average level of per capita income. In fact, this time the funds allocated to the regional policy were doubled and its aims and specific instruments reformed.

Later, within the framework of the Maastricht Treaty, when the foundations were laid for the formation of Economic and Monetary Union (EMU), Community regional policy was once again strengthened. This took the form, *inter alia,* of the creation of the Cohesion Fund, with the basic aim of making the strict nominal convergence conditions stipulated as a prerequisite for forming part of the EMU compatible for the less developed countries of the EU – Portugal, Greece, Ireland and Spain – with their larger investment needs in order to make progress towards income convergence with the more prosperous members. Finally, a new reform of the regional policy was undertaken with the aim of preparing the enlargement of the CEECs, which began with the adoption of the Agenda 2000 and whose implementation is still in progress.

Before moving on to the discussion on the main goals and instruments of today's regional policy, a feature on its past history should be highlighted on account of its special significance for the debate on the new reform that will have to be carried out as a result of the accession in 2004 of candidate countries that are currently amid negotiation processes. It is the increment of funds that has normally accompanied former integration processes involved in the accession of countries with a lower-than-average level of development than that of the EU, and that will be repeated much more markedly in the case of the CEECs, whose income gap is huge. This is certainly a significant fact that contrasts with the reluctance of present member States, especially those that because of their higher level of development are net contributors to the community budget, to increase the financing of the regional policy so as to be able to meet the needs of the new members without neglecting the needs of EU member States that still benefit from those funds. Having said this, we will go on now to describe briefly the nature of the European regional policy that is being implemented under the current budget for the period 2000-2006.

Basically, the European regional policy is based on the utilisation of two types of funds: 1) Structural Funds and 2) Cohesion Funds, which, as a whole, finance the Structural Measures.

The **Structural Funds** are, in turn, composed of the following four Funds:

a) The ESF (European Social Fund), established in 1960, has as its goals to support measures to prevent and combat unemployment, develop human resources and promote social integration in the labour market.
b) The EAGGF Guidance (European Agricultural Guidance and Guarantee Fund, guidance section) born in 1962, it is aimed at rural development and the adjustment of agricultural structures.
c) The ERDF (European Regional Development Fund) created in 1975, its aim is to correct the main regional imbalances and to participate in the development and reconversion of regions to promote economic and social cohesion.
d) The FIFG (Financial Instrument for Fisheries Guidance) working since 1993 with the aim of restructuring the fishery sector, fostering suitable conditions for its development and modernisation.

The distribution of these funds is carried out according to four principles:

- *Partnership:* It looks for the maximum cooperation between the Commission and national, regional or local authorities involved in each member State, from the preparatory stage to the implementation of measures.
- *Additionality:* It means that European aids must add to national aids and not replace them.
- *Programming:* It involves the designing of multi-annual development programmes and is carried out through a decision-making process involving the developers of public or private projects.
- *Concentration:* It means that only a limited number of objectives are acted upon, which at present are only three.

These objectives are:

Objective 1:

Development and structural adjustment of less developed regions: This objective is aimed at regions – at level II of statistical territorial unit nomenclature (NUTS) – whose average per capita income in purchasing power parity (PPP) is below 75% of the EU average with data from the last three-year period available at the time of preparation the financial prospects (Council Regulation for Structural Funds, EC 1260/1999 of 21 June 1999). This objective also includes the outermost regions – the Canary Islands among them – as well as depopulated areas formerly included in objective 6. Most funding goes to objective 1: nearly 70% of the total Structural Funds for the period 2000-2006.

Objective 2:

Economic and social reconversion of regions with structural difficulties: In order to be eligible, these regions will have to fulfil the following requirements: a) an unemployment rate above the Community average during the last three years; b) a share of industrial employment on total employment equal or higher than the community average in a benchmark year; c) a verified decline in industrial employment from the benchmark year. Also included in this objective are low density rural areas that are losing population as well as high density urban areas with environmental or delinquency problems.

Objective 3:

adaptation and modernisation of education, training and employment policies and systems: These are funds of an horizontal nature applicable to regions outside objective 1.

As a supplement to aids allocated to cofinance regional development activities set out by national agencies, the Community can also put forward action programmes, the so-called *Community Initiatives.* There are four at the moment:

- INTERREG, which aims to stimulate cross-border, trans-national and inter-regional cooperation;
- LEADER, which promotes rural development through initiatives of local action groups;
- EQUAL, which provides for the development of new ways of combating all forms of discrimination and inequality as regards access to the labour market;
- URBAN, which encourages the economic and social regeneration of cities and suburbs in crisis.

For its part, the ***Cohesion Fund*** helps finance projects aimed at the improvement of the environment and the modernisation of infrastructures in member States whose GNP per capita is below 90% of the community average.

The member States currently benefiting from the Cohesion Fund (2000-2006), as in 1993-1999, are Spain, Portugal, Ireland and Greece. Before the end of 2003, however, these countries' right to aid will be re-examined in accordance with the updated relative per capita GNP. In this regard, it is expected that Ireland will no longer benefit from the Cohesion Fund, since its relative per capita GNP exceeds by far the limit established.

Once the main instruments of community regional policy have been described, we will go on to analyse the development of their relative weight in the EU budget during the last budgetary periods: (1989-1993), (1994-1999), and the present (2000-2006) as well as the participation of each member State. This will be done in the next section.

4. The development of the European regional policy and the participation of Spain vis-à-vis the rest of the EU countries

In order to assess the likely impact of the accession of candidate countries on the EU regional policy and also to examine the appropriateness of the various options being considered so they can be better adapted to the new reality of a Union enlarged to 25 (and even 27) members, the history of the regional policy over the last few years should be borne in mind, and more importantly, the participation of the various member States.

Although Structural Measures make up the core of the European regional policy, the policies financed by the Community Budget as a whole should have a regional scope[2] that needs to be explored as an starting point for the specific analysis of the regional policy. Besides, by incorporating the analysis of the course of Structural Measures within the framework of the set of budgetary items, we may get not only a more accurate picture of the development of their significance in relation to other policies, but also a more solid basis for assessing the feasibility and adequacy of the various options of reform.

Thus, in chart 1 we can see that, in the course of time and alongside developments that take place in the European integration process, regarding both the strengthening of ties among member States and the enlargement to include more countries, a substantial increment of resources aimed at Structural Operations is observed, accounting for more than 35% of the share of total spending. The weight of these operations, however, is substantially inferior to that of the CAP which, in spite of declining in relative significance, still absorbs the largest volume of resources: 45%.

At this point the question is which are the main beneficiary countries of these growing Structural Measures. But, before answering it, we should examine each country's net contribution to the community budget as a whole during the various periods. In order to do that, chart 2 shows the fiscal balances of each member country in relation to the community budget (as well as its components: funds contributed and funds received) expressed as a percentage of the GDP. The analysis of the data shows that most countries have a negative fiscal balance, i.e., they are net contributors to the EU budget, especially the Netherlands. On the other hand, the list of net recipients of funds is made up – with some additions in some budget years – by four cohesion countries, in particular and according to the significance of the resources received as regards to the GDP: Ireland, Greece, Portugal and Spain. Thus, at first sight it seems that the EU budget is balanced among countries. However, graph 1 shows that this is not quite so.

In fact, the graph shows each EU country according to its difference in per capita income (x-axis) and the relative per capita fiscal balances (y-axis), over the period 1989-2001, following the method proposed by De la Fuente and Doménech (2001) which stresses that there is not perfect harmony between such balances and the levels of income. In other words, there is not total horizontal equity between the Fifteen.

[2]As a matter of fact, the European Union Treaty (art. 159) lays down that community policies should contribute to cohesion.

Chart 1

Relative significance of the Structural Measures in the EU budget

(credits undertaken in millions of euro of 2002)

Budget items[1]	1989-1993		1994-1999		2000-2006	
		% s/total		% s/total		% s/total
1. Common agricultural policy	215.654	58,1	323.222	48,2	376.392	44,9
2. Structural operations	80.590	21,7	223.136	33,3	304.352	36,3
2.1. Structural funds	80.590	*21,7*	203.972	*30,4*	263.380	*31,4*
2.2. Cohesion fund			19.164	*2,9*	32.134	*3,8*
2.3. Pre-accession aids					8.838	*1,1*
3. Internal policies			39.956	6,0	57.240	6,8
4. External measures[2]	67.484	18,2	40.985	6,1	52.176	6,2
5. Administration			32.231	4,8	42.879	5,1
6. Reserves	7.583	2,0	10.752	1,6	4.862	0,6
TOTAL	**371.310**	**100,0**	**670.282**	**100,0**	**837.901**	**100,0**
Own resources ceiling (%GDP)	1,20		1,27		1,27	
Allocation for payments	1,11		1,22		1,09	

Source: the European Commission. Budget Directorate-General and AMECO

Note: (1) period 1994-1999, EU-12

Period 2000-2006, EU-15

(2) It is not possible to break up this amount because of the concepts used for subsequent periods since, in the Financial Perspectives for 1989-1993, item 3 involves multi-annual endowment policies, item 4 other policies and item 5 refunds and administration expenses.

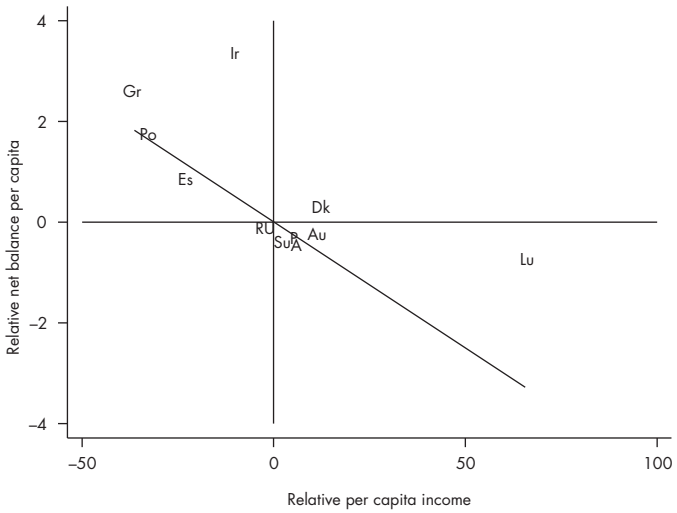
Chart 2

Payments, incomes and net balance of the EU countries in relation to the community budget

Country	Annual contribution to the community budget (%GDP)			Annual funds received from the community budget (%GDP)			Net annual budgetary balance (% GDP)		
	1989-1993	1994-1999	2000-2001	1989-1993	1994-1999	2000-2001	1989-1993	1994-1999	2000-2001
Belgium	1,3	1,4	1,4	1,0	0,9	0,7	–0,3	–0,4	–0,6
Denmark	0,9	1,0	1,0	1,2	1,0	0,8	0,3	0,0	–0,2
Germany	1,1	1,1	1,0	0,4	0,5	0,5	–0,6	–0,6	–0,5
Greece	1,0	1,1	1,1	5,3	5,1	4,5	4,3	4,0	3,4
Spain	1,0	1,0	1,0	1,6	2,2	1,9	0,5	1,2	0,9
France	1,0	1,0	1,0	0,8	0,9	0,8	–0,2	–0,1	–0,2
Ireland	1,1	1,2	1,0	6,4	4,4	2,2	5,2	3,2	1,2
Italy	0,9	0,9	0,9	0,8	0,8	0,8	–0,1	–0,2	–0,1
Luxembourg	1,1	1,2	1,0	0,6	0,7	0,5	–0,6	–0,5	–0,6
The Netherlands	1,3	1,4	1,3	1,2	0,7	0,5	–0,1	–0,8	–0,9
Austria		0,9	1,0		0,6	0,7		–0,3	–0,3
Portugal	1,1	1,2	1,1	3,4	4,0	2,6	2,3	2,8	1,5
Finland		0,8	0,9		0,7	0,9		–0,1	0,0
Sweden		0,9	1,0		0,5	0,5		–0,4	–0,6
United Kingdom	0,8	0,9	0,7	0,5	0,5	0,4	–0,3	–0,3	–0,3

Source: European Commission; the European Court of Auditors. Budget Directorate-General and Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy (Spring 2002).

Graph 1
Relative net balance and per capita income of Member States
(Average for 1989-2001)



Source: Own estimations from the Budget Directorate-General and Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy (Spring 2002) European Commission

In fact, although the correlation between the relative per capita income and the fiscal balance is inverse and significant, it shows a low value: -0.049. In addition, graph 1 shows that there are countries – such as Luxembourg (Lu), Austria (Au), Ireland (Ir) or Greece (Gr) – that have a much more beneficial per capita fiscal balance than what would correspond to them on account of their per capita income. The fact that all these countries are comparatively small suggests that this feature may have favoured their privileged situation in the reception of funds. Thus, it seems that the substantial grants received by Ireland or Greece, in relation to their GDP and their population, have been the result of their relative significance as regards to amount for large net contributing countries such as Germany (De), United Kingdom (UK), Sweden (Sw) and the Netherlands (Nl). In this regard, in the case of Spain it could be ventured that its large size has been an obstacle for the reception of funds insomuch as, although it benefits widely from the community funds in absolute terms, it is not at all so in capita terms. In fact, it receives less than it should. The rest of countries, Belgium, France, Finland and Italy are on the regression line, that is, they receive a "fair" treatment, so they have not been included in the graph.

If we also compare the differences between the real and theoretical net balances, as chart 3 shows, we can see that positive fiscal balances in Greece, and especially in Ireland, are higher than their theoretical balance, whereas, on the other hand, the funds allocated to Spain have been lesser than what would have corresponded to it. This is a very significant fact that should be underlined for it questions, as we have just seen, the mistaken belief that Spain has been especially benefited by the community budgets. Furthermore, Sweden, United Kingdom, Germany, the Netherlands and Finland, in this order, have made larger net contributions of what corresponded to them. That is why the first four countries are exerting most pressure so the accession of candidate countries does not entail an increment of the annual budget ceiling of 1.27 of the Community GNP.

In other respects, the analysis of the distribution of Structural Measures – Structural Funds and Cohesion Funds – confirms the analysis that Spain has by no means been the most benefited country. The data shown in charts 4 and 5 are quite explicit in this sense. In fact, the data on the per capita resources allocated to all countries as Structural Measures reveal that, evidently, the main beneficiaries have been the four less developed countries: Ireland (until a few years ago)

Greece, Portugal and Spain, though it is clear that our country has not received the most funds per capita.

Chart 3

Equity in the allocation of the net Community budget balances among member States

	Net annual budgetary balance (%GDP)			Net theoretical annual budgetary balance (%GDP)			Difference		
	1989-1993	1994-1999	2000-2001	1989-1993	1994-1999	2000-2001	1989-1993	1994-1999	2000-2001
Belgium	–0,3	–0,4	–0,6	–0,4	–0,6	–0,3	0,1	0,1	–0,4
Denmark	0,3	0,0	–0,2	–0,4	–0,9	–0,8	0,6	1,0	0,7
Germany	–0,6	–0,6	–0,5	–0,4	–0,4	–0,2	–0,3	–0,2	–0,3
Greece	4,3	4,0	3,4	1,6	2,7	2,2	2,7	1,3	1,2
Spain	0,5	1,2	0,9	0,8	1,5	1,0	–0,3	–0,2	–0,1
France	–0,2	–0,1	–0,2	–0,3	0,0	0,0	0,1	–0,1	–0,2
Ireland	5,2	3,3	1,2	1,0	0,0	–0,8	4,2	3,4	2,0
Italy	–0,1	–0,2	–0,1	–0,1	–0,2	–0,1	0,0	0,0	0,0
Luxembourg	–0,6	–0,5	–0,6	–1,5	–2,5	–2,4	0,9	2,0	1,8
The Netherlands	–0,1	–0,8	–0,9	–0,2	–0,6	–0,6	0,1	–0,2	–0,2
Austria	0,0	–0,3	–0,3	0,0	–0,5	–0,5	0,0	0,2	0,1
Portugal	2,3	2,8	1,5	1,8	2,2	1,7	0,6	0,7	–0,2
Finland	0,0	–0,1	0,0	0,0	0,0	–0,1	0,0	–0,1	0,1
Sweden	0,0	–0,5	–0,6	0,0	–0,1	–0,1	0,0	–0,4	–0,5
United Kingdom	–0,3	–0,3	–0,3	0,0	0,0	–0,1	–0,3	–0,3	–0,2

Source: Own estimations from the European Commission: Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy (Spring 2002) European Commission: Allocation of 2001 EU by Member State. European Court of Auditors: Annual Report.

Chart 4

Per capita Structural Funds and Cohesion Funds

In euro of 2002 per capita

	1989-1993			1994-1999			2000-2006		
	Total Structural Funds	Regions objective 1	Cohesion Fund	Total Structural Funds	Regions objective 1	Cohesion Fund	Total Structural Funds	Regions objective 1	Cohesion Fund
Belgium	102,4			244,6	85,2		233,8	71,7	
Denmark	99,0			190,0			182,1		
Germany	103,9	47,8		315,0	197,7		428,3	287,2	
Greece	954,8	872,3	32,4	1.712,8	1.582,2	899,7	2.688,3	2.264,5	330,6
Spain	433,6	310,0	26,2	1.038,8	793,1	78,5	1.634,2	1.107,7	324,5
France	131,4	19,4		296,7	43,5		302,0	73,4	
Ireland	1.598,0	1.498,8	47,7	1.983,5	1.826,2	422,8	1.200,5	932,8	217,5
Italy	238,5	177,6		447,2	307,0		605,4	451,6	
Luxembourg	235,8			287,8			235,3		
The Netherlands	64,1			199,2	11,4		239,7	9,0	
Austria				278,1	28,6		266,4	38,0	
Portugal	1.100,1	1.013,3	34,1	1.795,2	1.668,6	310,4	2.673,3	2.235,1	359,4
Finland				458,3			476,2	208,0	
Sweden				209,9			290,6	96,0	
United Kingdom	109,4	16,3		261,5	47,5		326,6	123,0	

Source: first and Second Report on the Economic and Social Cohesion (1996 and 2001), AMECO and Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy (Spring 2002) European Commission.

Chart 5

Allocation of the Cohesion Fund in all the programming periods

	Distribution of the Cohesion Fund in millions of euro of 2002			Distribution of the Cohesion Fund in relative terms (%)			Per capita Cohesion Fund (euro of 2002/inhabitant)		
	1989-1993	**1994-1999**	**2000-2006**	**1989-1993**	**1994-1999**	**2000-2006**	**1989-1993**	**1994-1999**	**2000-2006**
Greece	425	10.056	3.286	17,9	18,0	17	41,5	959,2	299,2
Spain	1.303	3.291	11.985	54,9	55,0	62	33,5	83,6	293,7
Ireland	215	1.646	773	9,1	9,0	4	61,0	450,7	196,9
Portugal	431	3.290	3.286	18,1	18,0	17	43,5	331,0	325,3
Total (1)	2.373	18.284	19.331	100	100	100	37,9	288,3	293,7

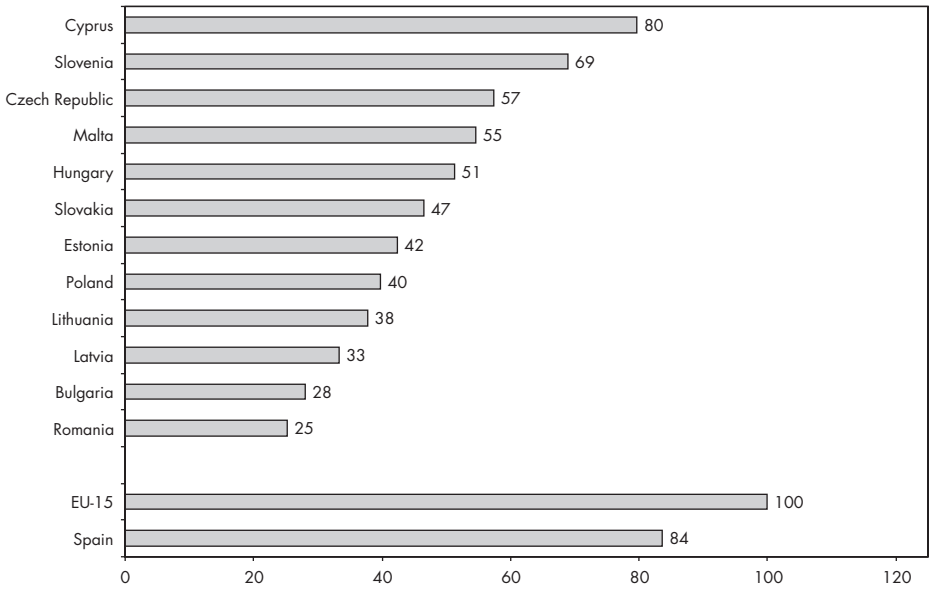
Source: European Commission. Budget Directorate-General and Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy (Spring 2002).

(1) Total per capita Cohesion Fund = Total Cohesion Fund / average population in Gr, Es, Irl, Pt.

5. Effects of the enlargement in the distribution of Structural and Cohesion Funds for 2000-2006

The EU enlargement with the accession of candidate countries may involve substantial changes in the community budget as a result of the financial situation of future member States: an agricultural sector needing reforms and with great weight on the economic activity, and a per capita income estimated in Purchasing Power Parities (PPP) – below 40% of the EU average – . In fact, as graph 2 shows, according to the latest available data, those for 2001, the acceding countries had an income level significantly lower than the average in present member States and Spain.

Graph 2
Per capita GDP of the acceding countries in Purchasing Power Parities (PPP)
Year 2001



Source: European Commission. Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy (Spring 2002).

Chart 6 also shows that, as regards to both output and, especially, employment, the weight of agriculture in most acceding countries is much more significant than in the Fifteen. However, it should be noted that there are substantial differences between the various countries: thus, Romania and Bulgaria are the most extreme cases, where agricultural activity has a key significance, whereas in some candidate countries, such as the Czech Republic or Hungary, this activity has quite similar levels to those of the EU-15. Even so, the average pattern of the ten countries that will accede to the EU in 2004 suggests that this countries will exert significant pressure on community funds allocated to the CAP, especially Poland.

Chart 6

Participation of the Gross Value Added (GVA) and Farm Employment on the Total

Year 2001

	GVA (%)	Farm Employment (%)
Bulgaria	13,6	26,7
Cyprus	3,9	4,9
Slovenia	3,1	9,9
Estonia	5,8	7,1
Hungary	4,3	6,1
Latvia	4,7	15,1
Lithuania	7,0	16,5
Malta	2,4	2,2
Poland	3,4	19,2
Czech Republic	4,2	4,6
Slovakia	4,6	6,3
Romania	14,6	44,4
EU-15	3,2	6,4
Spain	2,0	4,3

Source: European Commission: Regular Reports (2000); AMECO, INE; EUROSTAT.

In short, with the above date we can infer that the enlargement's most significant budgetary implications will focus on two items: the common agricultural policy (CAP) and the regional policy, implemented from the Structural and the Cohesion Funds.

The European Commission submitted in July 1997 the document *Agenda 2000*, where two issues of special significance for the future of the EU were addressed: the financial framework for the period 2000-2006 and the enlargement[3].Such framework was accepted at the Berlin Summit of 1999 without substantial changes. There, the limit of the community budget was set at 1.27% of the Community's GNP, the same ratio, therefore, as in the previous financial perspectives for 1999.

The distribution of expenditure among the various community policies devised at the *Berlin Summit* for the period 2000-2006 allocated most community funds to EAGGF-Guarantee and Structural Measures: over 80% of the total. In addition, it laid down a gradual increment of financing of candidate countries, whose accession was then foreseen for 2002 and included the six countries that it was thought would become the first wave of new member States (Poland, Hungary, Czech Republic, Slovenia, Estonia and Cyprus). Finally, the creation of two new pre-accession instruments was agreed: SAPARD (Special Accession Programme for Agriculture and Rural Development) and ISPA (Instrument for Structural Policies for Pre-accession).

However, due to the delay regarding the incorporation date of the new members until 2004 and to the fact that the enlargement might include ten members (all except Bulgaria and Romania), the budgetary framework approved in Berlin has had to be adjusted. This adjustment took place at the Brussels Summit of 24-25 October 2002, where in addition to establishing a timetable for the enlargement, some changes regarding budget allocations for the final years, from 2004 to 2006 of the period in force were introduced, keeping, however, the ceiling of total expenses agreed in Berlin, whereas some agreements with a view to the next financial year were pushed forward.

[3]The European Commission made this proposal under the Interinstitutional Agreement that defines the process established to set the EU's budget policy, submitting it subsequently, in March 1998, to the Council and Parliament for discussion and endorsement.

In particular, the EU will use funds that are expected to be saved from the years 2002 and 2003 in relation to the financial perspectives adopted in Berlin, when the enlargement was scheduled for 2002, to finance the enlargement to ten members instead of the six as it had been established in Berlin. Furthermore, the process of gradual participation of the new members in the CAP direct aids should be highlighted: 25% in 2004, an increment of five percentage points until reaching 40% in 2007, and 10% increments from that date on to reach, in 2013, the same level of aid as in the member States; as well as the adoption of a quota for CAP expenditure until 2013 equal to the expenditure for the year 2006 with a 1% maximum annual increment in nominal terms. Finally, as regards to Structural Measures, a total of 23,000 million euro will go to the enlargement, and it is estimated that a third of the funds should be allocated to the Cohesion Fund.

Chart 6 has been devised taking into account the technical adjustments of the financial perspectives carried out with the adoption of the community budget for 2002, and the decisions of the *Brussels Summit* and the *Council of Copenhagen*, in order to show the final budget for the period 2000-2006. The chart also shows a breakdown of the allocations for present and future members. Thus, it is easy to see how from 2004, the year for the accession of the new members, these will absorb an increasing share of the community budget expenditures until 2006, when they will receive 14% of the total payment credits. Of these, the largest share goes to Structural Measures. Obviously, given that the budget ceiling is already set, the gradual increase in the participation of the new members brings about a gradual reduction of the participation of the Fifteen. In this respect, it should be noted that, within the Fifteen, the most affected countries are those that, on account of their lower level of economic development, are the main beneficiaries of the regional policy implemented through Structural Measures.

This is why the unfairness of this type of system of enlargement funding has been criticised, and quite rightly, for in the end the cost of solidarity with the new members goes mainly to those present EU members that, due to their lower level of income, most need aids coming from the regional policy. Therefore, although the governments of net contributing member States have not been very receptive to these criticisms, the Commission has indeed taken them up and will consider them when the future financial perspectives for the community budget 2007-2013 are drawn up. In fact, in the Second Cohesion Report, the Commission already advanced some proposals aimed at facing the "statistical effect" problem in the allocation of Structural Measures, which will be seen in the next section, once the meaning and implications of such effect have been assessed.

Chart 7

Structure of community expenditures in accordance with the financial perspectives for 2000-2006

(% on total expenditures)

	Financial Perspectives (1994-1999)*		Berlin Summit (EU-15)**			Brussels and Copenhagen Summits (EU-25)***		
	1999	2000	2001	2002	2003	2004	2005	2006
Agricultural guideline	43,7	45,1	46,4	46,8	46,9	43,8	44,0	43,5
Present member States	43,7	44,5	45,8	46,3	46,4	41,4	39,9	39,1
Acceding countries	0,0	0,0	0,0	0,0	0,0	1,8	3,6	3,9
Pre-accession aid	0,0	0,6	0,6	0,6	0,6	0,5	0,5	0,5
Structural Operations	37,7	36,0	34,8	34,5	34,4	37,0	36,9	37,5
Present member States	37,7	34,8	33,7	33,4	33,2	30,1	29,4	28,2
Structural Funds	34,8	32,0	30,9	30,6	30,5	27,7	27,0	25,9
Cohesion Funds	2,9	2,8	2,8	2,8	2,8	2,4	2,4	2,4
Acceding countries	0,0	0,0	0,0	0,0	0,0	5,9	6,6	8,3
Pre-accession aid	0,0	1,1	1,1	1,1	1,1	1,0	1,0	1,0
Internal policies	6,2	6,4	6,5	6,5	6,7	7,6	7,5	7,5
Present member States	6,2	6,4	6,5	6,5	6,7	6,2	6,2	6,2
Acceding countries	0,0	0,0	0,0	0,0	0,0	1,4	1,3	1,3
External measures	6,6	6,6	6,5	6,5	6,5	6,0	5,9	5,8
Pre-accession aid		1,7	1,7	1,7	1,7		1,5	1,5
Other		4,9	4,9	4,8	4,9		4,5	4,4
Administration	4,6	4,9	4,9	5,0	5,1	5,3	5,3	5,4
Present member States	4,6	4,9	4,9	5,0	5,1	4,8	4,8	4,8
Acceding countries	0,0	0,0	0,0	0,0	0,0	0,5	0,5	0,6
Reserves	1,2	1,0	0,9	0,7	0,4	0,4	0,4	0,4
Total commitment credits	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Present member States	92,2	90,7	90,9	91,2	91,4	82,5	80,2	78,4
Acceding countries	0,0	0,0	0,0	0,0	0,0	9,6	12,0	14,0
Pre-accession aid	0,0	3,4	3,3	3,3	3,3	3,0	3,0	2,9
Non-imputable	7,8	5,9	5,8	5,5	5,3	4,9	4,8	4,7
Total payment credits	93,2	97,4	97,5	99,4	100,6	94,6	95,9	95,3
Payment credits (%GNP)	1,23	1,12	1,11	1,09	1,07	1,08	1,09	1,06
Own resources ceiling (%GNP)	1,27	1,27	1,27	1,27	1,27	1,27	1,27	1,27

(*) In the year 1999, the Structural Funds include an amount for the financial instrument of the European Economic Space (EES), as well as a budget adjustment for 1997.

(**) The financial perspectives for 2002 and 2003 set at the Berlin Summit have been changed taking into account both that the accession will begin in 2004 (two years later than foreseen at that European Council), and the technical adjustments carried out when adapting the community budget for 2002.

(***) This distribution takes into account both the changes in the final SEC (2002) 102 once that 2004 was set as the year for the incorporation of candidate countries, and the Conclusions of the Presidency at the European Council of Brussels and the European Council of Copenhagen.

Source: Conclusions of the Presidency, European Council of Copenhagen (12 –13 December, 2002); Conclusions of the Presidency, European Council of Brussels (24-25 October, 2002); Conclusions of the Presidency, European Council of Berlin (24-25 March, 2002); European Commission: SEC (2002) 102 and the European Economy Group.

6. The consequences of the enlargement for the Structural Measures of the future budget (2007-2013) and reform proposals

The accession of the candidate countries, whose average per capita income is still far behind the EU-15 average, would involve an increment of the relative per capita GDP and GNP in present member States and their regions that would exceed, in some instances, the limits set in the objective 1[4] and the Cohesion Fund, 75% and 90%, respectively. Chart 8 shows the impact this "statistical effect" of the enlargement would have on the reception of funds in present member States, among them Spain. The chart points up how in the EU-25, and especially in the EU-27, Spain's per capita income, and that of the rest of the EU-15, in relation to the Union's average would undergo an artificial increase – purely statistical – insomuch as the accession of poorer members would bring about a reduction of such average. Thus, unless the criteria for the allocation of the Cohesion Fund are changed, Spain would lose the Cohesion Fund as a result of the fictitious enrichment involved in this "statistical effect".

Chart 8

The "statistical effect" of the enlargement on the per capita income of the Fifteen

	Per capita income in Purchasing Power Parities*		
	EU15=100 (1999-2001)	EU25=100 (1999-2001)	EU27=100 (1999-2001)
Belgium	106,5	117,2	122,8
Denmark	120,5	132,6	139,0
Germany	105,3	115,9	121,4
Greece	68,6	75,5	79,2
Spain	82,8	91,2	95,5
France	99,4	109,4	114,6
Ireland	117,5	129,3	135,5
Italy	102,8	113,1	118,5
Luxembourg	193,3	212,8	222,9
The Netherlands	114,8	126,3	132,4
Austria	110,6	121,8	127,6
Portugal	73,6	81,0	84,8
Finland	102,0	112,3	117,6
Sweden	101,5	111,7	117,0
United Kingdom	101,6	111,8	117,1
EU-15	**100,0**	**110,0**	**115,3**

* The EU-15 is made up of the present member States of the European Union. The EU-25 includes the present member States plus the ten countries that will most likely accede in 2004: Cyprus, Czech Republic, Hungary, Lithuania, Latvia, Malta, Poland, Estonia, Slovenia and Slovakia. The EU-27 are the EU-25 plus the two countries that may accede in the next financial perspectives (2007-2013): Bulgaria and Romania.
Source: the European Commission: Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy, Spring 2002.

[4]It should be borne in mind that objective 1 also includes the outermost regions – French overseas territories, Madeira and the Canary Islands – as well as low density regions in Finland and Sweden that benefited from the former objective 6 during the period 1995-1999.

Furthermore, Chart 9 shows this "statistical effect" at a regional level, where a projection of the average per capita income for 2001-2003 in each EU region is provided, following the process explained in ***box 1***[5]. Chart 9 has been developed on the basis of such simulation – whose total outcome for all the regions can be seen in the Annex – and it shows the regions that would exceed the limit set for objective 1 (75% of the community per capita income) according to the three following scenarios: a) that the enlargement did not take place; b) that the candidate countries, with the exception of Bulgaria and Romania, acceded to the Union, EU-25 and , c) that also these two countries became member States before the distribution of the next financial perspectives (2007-2013) are laid down, EU-27.

Box 1

In order to have the projection of the EU relative regional per capita income, we have used the data on relative per capita income for 1999, provided in the statistical annex of the First Intermediate Report on Economic and Social Cohesion (European commission, 2002. The same source also provides the data on the per capita income (for each region and member State)for 1995-1999. Thus, we obtain each region's relative growth in relation to the country it belongs to for the period 1995-1999.

We also have the relative per capita income for current member States in 2000 and 2001, as well as estimations for 2002 and 2003 carried out by the European Commission (Directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy, Spring 2002).On the assumption that the relative growth of the regions in relation to the countries they belong to over the period 1995-1999 remain steady, their relative per capita income for the years 2001-2003 is projected. Finally, the average for these three years is estimated.

It should be borne in mind that the projection is carried out from each region's relative growth in relation to the country it belongs to, and of each country in relation to the EU, so it is not affected by shocks common to all member States. Also, the inclusion of candidate countries in the projections provides a more realistic assessment of the likely relative per capita income of present community partners in 2001-2003, for these countries have higher economic growth rates than the EU-15, reducing partly the "statistical effect".

Thus, the first block in chart 9 shows in detail the 56 EU regions that benefit from objective 1 during the current financial perspectives (2000-2006). Regions that receive transitory support, such as Cantabria, have been excluded. Greece is the only country that benefits as a whole from objective 1. In addition, Portugal has almost two thirds of its population in regions included in objective 1, its whole territory with the exception of Lisbon.

The second block indicates those regions that because of their own dynamics, and not on account of the enlargement, are above 75% of the community per capita income. In fact, the European regions that benefit from objective 1 have reduced the differences in per capita income in relation to the community average for the period 1994-1999.

[5]The average for 2001-2003 has been chosen for it is likely that it may be used as a criterion to decide the regions that will benefit from objective 1, if the guidelines of former financial perspectives are followed. In fact, to make the list of regions that would benefit from these funds during 2000-2006, the average for the triennium 1994-1996 was used.

[6]In this regard, see the Second Report on Economic and Social Cohesion and the First Intermediate Inform on Economic and social Cohesion (European Commission, 2001 and 2002, respectively).

Indeed, the regions that have benefited from objective 1 during these years, have increased their relative per capita income from 68% to 71%, and especially those regions that also received funds during the period 1989-1993, whose community per capita income went from 63% to 71%[6].

Chart 9

Simulation of the impact of the "statistical effect" on objective 1 regions as regards to the likely scenarios of EU enlargement for the financial perspectives 2007-2013

Objective 1 (2000-2006)		Without enlargement (2007-2013)		EU-25 enlargement (2007-2013)		EU-27 enlargement (2007-2013)	
Alemania (5)	*Irlanda (1)*	*Alemania (5)*	*Irlanda (0)*	*Alemania (1)*	*Irlanda (0)*	*Alemania (0)*	*Irlanda (0)*
Brandenburg	Border, Midland and Western	Brandenburg	Border, Midland, Western √	Brandenburg √	Border, Midland, Western √	Brandenburg √	Border, Midland, Western √
Mecklenburg-Vorpommern		Mecklenburg-Vorpommern		Mecklenburg-Vorpommern √		Mecklenburg-Vorpommern √	
Sachsen		Sachsen		Sachsen √		Sachsen √	
Sachsen-Anhalt	*Italia (6)*	Sachsen-Anhalt	*Italia (4)*	Sachsen-Anhalt	*Italia (4)*	Sachsen-Anhalt √	*Italia (1)*
Thüringen	Campania	Thüringen	Campania	Thüringen √	Campania	Thüringen √	Campania √
	Puglia		Puglia		Puglia		Puglia √
Grecia (13)	Basilicata	*Grecia (10)*	Basilicata √	*Grecia (6)*	Basilicata √	*Grecia (6)*	Basilicata √
Anatoliki Makedonia, Thraki	Calabria	Anatoliki Makedonia, Thraki	Calabria	Anatoliki Makedonia, Thraki	Calabria	Anatoliki Makedonia, Thraki	Calabria
Kentriki Makedonia	Sicilia	Kentriki Makedonia	Sicilia	Kentriki Makedonia √	Sicilia	Kentriki Makedonia √	Sicilia √
Dytiki Makedonia	Sardegna	Dytiki Makedonia	Sardegna √	Dytiki Makedonia √	Sardegna √	Dytiki Makedonia √	Sardegna √
Thessalia		Thessalia		Thessalia		Thessalia	
Ipeiros	*Austria (1)*	Ipeiros	*Austria (1)*	Ipeiros	*Austria (0)*	Ipeiros	*Austria (0)*
Ionia Nisia	Burgenland	Ionia Nisia	Burgenland	Ionia Nisia	Burgenland √	Ionia Nisia	Burgenland √
Dytiki Ellada		Dytiki Ellada		Dytiki Ellada		Dytiki Ellada	
Sterea Ellada	*Portugal (6)*	Sterea Ellada √	*Portugal (6)*	Sterea Ellada √	*Portugal (4)*	Sterea Ellada √	*Portugal (4)*
Peloponnisos	Norte	Peloponnisos	Norte	Peloponnisos	Norte	Peloponnisos	Norte
Attiki	Centro	Attiki √	Centro	Attiki √	Centro	Attiki √	Centro
Voreio Aigaio	Alentejo	Voreio Aigaio	Alentejo	Voreio Aigaio √	Alentejo	Voreio Aigaio √	Alentejo
Notio Aigaio	Algarve	Notio Aigaio √	Algarve	Notio Aigaio √	Algarve √	Notio Aigaio √	Algarve √
Kriti	Açores	Kriti	Açores	Kriti √	Açores	Kriti √	Açores
	Madeira		Madeira		Madeira √		Madeira √
España (10)		*España (7)*		*España (5)*		*España (2)*	
Galicia	*Finlandia (3)*	Galicia	*Finlandia (1)*	Galicia	*Finlandia (0)*	Galicia √	*Finlandia (0)*
Principado de Asturias	Itä-Suomi	Principado de Asturias	Itä-Suomi	Principado de Asturias √	Itä-Suomi √	Principado de Asturias √	Itä-Suomi √
Castilla y León	Väli-Suomi	Castilla y León √	Väli-Suomi √	Castilla y León √	Väli-Suomi √	Castilla y León √	Väli-Suomi √
Castilla-la Mancha	Etelä-Suomi	Castilla-la Mancha	Etelä-Suomi √	Castilla-la Mancha	Etelä-Suomi √	Castilla-la Mancha √	Etelä-Suomi √
Extremadura		Extremadura		Extremadura		Extremadura	
Comunidad Valenciana		Comunidad Valenciana √		Comunidad Valenciana √		Comunidad Valenciana √	
Andalucia	*Suecia (3)*	Andalucia	*Suecia (0)*	Andalucia	*Suecia (0)*	Andalucia	*Suecia (0)*
Murcia	Norra Mellansverige	Murcia	Norra Mellansverige √	Murcia √	Norra Mellansverige √	Murcia √	Norra Mellansverige √
Ceuta y Melilla	Mellersta Norrland	Ceuta y Melilla	Mellersta Norrland √	Ceuta y Melilla	Mellersta Norrland √	Ceuta y Melilla √	Mellersta Norrland √
Canarias	Övre Norrland	Canarias √	Övre Norrland √	Canarias √	Övre Norrland √	Canarias √	Övre Norrland √
Francia (4)	Reino Unido (4)	*Francia (4)*	Reino Unido (3)	*Francia (4)*	Reino Unido (1)	*Francia (4)*	Reino Unido (0)
Guadeloupe	Merseyside	Guadeloupe	Merseyside	Guadeloupe	Merseyside √	Guadeloupe	Merseyside √
Martinique	South Yorkshire	Martinique	South Yorkshire √	Martinique	South Yorkshire √	Martinique	South Yorkshire √
French Guiana	Cornwall and Isles of Scilly	French Guiana	Cornwall and Isles of Scilly	French Guiana	Cornwall and Isles of Scilly	French Guiana	Cornwall, Isles of Scilly √
Reunion	West Wales and The Valleys	Reunion	West Wales and The Valleys	Reunion	West Wales, The Valleys √	Reunion	West Wales, The Valleys √
Total 56		Total* 41		Total* 25		Total* 17	

* 1The regions that would be excluded in each scenario are marked. The Canary Islands would benefit from objective 1 for being an outermost region, and the regions in Finland and Sweden for their low density (former objective 6 for the period 1994-1999). That is why they can continue benefiting from objective 1 even when their average income is above 75%. Furthermore, Hainao (Belgium) would be included in objective 1 without the enlargement on account of a crisis the region has undergone in the last few years resulting in an average income below 75%.

Source: Own estimations from the European Commission: Statistical Annex of the First Intermediate Report on Economic and Social Cohesion, 2002 and directorate General ECFIN, Economic and Financial Affairs: Statistical Annex of European Economy, Spring 2002.

Therefore, 15 community regions might be excluded because of their own growth pattern, higher than the EU average, among them Castilla y León and Comunidad Valenciana. The Canary Islands would also be above the 75% limit, though they would continue benefiting from objective 1 for being an outermost region. Something similar would happen with the regions in Sweden and Finland which would benefit on account of their low density. Ireland, on the other hand, would also lose its second and last region included in objective 1.

We can see in the third block that sixteen further regions might be excluded from objective 1 as a result of the EU enlargement. In the case of Spain, however, only Murcia (75.7%) and Principado de Asturias (78.6%) would be excluded. Regions such as Galicia, Castilla-La Mancha, Ceuta and Melilla would continue benefiting from objective 1 with the EU-25 enlargement. These regions would benefit from the fulfilment of the Commission's forecasts which indicate that the largest growth rates in the candidate countries during the period 1995-2001 will continue at least until 2003. In this way, the "statistical effect" would decrease from 16.5% in the period 1997-1999 to 10.0% in 2001-2003 (see Annex). Spain would come off worse in the last scenario, if the accession included Bulgaria and Romania, for three further regions would not benefit from objective 1, i.e. only Andalucia and Extremadura would continue benefiting from it. However, Galicia (76.0%), Ceuta and Melilla (75.3%) would be very close from the limit that determines their eligibility.

Once we have an idea of the likely changes in the list of regions that benefit from the funds aimed at objective 1, in accordance with the various scenarios of enlargement, it is interesting to estimate the cost of these aid reduction scenarios for each country. In order to do that, data on the distribution of Structural Funds for the period 1994-1999 (Annual Report on Structural Funds, European commission, General Directorate for Regional Policy), and the indicative budget allocation for 2000-2006 (Ministry of Economy and Finance, Community Support Framework) has been used. For further details on the method of cost estimation see ***box 2.***The results of the new calculation are shown in Chart 10.

Chart 10

Estimated cost of the enlargement in relation to objective 1 measures

	(millions of euro 2002)			(%GDP)			(euro per capita)		
	EU-15	EU-25	EU-27	EU-15	EU-25	EU-27	EU-15	EU-25	EU-27
Belgium	0	663	663	0	0,04	0,04	0	65	65
Denmark	0	0	0	0	0	0	0	0	0
Germany	0	15.269	18.650	0	0,11	0,14	0	186	227
Greece	6.277	13.079	13.079	0,70	1,46	1,46	595	1.241	1.241
Spain	12.096	16.153	21.292	0,28	0,37	0,49	306	409	539
France	0	0	0	0	0	0	0	0	0
Ireland	1.395	1.395	1.395	0,17	0,17	0,17	368	368	368
Italy	5.370	5.370	11.327	0,07	0,07	0,14	94	94	198
Luxembourg	0	0	0	0	0	0	0	0	0
The Netherlands	0	0	0	0	0	0	0	0	0
Austria	0	277	277	0	0,02	0,02	0	34	34
Portugal	0	3.069	3.069	0	0,38	0,38	0	307	307
Finland	0	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0	0
United Kingdom	0	1.832	1.832	0	0,02	0,02	0	31	31

Source: Own estimations from the European Commission: Second Report on Cohesion; European Commission: Annual Report on Structural Funds and Ministry of Economy and Finance: Community Support Framework.

Box 2

In order to be able to make an approach to the allocation of Structural Funds in regions included in objective 1 for the period 2007-2013, we have used data published by the General Directorate for Regional Policy in the Annual Reports on Structural Funds. The last report belongs to the year 2002 and reflects the allocation of funds for each objective among EU regions for the period 1994-1999. Note that objective 1 is allocated to regions but its management falls partly on the Autonomous Governments and partly on the Central Government of each member State. Both payments are regionalised in the statistical annex of the said Report, though it is not possible to know which region benefits from all the funds managed by the Central Government, either because of its multiregional nature or because of the difficulty of imputing them. Such source provides information on both funds already executed (payment credits)and the total of funds scheduled funds (commitment credits). We will use here information regarding commitment credits for it provides a more reliable picture of the true allocation of objective 1, regardless the rate of its execution.

For the Spanish regions we have also used the objective 1 indicative distribution for the period 2000-2006 included in the Community Support Framework (Plan for Regional Development, regions included in Objective 1of the European Structural Funds, Volume I, II and III, Ministry of Finance).

From these data we have made the estimation on the assumption that the allocation of aids among regions in the period 1994-1999 will remain stable among those regions that continue benefiting from objective 1 during 2000-2006. This assumption – which is not needed for Spain insomuch as we have more data available – seems quite realistic since the criteria for the allocation of funds among countries included in objective 1(also used by countries for their subsequent allocation among regions)are basically structural. In fact, such criteria included in art. 8 of the Regulation for Structural Funds are the following: population of regions that are entitled to obtain funds, regional and national prosperity and relative seriousness of the structural problems, especially the unemployment rate. In addition, these criteria are very similar to those used in the former period, so the next periods may not differ substantially. In fact, the allocation of funds by countries coming from objective 1for the period 2000-2006 is very similar to the one for the period 1994-1999 (which can be found in the First Cohesion Report, European Commission, 1996).

Thus, a substraction of the percentage absorbed during the period 1994-1999 has been made to the amount allocated to each country by objective 1 for the period 2000-2006 in regions: a) whose average per capita income is above 75% even without the enlargement, in accordance with the annex forecasts; b) that would be above that limit if the enlargement to the ten candidate countries took place and c)that would be above that limit even with the accession of Romania and Bulgaria. The proportional share of multiregional funds of regions that were left out from objective 1 has also been deducted to the remaining amount. Finally, the funds have been updated with the EU price index in 2000 and 2001, insomuch as the indicative allocation of objective 1 by countries was in thousands of millions of euro of 1999.

Chart 10 shows the cost of each scenario in each member State, assuming that the total amount of objective 1 to be distributed in the period 2000-2006 among present member States is the same as the one that would be distributed in 2007-2013.

Note, however, that this cost will be the upper limit since the Commission is likely to find transitional support for regions that have been left out from objective 1.

The analysis of chart 10 shows that Spain, as a result of the growth rate of its regions, might lose a large share of objective 1 funds. In particular, the proportion of funds that it would stop receiving would be about 0.28% of its GDP annually. The enlargement to the ten candidate countries would further decrease that amount, by almost 0.09% a year, so the annual loss of support for the Spanish regions would amount to 0.37% of the GDP. The loss of funds would also be very substantial for Greece and Portugal.

The costs of the enlargement in terms of aids from objective 1 would be much higher in the case of an enlargement to 27 countries, especially for Spain, Italy and Germany, in this order. So, obviously, these three countries have reasons for not wanting the accession of Bulgaria and Romania when the next financial perspectives are determined. However, for the Netherlands, Austria and Sweden – the three countries that together with Germany want to reduce their community bill – the future of objective 1 does not affect them much. As a result, it is expected that these countries may want to see the cost of the enlargement fall on objective 1, which has a regional nature. In fact, the Dutch Government has already put forward its intention to reform the Structural Measures to transform them into national aids, as is the case for the Cohesion Fund and the objective 3 of the Structural Funds. France and Denmark wouldn't be affected either by the future of objective 1. The four French outermost regions would continue benefiting from these aids any way, so it is not surprising that these countries support the financing of the enlargement by means of a reduction of the Structural Measures in present member States rather than through adjustments in the CAP, from which they derive substantial benefits.

In response to the concern shown by member States on the serious implications of the enlargement for the regional policy, and in order to come up a more satisfactory solution to the next budget period 2007-2013 than the application of current criteria for the distribution of funds, the Commission brought up a series of regional policy reform proposals in its Second Report on Economic and Social Cohesion (see EC, 2001 and the First Progress Report on Economic and Social Cohesion COM, 2002).

As regards to the "statistical effect", these proposals try to prevent many of these regions from no longer being eligible to the allocation of Structural Funds either in the EU-25 or in the EU-27. As a result, and though they mention the application of the present threshold of 75% regardless the number of acceding countries –which means no correction whatsoever to the "statistical effect" problem – they favour one the three following options:

a) Establishing a transitional assistance mechanism (phasing-out) for regions with a per capita income at the end of the current financial perspectives below 75% of the EU-15 average without the enlargement, but that would exceed that limit in an enlarged EU.
b) Raising the eligibility criteria to a level equivalent to what would be needed to prevent EU-15 regions from being excluded from objective 1 by a mere statistical effect of reduction of their differential in relation to the per capita income in an enlarged EU.
c) Establishing two eligibility criteria, one for EU-15 regions and another for future member States.

We think, therefore, that, because of its lack of rationality and, especially, of solidarity, the option of keeping the current criteria should be ruled out – something the Commission has basically done already, though some of the more developed countries in the EU-15 that are net contributors to the community budgets still stick to them. It should be stressed, then, that keeping these criteria would mean not correcting the "statistical effect" and, therefore, exercising solidarity with the new members at the cost, basically, of the less prosperous countries.

Within the three options considered by the Commission the first one seems the most suitable, on account of its more functional character. In fact, the Commission has shown its preference for it.

But, obviously, these are not the only options and, at least from a technical point of view, it may be argued that there are better ones. In particular, a possible way of preventing the reduction of aids coming from Structural Measures in the EU-15 as a result of the accession of new members without altering the budget ceiling would be to cut substantially funds allocated to other items, especially those aimed at the largest one: the CAP. In fact, as we know, the CAP finances three types of measures:

a) Direct aids: grants aimed at farmers and stock-farmers as compensatory payments for the reduction of support prices agreed in the MacSharry reform of 1992, in order to stabilise farm earnings. This is the most significant item, absorbing nearly 65% of the CAP expenditures.
b) Market intervention: support measures for farm prices that include storage expenses and export subsidies. It accounts for about 25% of the CAP expenditures.
c) Rural development: its aim is to carry out structural changes and the modernisation of the European agriculture through the diversification of activities and sources of revenue, the improvement of competitiveness, and the preservation of the environment and the rural setting. At present, it only accounts for 10% of the CAP funds.

Thus, there are many reasons, both from an efficiency and a fairness viewpoint, that would support the advisability of undertaking a reduction of the funds allocated to the first two measures. In this regard, it suffices to list the most repeated criticism to the CAP direct aids and market interventions during its long period of existence. In short, as regards to efficiency, there is wide evidence that the CAP has the following problems:

- It brings about a trade deflection effect that raises the price of products for EU consumers
- It interferes with the adjustment of inefficient farms that would not exist in the absence of protection and subsidies and, as a result, becomes an impediment for growth
- Its complexity may bring about corruption
- It does not promote product quality, insomuch as aids reward quantity
- It does not fight environmental degradation

From the fairness point of view, the CAP can also be criticised for at least two:

- Aids benefit mainly the owners of the largest farms who normally have higher income levels, insomuch as aids via prices or income are normally established by taking as a reference the average levels of efficiency
- The high levels of protection involved affect developing countries for they restrain their exports

If to the reasons that would endorse the advisability of reforming and reducing the funds allocated to the CAP we, on the contrary, add the causes that enable to advocate the permanence of a cohesion policy for present and future EU member States, the economic rationality of reallocating resources from CAP direct aids and its market intervention policies towards Structural Measures or rural development measures may be argued. Thus, a more efficient and fair allocation could be achieved without altering the agreed ceiling for the community budget.

Of course, this solution, that would obviously involve a correction of the above mentioned "statistical effect", has difficulties of a political nature to be implemented, given the significance of lobbies that want the CAP as it is, and also the differences of interests existing among member States for one policy or the other.

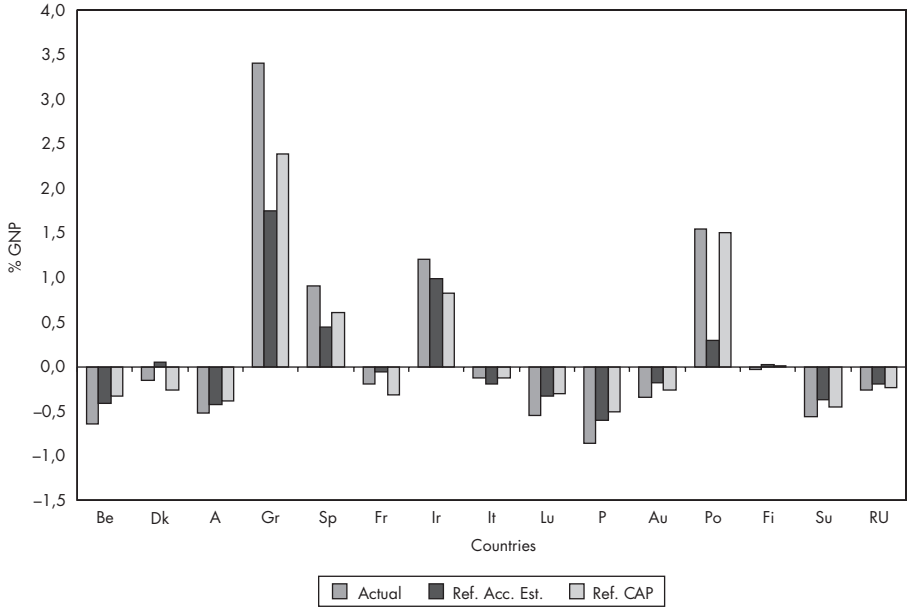
In this regard, to assess this "conflict of interests" it may be useful to carry out a simulation exercise to see the extent to which the reform of the CAP or of the Structural Measures affects each member State. The results of this exercise are shown intuitively in graph 2. To interpret it, note that each country has three bars which mean the following: the first one indicates the *status quo:* the real net balance in their financial relations with the EU reached by each country as an average in the years 2000 and 2001. The second bar shows the average net balance (%GDP) that would have been reached in the years 2000 and 2001 – the periods of the current financial perspectives already terminated – should the funds of a regional nature from Structural Measures disappear, remaining only those of a national nature: the objective 3 and the Cohesion Fund. Assuming, also, that the savings would revert in a proportional reduction of the contribution of all EU countries to the community budget, and that the rest of the items of expenditure and their allocation remained invariable. The third bar indicates the net balance that would have resulted in another extreme case, the disappearance of CAP direct aids on the same assumptions as in the previous scenario. Note that the reform proposals and the CAP expenditure contention included in the Intermediate Review of the CAP and submitted by the Commission makes reference, precisely, to direct aids.

Bearing the foregoing in mind, the interpretation of the graph with the results of the simulation exercise is the following: In the case of countries that had a positive balance in their financial relations with the EU in 2000 and 2001 (those whose first bar is above the x-axis, i.e. Greece, Ireland, Portugal and Spain) the first bar is higher than those indicating the effects of the reforms on the CAP and the Structural Measures. That is, any of the reforms considered would reduce the net funds that these countries receive from the community budget. However, the implications of both options are not indifferent for them. In fact, for Greece, Spain and, especially, Portugal, the bar showing the implications of the elimination of CAP direct aids is higher than the one showing the net balances following a likely reduction of funds of a regional nature of the Structural Measures. These three countries, therefore, would be less affected if the curb on community spending fell on the CAP. On the other hand, Ireland would be more favoured by a reduction of funds allocated to Structural Measures. Note that, although this country has historically benefited the most from this type of aids in relation to its GDP and its population, its recent development has left its most populated region outside objective 1, and it may also lose the Cohesion Fund after this is reviewed in 2003.

In the countries with negative balances, however, the bar indicating the real balance is farther away from the x-axis than those related to likely reforms. In fact, as many as eight countries (Belgium, Germany, Luxembourg, the Netherlands, Austria, Sweden and United Kingdom) would reduce their net contributions to the community budget with either of the reforms. We must add Finland to those countries, which could even reach positive fiscal balances with the EU if direct aids or Structural Measures of a regional nature were eliminated. Three out of these eight countries (Austria, Sweden and United Kingdom) would further reduce their negative balances if the reform had a more substantial impact on the Structural Measures, whereas the rest would mostly benefit from a reduction of CAP funds. Finally, France and Denmark would be able to increase their negative balances if the reform fell on the CAP, whereas the same would happen to Italy if the Structural Measures were reformed.

In short, taking into account the member States as a whole, both those with a positive balance and those with a negative one, the results of the simulation exercise – shown in graph 3 – that we have just analysed, enable us to get an idea of the complex conflict of interests that might arise in the discussions regarding the next financial perspectives. This exercise also throws light on the difficulty to reach an agreement on the seemingly best solution, from the standpoint of economic rationality, both in efficiency and fairness terms, to face the regional policy in an enlarged EU with a budget ceiling of 1.27%: reduce CAP direct aids and allocate them to Structural Measures.

Graph 3
Simulation of the net balance of the member States (%GDP) for various scenarios of community budget allocation in 2000 and 2001



Source: Own estimations from the European Commission: Allocation of 2001 EU operating expenditure by member State.

Therefore, in spite of the political complexity involved in this solution, we expect that the efficiency and fairness criteria will prevail and, as a result, the next budget for 2007-2013 will follow these lines of reform. Fortunately, the conclusions reached at the Council of Brussels give some grounds for confidence this may be so. In fact, as we noted in the previous section, this Council decided some measure of constraint for the CAP, in particular: the limitation of the nominal growth of funds aimed at the CAP to 1% for the period 2007-2013 and the establishment of gradual scale of participation of the new partners in direct aid allocation, until they match the aid allocated to present member States in terms of percentage, which means that if aids to the EU-15 were reduced, the same would happen to aids aimed at the new members.

In any case, from a technical point of view, we may discuss the suitability of a proposal of financial perspectives for the period 2007-2013 that, in accordance with the conclusions reached at the European Council of Brussels on the CAP, reduces its funds aimed at direct aids in favour of Structural Measures and other EU policies. The simulation of this proposal is shown in chart 11 and explained in detail in box 3. In fact, as we can see, with this reallocation of funds the community budget could include the new partners, even Bulgaria and Romania, without increasing the maximum ceiling of own resources and without affecting present member States such as Greece, Portugal and Spain that still need Structural Measures for their development. In order to do that, we would need first that payment credits - expenditures really executed in each year – increased gradually until reaching the maximum ceiling of current own resources, set at 1.27% of the EU GNP. It should be borne in mind that this limit has not been reached. Thus, in 2000 and 2001 the total contributions of member States only amounted to 1.12% and 1.11% of the EU GNP, respectively, with a 0.15% and 0.16% margin of the GNP unused. Furthermore, it is expected an expenditure of about 1.06% of the GNP for the last year of the present financial perspectives, 2006, leaving a margin for incidentals of 0.21% of the GNP that will probably not be used.

Chart 11

Proposal of financial perspectives for the period 2007-2013 (% on total expenditures)

	2006	2007	2008	2009	2010	2011	2012	2013	Total 2007-2013 millions of euro 2002
Agricultural guideline	43,5	40,8	38,3	36,0	33,9	31,9	30,0	28,3	329.357
Present member States	39,1	36,5	33,6	31,1	28,7	26,6	24,7	22,9	280.091
Acceding countries	3,9	4,3	4,7	5,0	5,2	5,3	5,4	5,4	49.266
Structural Operations	37,5	40,9	42,9	44,8	46,5	48,1	49,7	51,1	454.964
Present member States	28,2	20,5	22,8	24,9	26,9	28,7	30,5	32,1	263.732
Structural Funds	25,9	18,8	20,9	22,8	24,7	26,3	27,9	29,4	241.638
Cohesion Funds	2,4	1,7	1,9	2,1	2,3	2,4	2,6	2,7	22.094
Acceding countries	8,3	20,4	20,1	19,9	19,6	19,4	19,2	19,0	191.232
Structural Funds	5,5	13,6	13,4	13,2	13,1	12,9	12,8	12,7	127.488
Cohesion Funds	2,8	6,8	6,7	6,6	6,5	6,5	6,4	6,3	63.744
Present member States	6,2	5,8	6,1	6,3	6,6	6,8	7,0	7,2	64.318
Acceding countries	1,3	1,2	1,3	1,3	1,4	1,4	1,5	1,5	13.486
External Measures	5,8	5,6	5,9	6,2	6,4	6,6	6,8	7,0	62.638
Administration	5,4	5,3	5,1	5,0	4,9	4,7	4,6	4,5	47.255
Present member States	4,8	4,7	4,5	4,4	4,3	4,2	4,1	4,0	42.004
Acceding countries	0,6	0,6	0,6	0,6	0,5	0,5	0,5	0,5	5.251
Reserves	0,4	0,4	0,4	0,3	0,3	0,3	0,3	0,3	3.307
Total commitment credits	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	975.686
Present member States	78,4	62,7	62,4	62,1	62,0	62,0	62,0	62,0	606.301
Acceding countries	14,0	26,1	26,3	26,4	26,4	26,3	26,3	26,1	256.185
Non-chargeable	7,6	11,3	11,4	11,5	11,6	11,7	11,8	11,9	113.200
Total payment credits	95,3	95,3	95,3	95,3	95,3	95,3	95,3	95,3	929.829
Credits over payments (%GNP)	1,06	1,09	1,12	1,15	1,18	1,21	1,24	1,27	–
Own resources ceiling (%GNP)	1,27	1,27	1,27	1,27	1,27	1,27	1,27	1,27	–

In addition, the curb on CAP spending agreed at the Brussels Summit and the freezing of administrative costs would have to be implemented. As a result, funds would be released to increase Structural Measures that would become the most significant item of the community budget. Thus, acceding countries would be able to receive aids close to 4% of their GDP, the maximum foreseen in the Agenda 2000, and the funds allocated to present member States would not have to be reduced. Certainly, with our proposal the acceding countries would receive as Structural Measures close to 20% of the total commitment credits of the community budget, increasing substantially their participation in comparison to 2006, whereas present member States would keep their share of about 30% of the total, similar to the one for the present period 2000-2006.

Box 3

To design chart 11 – which reflects our proposal for the future financial perspectives – we have estimated the Community's GDP for the period 2006-2013. In order to do that, the estimations on growth of both the Community's GDP and prices recently issued by the European Commission for 2002, 2003, and 2004, have been taken into account, and it has been assumed for the following years an actual growth of the GDP in the EU of 2.5% a year, and of 2% a year for community prices, as foreseen for the financial perspectives 2000-2006 in the Agenda 2000 and at the Berlin Summit. We have also assumed that the growth of the GDP in the EU for those years will be similar to the growth of the GNP, which is the value used as a reference in the community budget.

In this way, we get the maximum ceiling of own resources, 1.27% of the Community's GNP. We also propose to increase gradually the ceiling of payment credits from 1.06% of the Community's GNP in 2006 until reaching the maximum ceiling of own resources, 1.27% of the GNP in 2013. The total of commitment credits for the period 2000-2006 is also estimated, on the assumption that it will keep the same proportion with payment credits that in 2006. As regards to the allocation of the community budget by items, the allocation for 2006 has been taken as a benchmark. Thus, in the case of the CAP, it has been assumed that the budget ceiling is used and, as a result, the expenditures for 2006 show a 1% annual increase as was agreed at the Brussels Summit. As to administrative expenses and funds aimed at the reserve, we have proposed the maintenance of the same ratio on the GNP as in the current period 2000-2006. The Structural Measures, Internal Policies and External Measures will share the remaining commitment credits, i.e., the total commitment credits minus the funds allocated to the CAP, administrative expenses and reserve. Thus, these policies would be able to increment their significance and their resources for the period 2007-2013 in comparison to the financial perspectives 2000-2006. The allocation between these three items would be proportional to that of 2006.

Finally, as regards to the allocation among new partners and present member States, it has been estimated that acceding countries will receive funds aimed at Structural Measures accounting for 4% of their GDP, limit established in the Agenda 2000, and that a third of these aids will be allocated as Cohesion Fund. The rest of Structural Measures aimed at present member States have been allocated between Structural funds and the Cohesion Fund, like in 2006. For Internal Policies it has been assumed that the allocation between present member States and acceding countries will be the same as in 2006, insomuch as increasing the participation in the financing of the Framework Programme takes several years of adaptation and a technological situation similar to the community average, which candidate countries are still far from achieving.

The scenario that we propose would also enable to boost the significance of internal policies, that include, above all, assistance to R&D activities distributed across Framework Programmes. This seems not only convenient, but also necessary in order to bridge the EU technological gap in relation to the United States, which is considerable and has increased in the 1990s. In addition, internal policies finance measures regarding training, employment and trans-European networks, factors that could boost economic growth in the EU which, at least in the 1990s, was significantly lower than the growth recorded in the United States. There would be resources, also, to be used in External Measures aimed at increasing the role of the EU in the world.

To sum up, the financial perspectives put forward – the figures must, of course, be interpreted in their order of magnitude – would involve a gradual increment in the participation of the new community members, which would greatly improve their situation in relation to the first years

of permanence in the EU, where, as it happened to Spain and Portugal, they could reach negative fiscal balances in the first year. Present member States, on the other hand, would reduce the share of funds they receive as CAP direct aids, but not the one regarding Structural Measures, which are more efficient and equitable.

7. Conclusions and Recommendations

At the beginning of this study we set forth the points that justify government intervention by means of the regional policy with the aim of fighting imbalances in the levels of economic growth among countries and, especially, among regions. In addition, It was argued the advisability that the EU continued implementing a community regional policy to address geographical income disparities still existing within the Union and that will no doubt become more marked with the enlargement, for it will entail the accession of countries with a huge income imbalance in relation to the Fifteen.

Next, after a brief description of the objectives and instruments that make up the current European regional policy, an analysis has been carried out on both the fiscal balances of each member State with the Union budget and the participation of each country in the basic instrument of the community regional policy: the Structural Measures. This analysis has enabled to bring to light some facts that must be taken into account for any reform that may be undertaken, so as to fit the regional policy to an enlarged EU. Among them, two should be underlined. The first one is the existence of problems of horizontal equity in the contribution of member States to the community budget, i.e. the fiscal balances are not fully linked, as would be desirable, to the level of per capita income of the countries, for there are countries that contribute to the budget more than would correspond to them, as is the case of Germany, Sweden and the Netherlands, and other countries, like Spain, that receive less than they should. The other fact, related to the former one, is that, contrary to what is generally assumed, Spain is not the country that benefits most from the Structural Meaures policy.

The next step in this research has been the assessment of the impact of the "statistical effect" involved in the enlargement. This effect could deprive some regions that currently benefit from aids aimed at regions with a level of income below 75% of the EU average due to the relative "enrichment" that in purely statistical terms would take place as a result of the reduction of the average per capita income involved in the EU enlargement to 25 members, and especially 27 members. In this regard, this study discusses the unfairness of the proposal advocated by some net contributing member States of not introducing reforms to correct this "statistical effect", for it would mean a failure to comply with the principle of cohesion acknowledged in the European Union Treaty. In fact, if such effect is not corrected, a situation would be reached where funding of the regional policy for the new partners would fall mainly on the less developed member States

Thus, after making a simulation of the costs involved in correcting such "statistical effect" for the regions (and therefore the countries) that currently benefit from the aid to the less developed regions of the Fifteen, among them the Spanish ones, this study supports the suitability of introducing a corrective mechanism to enable regions from present member States, that would continue benefiting from aids to regions included in objective 1 if there were no enlargement, to continue receiving those aids.

Furthermore, our study supports a more ambitious proposal: undertaking a reduction of the community budget funds aimed at CAP direct aids in order to release funds for both the regional policy and for other community policies. The fund transfer that we contemplate would be reflected in a more fair and efficient spending structure for the community budget and, as a result, more suitable to promote the desirable growth of the EU economies as a whole.

Of course, from a technical point of view, more ambitious budgetary reforms may be advocated which, unlike this one, imply an increment of the Union's budgetary ceiling, i.e. 1.27% of the GNP of member countries. According to some Commission's proposals, this could be feasible if a community tax were introduced. This proposal, however, - which could be upholded in economic terms, especially for members under the euro – does not have a minimum political endorsement for the time being.

Reference Sources

ARGIMÓN, I.; GONZÁLEZ-PÁRAMO, J. M., y ROLDÁN, J. M. (1997): «Evidence of Public Spending Crowding-out from a Panel of OECD Countries», *Applied Economics* 29: 1001-10.

ASCHAUER, D. A. (1989): «Is Public Expenditure Productive?», *Journal of Monetary Economics* 23: 177-200.

ASCHAUER, D. A. (2000): «Public Capital and Economic Growth: Issues of Quantity, Finance, and Efficiency», *Economic Development and Cultural Change* 48(2): 391-406.

BEUTEL, J. (1995): *The Economic Impacts of the Community Support Frameworks for the Objective 1 Regions 1994-1999,* Report to the Directorate-General for Regional Policies, Commission of the European Communities, Luxembourg.

BOERI, T. et al. (2002): «Who's Afraid of the Big Enlargement?», CEPR Policy Paper No. 7, London.

BOLDRIN,M. y CÁNOVA, F. (2001): «Income Disparities and Regional Policies», *Economic Policy* 32: 205-53.

BRADLEY, J. (2000): «The impact of CSF on objective 1 countries-1989-2006», *Regional Policy DG XVI, European Commission, Luxembourg*.

BRADLEY, J., MODESTO, L. y SOSVILLA, S. (1995): «HERMIN: A Macroeconomic Modelling Framework for the EU Periphery», *Economic Modelling* 12: 221-247.

CÁNOVA, F. y MARCET, A. (1995): «The poor stay poor: Non-convergence across countries and regions».

Discussion Paper No. 1265, Centre for Economic Policy Research, Londres.

COMISIÓN EUROPEA (1996): Primer Informe sobre la Cohesión Económica y Social, COM/542/final, Bruselas.

COMISIÓN EUROPEA (2000): Annual report on the Structural Funds, COM/698 final, Volume I, II, Bruselas.

COMISIÓN EUROPEA (2001): Segundo Informe sobre la Cohesión Económica y Social, Oficina de Publicaciones Oficiales de las Comunidades Europeas, Luxemburgo.

COMISIÓN EUROPEA (2001): Allocation of 2000 EU operating expenditure by Member States.

COMISIÓN EUROPEA (2002): Primer Informe Intermedio sobre la Cohesión Económica y Social, D.G.,

COM/46/final, Bruselas.

COURT OFAUDITORS (2001): Annual Report concerning the financial year 2000, Official Journal of the European Communities, 15/12/2001.

CHRISTODOULAKIS, N y KALYVITIS, S. (1998): «A four-sector macroeconometric model for Greece and the evaluation of the community support framework 1994-1999», *Economic Modelling* 15(4): 575-620.

DE LA FUENTE, Á. (2001): «Is the allocation of public capital across the Spanish regions too redistributive?», Instituto de Análisis Económico, CSIC.

DE LA FUENTE, A. y DOMENECH, R. (2001): «The Redistributive Effects of the EU Budget: An Analysis and a Reform Proposal», *Journal of Common Market Studies* 39(2): 307-330.

EASTERLY,W. y REBELO, S. (1993): «Fiscal Policy and Economic Growth», *Journal of Monetary Economics* 32: 417-58.

EDERVEEN, S. et al. (2001): «The Wealth of Regions: The Impact of Structural Funds on Convergence in the EU», mimeo, Netherlands Bureau for Economic Policy Analysis, The Hague.

HERCE, J. A. y SOSVILLA, S. (1994): «The Effects of CSF 1994-99 on the Spanish Economy: An Analysis Based on the HERMIN Model», *Working Paper No. 10R, FEDEA, Madrid.*

HERCE, J. A. y SOSVILLA, S. (1999): «Los efectos macroeconómicos de la Agenda 2000», Working Paper No. 99-21, FEDEA, Madrid.

KRUGMAN, P. R. (1991): «Increasing returns and economic geography», *Journal of Political Economy* 99(3): 484-499.

LÓPEZ-BAZO, E.;VAYÁ, E.;MORA, A. J. y SURIÑACH, J. (1999): «Regional economic dynamics and convergence in the European Union», *Annals of Regional Science* 33(3): 343-370.

LUCAS, R. E. (1988): «On the Mechanics of Economic Development», *Journal of Monetary Economics* 22(1): 3-42.

MARTIN, R. (1999): *The Regional Dimension in European Public Policy, Convergence or Divergence,* Macmillan Press Ltd., UK and St. Martin' s Press, Inc., USA.

MINISTERIO DE HACIENDA (2000): Plan de Desarrollo Regional 2000-2006. Regiones incluidas en el Objetivo n.º 1 de los Fondos Estructurales Europeos, Volumen I, II y III. Secretaría de Estado de Presupuestos y Gastos, D.G. de Fondos Comunitarios y Financiación Territorial, Madrid.

NEARY, J. P. (2001): «Of hype and hyperbolas: introducing the new economic geography», *Journal of Economic Literature,* 39(2): 536-561.

NEVEN, D. y GOUYETTE, C. (1995): «Regional Convergence in the European Community», *Journal of Common Market Studies,* 33(1): 47-65. las consecuencias de la ampliación para la política regional europea 43

OTTAVIANO, G. I. P. y PUGA, D. (1998): «Agglomeration in the global economy: a survey of the "new economic geography", *World Economy,* 21(6): 707-731.

PUGA, D. (2002): «European regional policies in light of recent location theories», *Journal of Economic Geography* 2: 373-406.

ROEGER, W. (1998): «Macroeconomic Evaluation of the Effects of Community Structural Funds with QUEST II». En: *Evaluation of Structural Policies,* Seville Conference, marzo.

ROMER, P. (1986): «Increasing returns and long run growth», *Journal of Political Economy* 94: 1002-1037.

ROMER, P. M. (1990): «Endogenous Technological Change», *Journal of Political Economy* 98: 5-21.

SOLOW, R.M. (1956): «A Contribution to the Theory of Economic Growth», *Quarterly Journal of Economics* 70(1): 65-94.

VENABLES, A. J. y GASIOREK, M. (1999): «Evaluating regional infrastructure: a computable equilibrium approach. En: *Study of the Socio-economic Impact of the Projects Financed by the Cohesion Fund - a Modelling Approach,* Volumen 2. Oficina de Publicaciones Oficiales de las Comunidades Europeas, Luxemburgo.

WEISE, C. (2002): «How to finance Eastern Enlargement of the EU», DIW, Berlín.

List of Charts and Graphs

Annex 1 Per capita income forecasts for EU regions and acceding countries in the period 2001-2003

		In relation to:	
	EU(15)=100	EU(25)=100	EU(27)=100
EU-15	100,0	110,0	115,2
EU-25	90,9	100,0	104,8
EU-27	86,8	95,4	100,0
Belgium			
Région Bruxelles-capitale/Brussels hoofdstad gewest	216,3	237,9	249,2
Antwerpen	122,0	134,2	140,6
Limburg (B)	88,1	97,0	101,6
Oost-Vlaanderen	90,8	99,8	104,6
West-Vlaanderen	111,4	122,5	128,4
Vlaams Brabant	97,9	107,7	112,8
Brabant Wallon	99,7	109,7	114,9
Hainaut	68,2	75,1	78,6
Liège	80,1	88,1	92,4
Luxembourg (B)	76,4	84,1	88,1
Namur	75,0	82,5	86,5
Denmark	120,1	132,1	138,4
Germany			
Baden-Württemberg	118,0	129,8	136,0
Bayern	121,5	133,7	140,1
Berlin	95,6	105,2	110,2
Brandenburg	69,1	76,0	79,6
Bremen	139,9	153,9	161,3
Hamburg	180,3	198,3	207,8
Hessen	126,5	139,2	145,8
Mecklenburg-Vorpommern	68,5	75,3	78,9
Niedersachsen	94,4	103,8	108,8
Nordrhein-Westfalen	105,9	116,5	122,1
Rheinland-Pfalz	92,7	102,0	106,9
Saarland	96,5	106,1	111,2
Sachsen	69,7	76,7	80,4
Sachsen-Anhalt	67,3	74,1	77,6
Schleswig-Holstein	96,8	106,5	111,6
Thüringen	69,0	75,9	79,6
Greece			
Anatoliki Makedonia, Thraki	59,7	65,7	68,8
Kentriki Makedonia	74,3	81,8	85,7
Dytiki Makedonia	70,6	77,6	81,3
Thessalia	64,0	70,4	73,7
Ipeiros	56,8	62,5	65,5
Ionia Nisia	64,2	70,7	74,0
Dytiki Ellada	56,2	61,9	64,8
Sterea Ellada	88,2	97,1	101,7
Peloponnisos	58,4	64,2	67,3
Attiki	81,3	89,4	93,7
Voreio Aigaio	69,6	76,5	80,2
Notio Aigaio	86,7	95,4	99,9
Kriti	72,7	80,0	83,8
Spain			
Galicia	65,9	72,5	76,0
Principado de Asturias	71,5	78,6	82,4
Cantabria	78,9	86,8	91,0
Pais Vasco	102,9	113,2	118,5
Comunidad Foral de Navarra	105,9	116,5	122,1
La Rioja	93,6	103,0	107,9
Aragón	87,2	95,9	100,5
Comunidad de Madrid	113,8	125,2	131,1
Castilla y León	75,5	83,0	87,0
Castilla-la Mancha	65,2	71,7	75,1
Extremadura	52,4	57,6	60,4

		In relation to:	
	EU(15)=100	EU(25)=100	EU(27)=100
Cataluña	101,9	112,0	117,4
Comunidad Valenciana	80,7	88,8	93,0
Baleares	102,5	112,7	118,1
Andalucia	60,5	66,5	69,7
Murcia	68,8	75,7	79,3
Ceuta y Melilla (ES)	65,4	71,9	75,3
Canarias (ES)	82,3	90,5	94,9
France			
Île de France	154,3	169,8	177,9
Champagne-Ardenne	95,0	104,5	109,5
Picardie	82,0	90,2	94,5
Haute-Normandie	92,6	101,8	106,7
Centre	89,7	98,6	103,3
Basse-Normandie	83,6	91,9	96,3
Bourgogne	90,9	99,9	104,7
Nord - Pas-de-Calais	79,8	87,7	91,9
Lorraine	82,6	90,8	95,2
Alsace	102,5	112,7	118,1
Franche-Comté	86,1	94,7	99,2
Pays de la Loire	87,4	96,1	100,7
Bretagne	83,9	92,3	96,7
Poitou-Charentes	79,7	87,7	91,8
Aquitaine	92,0	101,2	106,0
Midi-Pyrénées	87,1	95,8	100,3
Limousin	80,7	88,8	93,0
Rhône-Alpes	103,0	113,2	118,6
Auvergne	84,6	93,0	97,5
Languedoc-Roussillon	78,2	86,0	90,2
Provence-Alpes-Côte d'Azur	89,6	98,6	103,3
Corse	82,0	90,2	94,5
Guadeloupe (FR)	56,4	62,0	65,0
Martinique (FR)	64,4	70,8	74,2
French Guiana (FR)	50,1	55,1	57,7
Reunion (FR)	51,1	56,2	58,9
Ireland	122,0	134,2	140,6
Border, Midland and Western	89,8	98,8	103,5
Southern and Eastern	133,5	146,9	153,9
Italy			
Piemonte	120,5	132,6	138,9
Valle d'Aosta	126,8	139,5	146,1
Liguria	109,3	120,3	126,0
Lombardia	135,9	149,5	156,6
Trentino-Alto Adige	135,3	148,9	156,0
Veneto	121,2	133,3	139,7
Friuli-Venezia Giulia	115,3	126,9	132,9
Emilia-Romagna	131,3	144,5	151,4
Toscana	113,8	125,2	131,1
Umbria	101,6	111,7	117,1
Marche	104,6	115,1	120,6
Lazio	116,2	127,8	133,9
Abruzzo	83,7	92,1	96,5
Molise	81,2	89,3	93,6
Campania	66,1	72,7	76,1
Puglia	67,4	74,2	77,7
Basilicata	75,7	83,3	87,3
Calabria	62,9	69,1	72,4
Sicilia	66,4	73,1	76,6
Sardegna	79,5	87,4	91,6
Luxembourg	202,1	222,3	232,9

		In relation to:	
	EU(15)=100	EU(25)=100	EU(27)=100
The Netherlands			
Groningen	124,6	137,0	143,6
Friesland	93,6	103,0	107,9
Drenthe	89,2	98,2	102,8
Overijssel	99,1	109,0	114,2
Gelderland	101,0	111,1	116,4
Flevoland	79,4	87,4	91,5
Utrecht	150,5	165,6	173,5
Noord-Holland	135,4	149,0	156,1
Zuid-Holland	121,1	133,2	139,5
Zeeland	99,2	109,2	114,4
Noord-Brabant	114,7	126,2	132,2
Limburg (NL)	99,3	109,2	114,4
Austria			
Burgenland	70,6	77,7	81,4
Niederösterreich	93,3	102,7	107,6
Wien	147,0	161,6	169,4
Kärnten	93,5	102,8	107,7
Steiermark	93,3	102,6	107,5
Oberösterreich	105,8	116,4	122,0
Salzburg	124,8	137,2	143,8
Tirol	110,7	121,8	127,6
Vorarlberg	114,0	125,4	131,4
Portugal			
Norte	60,1	66,1	69,3
Centro (P)	56,5	62,1	65,1
Lisboa e Vale do Tejo	100,7	110,8	116,0
Alentejo	56,8	62,5	65,5
Algarve	68,4	75,2	78,8
Açores (PT)	52,8	58,1	60,9
Madeira (PT)	73,0	80,3	84,1
Finland			
Itä-Suomi	74,0	81,4	85,3
Väli-Suomi	82,7	90,9	95,3
Pohjois-Suomi	85,1	93,6	98,0
Uusimaa (suuralue)	141,8	156,0	163,4
Etelä-Suomi	93,7	103,0	107,9
Åland	142,5	156,8	164,2
Sweden			
Stockholm	134,2	147,6	154,7
Östra Mellansverige	91,4	100,6	105,4
Sydsverige	90,7	99,8	104,5
Norra Mellansverige	94,8	104,3	109,3
Mellersta Norrland	97,7	107,5	112,6
Övre Norrland	96,6	106,3	111,3
Småland med öarna	98,7	108,6	113,8
Västsverige	87,1	95,8	100,4
United Kingdom			
Tees Valley and Durham	75,9	83,5	87,5
Northumberland, Tyne and Wear	78,7	86,5	90,7
Cumbria	90,3	99,4	104,1
Cheshire	115,9	127,5	133,6
Greater Manchester	89,5	98,4	103,1
Lancashire	81,1	89,2	93,4
Merseyside	71,3	78,4	82,1
East Riding and North Lincolnshire	96,1	105,7	110,8
North Yorkshire	96,0	105,6	110,6
South Yorkshire	76,4	84,0	88,0
West Yorkshire	92,8	102,0	106,9

		In relation to:	
	EU (15)=100	EU (25)=100	EU (27)=100
Derbyshire and Nottinghamshire	91,7	100,9	105,7
Leicestershire, Rutland and Northants	104,1	114,5	120,0
Lincolnshire	86,1	94,7	99,2
Herefordshire, Worcestershire and Warks	99,2	109,1	114,3
Shropshire and Staffordshire	88,1	96,9	101,5
West Midlands	93,5	102,8	107,7
East Anglia	111,5	122,7	128,5
Bedfordshire, Hertfordshire	109,8	120,8	126,5
Essex	96,2	105,9	110,9
Inner London	245,4	270,0	282,8
Outer London	89,3	98,3	103,0
Berkshire, Bucks and Oxfordshire	134,2	147,7	154,7
Surrey, East and West Sussex	109,0	119,9	125,6
Hampshire and Isle of Wight	113,9	125,3	131,2
Kent	94,8	104,3	109,3
Gloucestershire, Wiltshire and North Somerset	106,2	116,8	122,4
Dorset and Somerset	88,3	97,1	101,7
Cornwall and Isles of Scilly	66,3	73,0	76,4
Devon	79,8	87,8	92,0
West Wales and The Valleys	71,7	78,9	82,6
East Wales	98,0	107,8	112,9
North Eastern Scotland	121,1	133,2	139,6
Eastern Scotland	100,4	110,5	115,8
South Western Scotland	92,6	101,9	106,7
Highlands and Islands	74,6	82,1	86,0
Northern Ireland	78,0	85,8	89,9
Bălgarija	28,3	31,1	32,6
Severozapaden	24,4	26,8	28,1
Severen Tsentralen	24,0	26,4	27,7
Severoiztochen	24,5	27,0	28,3
Yugozapaden	38,2	42,0	44,0
Yuzhen Tsentralen	23,2	25,6	26,8
Yugoiztochen	30,9	34,0	35,6
Kypros	83,8	92,1	96,5
Česká Republika	60,6	66,7	69,9
Praha	133,2	146,5	153,5
Střední Čechy	50,9	56,0	58,6
Jihozápad	55,7	61,3	64,2
Severozápad	49,3	54,2	56,8
Severovýchod	51,2	56,3	59,0
Jihovýchod	52,4	57,6	60,4
Střední Morava	48,2	53,0	55,6
Moravskoslezsko	50,8	55,9	58,6
Eesti	38,8	42,7	44,7
Magyarország	53,3	58,6	61,4
Közép-Magyarország	81,5	89,6	93,9
Közép-Dunántúl	50,4	55,5	58,1
Nyugat-Dunántúl	63,0	69,3	72,6
Dél-Dunántúl	40,9	45,0	47,2
Észak-Magyarország	34,5	38,0	39,8
Észak-Alföld	33,3	36,6	38,4
Dél-Alföld	38,6	42,5	44,5
Lietuva	31,7	34,9	36,5
Latvija	29,2	32,1	33,7
Malta	53,2	58,5	61,3
Polska	38,7	42,6	44,6
Dolnośląskie	39,4	43,4	45,5

		In relation to:	
	EU(15)=100	EU(25)=100	EU(27)=100
Kujawsko-Pomorskie	33,4	36,7	38,5
Lubelskie	26,4	29,0	30,4
Lubuskie	34,5	37,9	39,7
Łódzkie	35,3	38,8	40,6
Małopolskie	34,7	38,2	40,0
Mazowieckie	60,5	66,6	69,7
Opolskie	31,1	34,2	35,9
Podkarpackie	28,1	30,9	32,3
Podlaskie	27,9	30,7	32,2
Pomorskie	39,3	43,3	45,3
Śląskie	41,6	45,8	48,0
Świętokrzyskie	30,1	33,2	34,7
Warmińsko-Mazurskie	29,8	32,8	34,4
Wielkopolskie	41,5	45,6	47,8
Zachodniopomorskie	38,5	42,3	44,4
România	24,9	27,4	28,7
Nord-Est	18,8	20,6	21,6
Sud-Est	25,2	27,7	29,0
Sud	22,0	24,2	25,3
Sud-Vest	23,3	25,6	26,8
Vest	29,0	31,9	33,4
Nord-Vest	22,8	25,1	26,3
Centru	28,4	31,2	32,7
Bucureşti	36,0	39,6	41,5
Slovenija	71,9	79,1	82,9
Slovenská Republika	50,5	55,5	58,2
Bratislavský	99,9	109,9	115,2
Západné Slovensko	46,9	51,6	54,0
Stredné Slovensko	43,5	47,9	50,1
Východné Slovensko	41,3	45,5	47,7

Source: Own estimations from the European Commission: Statistical Annex of the First Intermediate Report on Economic and Social cohesion, 2002 NS European Commission: Directorate General ECFIN, Economic and Social Affairs: Statistical Annex of European Economy, Spring 2002.

EASTERN ENLARGEMENT OF THE EUROPEAN UNION:

AGRICULTURAL IMPLICATIONS

Eastern Enlargement of the European Union: Agricultural Implications

José M.ª Sumpsi
Universidad Politécnica de Madrid

Ignacio Atance
Universidad de Valladolid

EUROPEAN ACADEMY FOR SCIENCES AND ARTS
SPANISH DELEGATION

Eastern Enlargement of the European Union
Agricultural implications

Published by:
European Academy for Sciences and Arts

printed by: Sociedad Anónima de Fotocomposición
Talisio, 9. 28027 Madrid

CONTENTS

Preliminary Note

In December of 2002, the European Council endorsed in Copenhagen the accession to the European Union of ten new member States, bringing to a close a negotiation process that began years earlier and that will continue the next years, enabling the accession of Bulgaria and Romania in 2007. The aim of this work is to analyse the agricultural implications of the enlargement for both current member States and new member States, as well as for the Common Agricultural Policy (CAP).

The previous negotiation process has given rise to a large number of studies, works and reports whose aim is similar to the one we are dealing with. Yet, the results of a research depend on the methodology and the hypothesis used. This means, within the framework of the enlargement, that the results achieved in those previous works inevitably depend on the hypotheses made by their authors in matters such as the number of countries involved in the enlargement, the timetable for accession, the development of agricultural prices, the granting of direct aids, the establishment of production and subsidy rights, and so forth. Obviously, these conditionings have changed and made more explicit during the negotiation process, but not even after the Copenhagen Summit of 2002 have uncertainty elements been totally cleared up, for example those regarding the development of the CAP.

Thus, by taking advantage of the data coming from those previous works and the final scenario agreed upon for the accession of the new member States, this work combines qualitative and quantitative information to analyse the agricultural implications of the enlargement, regarding aspects that can be both cautiously anticipated and those which only allow a speculative analysis on the opening alternative scenarios. To this end, Chapter 1 addresses an updated view on agriculture and rural areas in the acceding countries. Chapter 2 analyses the political and economic convergence that has taken place during the last decade between acceding countries and the European Union. The negotiation process of the enlargement and the final conditions agreed upon to carry it out are summarised in chapter 3. In addition, Chapter 4 discusses the likely scenarios for short, medium, and long-term development of the CAP, taking into account the implications of the EU enlargement. From the quantitative information provided by the first and second chapters and playing with the hypotheses of CAP development raised in Chapter 4, the medium and long-term effects of the enlargement on agriculture and rural areas of both the new and the old members of the European Union are assessed in Chapter 5. Finally, Chapter 6 provides the main conclusions of this work.

1. Agriculture and rural areas in the acceding countries

The aim of this chapter is to summarise the main characteristics of the agricultural sector in the ten acceding countries (AC-10), especially those regarding the group of ten as a whole in relation to the present-day European Union, distinguishing those features common to the various countries from those peculiar to each one of them. However, the larger size, quantitatively speaking, of the five Central European countries (Slovakia, Slovenia, Hungary, Poland and the Czech Republic) with regards to the three Baltic countries (Estonia, Latvia and Lithuania), or the two Mediterranean ones (Cyprus and Malta), will often involve a more comprehensive analysis of the former ones. This chapter's first section, therefore, deals with the weight of agriculture in each one of the AC-10, especially in terms of output and employment as well as the levels of consumption and self-sufficiency of agricultural products. These countries' agricultural production system will be discussed next, regarding both agricultural produce and the structure of farms or the agro-food industry. This system is not only the result of the one existing under the previous socialist regime, but also of the significant changes that have taken place during the last decade. The third heading deals with the agricultural production in the AC-10, especially in those acceding countries whose production is the most significant. Finally, the fourth heading shows some of the basic features of these countries' rural areas, especially focusing on those that, to a larger extent, make them different from the EU-15.

1.1. Agriculture in the economy of acceding countries

1.1.1. The weight of the agricultural sector in the AC

The Enlargement of the EU-15 to the AC-10, after the exclusion of Bulgaria and Romania from the first stage of incoming members, means a comparatively mild increase of the European area (about 20%), and of its population (about 75 million people). Yet, the Enlargement's great challenge lies in the accession of ten countries whose GDP per capita (see Annex 1) would be equivalent to only 45% of that of the EU-15 (which would decrease in almost ten points the aggregate GDP in the EU-25), and whose unemployment rate is almost ten points higher than that of the EU-15 (13.3% vs. 4.5%).

As to agriculture, the Enlargement means to increase the EU' useful agricultural area by almost 30%, to increment the number of farms by 55% and the number of farm workers by 50% (see Annexes 2 and 3). But more importantly, the Enlargement means to include a group of countries whose dependence on agriculture, both in output and employment or consumption, is much higher as a whole than that of the EU-15. Thus, agriculture provides 3.8% of the AC-10[1] GDP (only 2% in the EU-15), with the Baltic countries reaching the highest values within this percentage. These countries' final agricultural production (FAP) was twelve thousand million euro in 2002, only 7.2% of the EU-15 FAP for the same year or, approximately, a third of France's FAP, or 60% of Spain's FAP. Out of those twelve thousand millions, 73% would account for the output of three countries (AC-3): Poland (41%), Czech Republic (17%) and Hungary (15%).

[1] It is important to note that the exclusion of Bulgaria (where agricultural output accounts for 14.5% of the GDP) and Romania (12.6%) from the first wave of enlargement has substantially decreased this figure, which was much higher in previous studies where these countries were included.

In the 1990s, especially in the second half, a general recovery of the economy in the acceding countries has taken place. This recovery, however, has not been observed in their agricultural production (see Annex 3). Thus, for example, table 1.1. shows the FAP's annual percentage variation in real terms for the three countries with the largest agricultural output:

Table 1.1.

Annual development of the FAP in the AC-3 during the 1990s

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Accumulated
Hungary	–4,7	–6,2	–20,0	–9,7	3,2	2,6	4,9	–0,6	–0,3	–3,3	–31,3
Poland	–2,2	–1,6	–12,7	6,8	–9,3	10,7	0,7	–0,2	5,9	–5,6	–9,5
Czech Rep.	–2,3	–8,9	–12,1	–2,3	–6,0	5,3	–0,9	–5,9	–1,3	1,1	–29,6

We are facing, therefore, an enlargement of countries where agriculture has a much larger weight in their economy (very much concentrated in three of them and especially in Poland) than in the EU-15, but whose output value is slightly over 7% of the current value in the EU's agricultural production, among other things, because of the significant slowdown in agricultural production experienced by these countries in the beginning of their economic transition.

1.1.2. Agricultural employment

It is not easy to have reliable and updated data on the labour force used in agriculture in the AC. The significance of subsistence agriculture and its closeness in many instances to a more or less disguised unemployment, together with the lack of appropriate systems of statistical information gathering regarding agriculture make this job difficult. Furthermore, the existing differences are very significant, not only among countries, but also among regions within the same country.

During the socialist period, the share of total employment absorbed by agriculture declined, following similar rates to those of the EU. During the 1990s, however, the growth of unemployment rates, especially in rural areas, has increased the percentage accounted for agricultural employment. As a whole, agriculture would be responsible for 16.5% of the employment in the AC (amount that nearly quadruples that of the EU and that would make agriculture to account for 8.5% of the employment in the EU-25). We must take into account, however, Poland's high rate of agricultural employment (18.8%), since in countries such as Czech Republic (7.4%), Slovakia (6.7%) or Hungary (4.8%), the weight of agriculture in employment would be more in line with that of the EU' present members. The close relation existing in the AC-10 between unemployment rates (Poland, 16.8%; Czech Republic, 8.8%; Hungary, 6.4%), and the weight of agriculture in total employment suggest a phenomenon that will be later analysed more in-depth, since it is a basic feature of these countries' agriculture: the maintenance of an agricultural activity of near subsistence by a large share of the labour force, who, once they have lost their previous jobs due to severe adjustment during the economic transition, do not find alternative employment opportunities outside agriculture.

The data in Annex 3 show that after a stage of stabilisation in agricultural employment, there has been a significant fall in the 1990s. Among the largest countries, the decline has been specially significant in Hungary, the Czech Republic and Slovakia (whose loss of agricultural employment in the period 1994-2000 has been around 50%), whereas in the case of Poland or Slovenia it has been more moderate (about 20%). In these countries, as it will be shown in section 1.2, subsistence agriculture has a much more significant presence. As to the labour force expelled from agricultural activity, estimates by Arzeni *et al. (2001)* show that a third would

have retired, another third would be the result of the separation of non-agricultural activities from agricultural ones (which during the socialist period were together in state enterprises and farms), whereas about 90% of the remaining third would have transferred to other sectors (of which three quarters would have migrated to cities), or continued unemployed (10%).

1.1.3. Consumption and self-sufficiency of farm products in the AC

The demand of agricultural products has remained comparatively constant during the 1990s in terms of raw materials, which, together with the fall in production noted above, has aggravated the self-sufficiency balance of acceding countries in both farm products and products of animal origin, although in the latter the self-sufficiency level is still over 100%. The aggregate figures, however, are quite influenced by Hungary's in this case, the only net agricultural exporting acceding country (see Table 4.2, Annex 4).

In contrast, the demand for processed products has increased considerably during the decade, a significant part of which come from the European Union itself, whose processing level is much more developed than that of the candidate countries. If we also bear in mind that during the 1990s the acceding countries have levied comparatively high tariffs on the importation of these products (Pouliquen 2001), the competitive disadvantages of their agro-food industry compared to the Community's are still more significant. In addition, the opening of borders to other types of trade (like coffee or tea), whose importation had been seriously limited in the socialist period, has stressed this situation, having a significant impact on the trade balance. For most acceding countries (see Table 4.2, Annex 4) farm processed products would be responsible for almost 60% of their agricultural trade deficit (with the significant exceptions of Hungary, an exporting country, and Poland, basically importer of non-transformed raw materials). Unlike trade in non-transformed raw materials, bilateral trade with the EU in transformed products accounts for more than 50% of the total for most of the countries.

Yet, despite the impact that demand of agricultural products has on these counties' trade balance, there is no doubt that one of the main characteristics that distinguishes the AC-10 from the EU-15 member countries is the weight food expenses have on family budgets. Thus, as Table 1.2 shows, the share of food consumption on total expenditure of the AC-10 doubles that of the EU-15, although their smaller population prevents this indicator from rocketing for the EU-25 after the accession (it would only increase from present-day 17.4% to 20.3%). As regards to countries, with the exception of Slovenia and Cyprus, food would account for 30% or more of the total expenses in all of them.

These differences in food expenses, however, also imply significant differences as regards to what the group of AC-10 may request from the Common Agricultural Policy (CAP), and what the EU-15 requests from it. Thus, whereas citizens of the EU-15 would spend relatively little on food and focus their expenses on products with a high value added (which makes their price less sensitive to the various changes of the CAP's Community Market Organisations -CMOs-), citizens in the acceding countries would spend a larger share of their income and would do it on less transformed products, whose price depends more on decisions taken by the CAP. In fact, one of the traditional fears in the face of the enlargement was the effects that price alignment of farm products induced by the CAP might have on AC citizens. As it will be seen in the next chapter, however, a substantial part of this alignment has taken place previous to the accession, diminishing, thus, this problem's real significance.

Table 1.2.

Percentage of the total cost in food consumption (1999)

Cyprus	18,6
Slovakia	31,8[1]
Slovenia	24,0
Estonia	35,7
Hungary	42,1[1]
Latvia	38,7
Lithuania	39,8
Malta	n.d.
Poland	29,5
Czech Republic	32,2
AC-10	34,8
EU-15	17,4
EU-25	20,3

Source: EC (2002b)
1: Data of 1992

1.2. Agricultural production structure in the acceding countries

1.2.1. Agricultural output

As noted in the previous heading, agricultural output in the AC as a whole (and in varying degrees in each one of them), sustained a significant fall during the first half of the 1990s, to subsequently start a slow recovery. This recovery was more significant in those countries that, to a large extent, had completed their economic transition (Hungary, Czech Republic and Slovakia), and also in the case of agriculture as opposed to stockbreeding.

As a whole (with the obvious exception of the two Mediterranean countries Malta and Cyprus), from an agricultural point of view, the AC are producers of cereal and livestock, using a large share of their agricultural output in the livestock sector, with very low efficiency, as we will see later. As regards to cereals, the largest areas and productions are for wheat, though the farming of barley and corn (a very deficit product in the AC-10) is also important; other significant products, though in recession, are oats, rice, rye and triticale. As to stockbreeding, its main feature is that it is more intensive than in the EU-15, given the smaller pasture areas available. As regards to sectors, the main ones would be cattle, with its two variants (dairy products and meat), pigmeat and chicken production.

Annex 5 shows the weight on the FAP and the level of self-sufficiency as regards to products in the AC-3. In terms of products, the data show the significance of three meat subsectors: milk, pigmeat and chicken (which would account for almost 40% of the FAP), in which the level of self-sufficiency is well over 100%. As to agricultural productions, a greater regional specialisation is observed (especially in the case of cereals other than wheat). In any case, as Table 4.2 of Annex 4 shows regarding these countries' agricultural trading, Hungary's high level of self-sufficiency in most products is evident.

But these agricultural productions take place in a very low profitability context. For example, Table 1.3 shows the profitability of the main farm products in the case of Poland. It is true that profitability in countries such as Hungary or Czech Republic would be higher, but the Polish case is significant because its agricultural sector would produce more than 41% of the AC-10 final agricultural output. These figures, estimated with the same techniques used in the European Community (and obtained for a sample whose average size farm is 15 hectare, much larger than the actual average, so they may show an upward bias), relapse into the idea of a

semisubsistence agriculture, unable to pay not only land and capital expenses, but also labour expenses, though these data show the best results achieved in the case of wheat production.

Table 1.3.

Profitability of the agricultural output in Poland (1999)

	Wheat[a]	Rice[a]	Beet[a]	Pigmeat[b]	Beef[b]	Milk[c]
Production	1.645	695	4.085	306	316	2.791
Gross margin[1]	676	29	1.835	108	80	1.779
Net margin[2]	368	–249	1.241	57	0	1.379
Gross profit[3]	43	–600	–213	–102	–317	–436
Net profit[4]	–548	–1.105	–1.202	–219	–504	–1.338

Source: IERiGZ (2000). Data from a sample of 352 farms

Amounts in zlotys (1 euro. = 3,984 zlotys); a: per Ha; b: per 100 kg; c: per cow

1: production minus direct and indirect costs; 2: gross margin minus amortisation; 3: net margin minus cost of labour force (calculated according to the average wage); 4: gross profit minus alternative use cost of land and capital

Given these low levels of agricultural profitability it is easy to understand the minimum value of today's land prices and rents[2]. Thus, land value would account for 5 to 20% of the average price in the EU-15, so a significant rise is expected once these countries accede to the EU, especially due to the impact of direct aids. In fact, given these low levels of land value, even very low levels of direct aids would rise those prices substantially.

1.2.2. Structure of farms

The high figures of agricultural employment in the AC shown above make evident the existence of a significant share of disguised unemployment in rural areas, possibly as a result of the consolidation of a productive structure based to a large extent on a **subsistence agriculture**, with very small farms, a nonexistent commercial approach, a labour force not qualified at all, whose goal is to keep themselves busy and feed families that cannot find another means of life in these transition economies. These farm's minimum, and even negative, profitability values show the nonexistent alternative use cost of the labour force that stems from the high level of unemployment existing: only by really increasing the possibilities of access to employment of the AC's rural population, could the weight of this kind of agriculture be lessened. Thus, the problem goes beyond the agricultural scope and, therefore, of its policies, calling for solutions for the rural world that depend on policies regarding macroeconomics, investment, human capital training, infrastructures, and so forth.

The source of this subsistence agriculture is to be found in both the parcelling out among workers of old state farms, and the existence during the socialist period, in countries like Poland, of tiny farms aimed at completing the income earned by its holders through jobs in the industrial sector or pensions. As a result of the destruction during the transition period of these jobs, due to the restructuring of the industrial sector, and of the redistribution of the lands belonging to large state farms among their workers, agriculture becomes the only source available for many families in the countryside to complete the income coming chiefly from retirement annuities, and in many instances the only source of income in the absence of pensions, contributing to the perpetuation of such little efficient agricultural systems.

[2]It should be noted, however, that land sale and purchase is very rare in the AC, being more common renting, especially through verbal deals and for short periods of time.

The contribution of this type of subsistence agriculture to the final agricultural output, despite its extremely low productivity, would be a little over 50% in most AC, with the exception of countries such as Czech Republic, Slovakia or Hungary, so it really should be taken into account when analysing these countries' agricultural sector. The low volumes marketed by these farms and their poor quality levels exclude this type of agriculture from the main commercial channels and confine them to short trade circuits, based on local markets. This fact, together with the low purchasing power of these countries' rural population, and the high share of income used for buying food, makes it very likely the perpetuation of these farms.

On the other end of this subsistence agriculture we find the **privately-owned macro-farms** with areas ranging between 500 and 2,000 Ha. These farms, whose approach is fully commercial, would be the result of the privatisation of great state farms during the socialist period. However, their inefficient productive systems, due to lack of capital and the abundance of labour force (inherited from the socialist period), compromise their future, though their ratio employment/productivity is much higher than that found in subsistence farms. The relative significance of this kind of farms is specially remarkable in the case of the livestock subsector, though a decreasing trend is observed when compared to the more stable situation of subsistence farms.

In addition to this polarised structure made up of subsistence micro-farms and private macro-farms, there is a third type of farms that could be called **family farms of considerable size**. These farms make up a production model similar to that of the EU, with a ratio employment/profitability noticeably higher than the previous types of farms, that would enable the family labour force to earn a decent income. However, the large amount of capital required for stockbreeding, makes these farms to operate chiefly in the agricultural subsector, focusing on cereal farming under extensive methods of cultivation.

Obviously, this duality of productive structures does not have the same weight in all the AC. Thus, commercial farms (both family and private enterprise-owned) would have a major presence in Hungary, Czech Republic, Slovakia and Estonia, whereas subsistence agriculture would be specially significant in the rest of the countries. In fact, in the AC-3, the weight of subsistence agriculture in the final agricultural output would account for 53% in Poland, 36% in Hungary and 25% in Czech Republic. This makes a weighted total of 45%, much higher than the 15-20% that this type of productive systems would account for in present-day EU countries and with the further complication that the reliance of their tenants on farm income is much higher than that of the farmers in the EU-15, where part time farming is supplemented with income coming from other activities.

In the medium term, the productive restructuring required by the AC's agriculture does not seem to depend solely on agricultural policies, but on macroeconomic aspects such as the ability of the rest of sectors to absorb underemployed labour force that has found refuge in agriculture, or the reduction of the interest rates, and the improvement of the ability of large farms to access to investment credits. In this context, the role played by direct aids does not seem specially promising, for it is unlikely that they are going to be used in investment (given the precarious situation of producers, it is much more likely that direct aids be used for consumption), whereas it is much more likely that they may become a direct obstacle to restructuring, especially through the rise of land prices and rents. On the other hand, structural support do seem a more suitable instrument for these countries (especially in the case of privately-owned macro-farms and family farms of larger size), though we are dealing with subventions that are difficult to devise and manage, as can be judged by the little success they have had so far in the context of the SAPARD programmes of pre-accession (Wilkin, 2002).

1.2.3. The agro-food industry

The development of the agro-food industry (AFI) in the AC is still very conditioned by the previous situation during the socialist period. The existing industries have had to face an internal privatisation (since they had not much appeal to foreign investors) and a situation of overcapacity, since output coming from the growing subsistence agriculture was no longer processed by these industries and found itself its place in local market channels. This adjustment, only partly carried out, has meant the persistence of high processing costs and very low or nonexistent profitability. On the other hand, the restructuring of the agro-food industry of second processing and distribution has been much faster, giving place to a dualistic situation in this sector. As regards to countries, the adjustment has again been much faster in the case of Hungary, due mainly to a more significant presence of foreign investment. However, because of the special significance of the differences among countries in this economic subsector, the most relevant features of the AFI in the AC-3 are studied in detail next.

In Poland, the AFI accounts for 4.1% and 5.3%, respectively, of the country's GDP and total employment, having experienced a substantial growth during the 1990s, due in large measure to its ability to attract foreign investment (during the decade, the AFI captured 12% of Poland's total foreign investment). As for subsectors, meat and "other products" industries (where processed products of larger value added would be included) prevail, while the beverage, dairy products and tobacco subsectors are also very significant (between the five of them would account for almost 90% of production). As regards to trade in processed farm products, Poland exports to the EU-15 products for as much as 319 million euro (between 1997-2000, see Table 4.2, Annex 4), and imports for a value of 746 million euro, though these figures show how, comparatively speaking, its trade balance of processed farm products is more compensated than in the rest of the countries.

In Hungary, the AFI provides 13.8% of the country's GDP, having shown a substantial growth and restructuring (with significant loss of jobs) during the 1990s. As regards to sectors, the meat industry is the most important. The Hungarian AFI is quite export-oriented, as can be judged by the fact that this is the only country of the AC-10 that has a positive trade balance of processed farm products (both total and bilateral with the EU-15). About 20% of the output goes to export, increasing this percentage in the vegetable oils, horticultural products or wine subsectors.

In the case of the Czech Republic, the AFI is much less developed, accounting for only 3.8% of the country's GDP. Again, the meat and "other products" subsectors are the most developed, though exports come down to small subsectors of high value added (chocolates, liquors), where foreign investment has been significant. This poor performance of the AFI translates into very adverse figures in the trade balance of processed farm products, especially in the case of bilateral trade with the EU-15.

1.3. Agricultural productivity in the acceding countries: present situation and future perspectives

The lack of investment in agriculture in the AC and the serious structural shortcomings analysed in section 1.2, make these countries' average productivity to be much lower than that of the EU. Thus, in 1999 (see Table 1.4), these countries' gross value added of agricultural output per hectare accounted for only 8.5 to 35% of the EU's average GVA (with the exception of Slovenia, where this percentage went up to 68%, mostly as a result of this country's greater public support to agriculture, as we will see in section 2.2).

Table 1.4.

Agricultural GVA per hectare (1999)

	EU-15	Slovakia	Eslovenia	Estonia	Hungary	Latvia	Lithuania	Polonia	Czech Republic
€/ha	1.927	504	1.318	288	682	163	242	570	582
% EU	100	26	68	15	35	8.5	13	30	30

Fuente: Pouliquen (2001)

In order to find answers to this low productivity, the first fact we have to highlight is, as regards to the agricultural subsector, a less significant presence of intensive crops, as it was seen in section 1.2. But also, the average returns per hectare of the AC's agricultural productions are noticeably lower than those of the EU (see Table 1.5), between 30% (AC-3) and 50% (the rest of countries, with the exception, once more, of Slovenia). However, as Table 1.5 shows, the returns will be very different between the various acceding countries. Thus, Slovenia would have similar returns to those of the EU (20% lower, approximately), whereas returns in Poland, Hungary and Czech Republic would be about 40% lower than those in the EU-15, being the returns in the Baltic countries even lower.

Table 1.5.

Returns of agricultural and dairy products (1998)

	EU-15	Slovakia	Eslovenia	Estonia	Hungary	Latvia	Lithuania	Polonia	Czech R.
Soft wheat	6,8	4,2	4,8	–	4,1	2,5	3,0	3,6	4,2
Corn	8,8	5,5	7,3	–	6,0	–	–	5,8	6,1
Sunflower	1,8	1,6	–	–	1,7	–	–	–	2,1
Beet	57,2	–	49,6	26,1	42,0	35,6	29,0	37,9	–
Potatoes	36,3	14,3	22,5	14,3	18,9	12,1	15,1	20,0	21,2
Milk	5.639	4.000	3.199	4.070	5.225	3.560	3.104	3.477	4.837

Source: Eurostat and EC (2002)
Values in Tm/ha, except for milk production (litres per cow/year)

Also, as it has been noted above, a significant part of the agricultural output in the AC would go to the livestock subsector, in a much higher proportion than that of the EU countries. The estimations by Allain Pouliquen (2001) would indicate that these countries' efficiency ratios in fodder conversion would be around 50% of those of the EU, having a very negative impact on the final output of the agricultural sector. In addition to this productive weakness that would generate high productive costs, as was the case with the agricultural productions, the physical returns as regards to stockbreeding in the AC are lower than those in the Community, though in this case the difference is smaller, about 30%. As regards to the dairy sector, farm improvements during these last years in Hungary and Czech Republic have enabled their returns (in litres per cow and year) to account for 93% and 86%, respectively, of the average returns in the EU (5, 639 litres). Dairy returns in Poland, on the other hand, are slightly under 62% of the Community average.

Farms low input levels in the AC are responsible, to a large extent, for their low productive returns. Thus, the cost per hectare of fertilisers, phytosanitary measures, or seeds, is less than 50% of the cost on farms in the EU-15. Something similar happens in the livestock subsector as regards to products such as concentrated fodder, veterinarian products and services and so forth. Besides, to this low level of utilisation of variable elements we must add a more than deficient level of farm investment in fixed factors, due to the financial shortages these countries went through at the end of the socialist period. To this lack of own resources to make investments we

must add the great difficulty of AC farms to access to credits, due to their low profitability, the high interest rates existing and the lack of guarantee of the lands, as a result of the instability of property rights. Thus, indicators such as the level of investment, amortisation or capital, both per job and per hectare on AC farms, are way below Community levels, compelling these countries to carry out extensive production which results in very low productivity.

All this situation, aggravated by the high level of farm employment stemming from the significance of subsistence agriculture, results in a minimum level of productivity per job. Thus, in Poland, where the number of agricultural jobs per hectare is more than three times that of the EU-15 (see Annex 2), the gross value added per job is equivalent to only 8% of the EU-15 average. The situation in the Baltic countries is also very similar. On the other hand, in Hungary, Czech Republic and Slovakia, where the number of agricultural jobs per hectare is much lower, the productivity per job is four times higher (in the case of Hungary) than the AC average.

Considering the present productive levels and the serious structural deficiencies existing in the AC, especially the weight of subsistence agriculture and the general difficulty of farms to make the necessary investments to boost their competitiveness, it is not easy to venture the actual possibilities of an increment in agricultural productivity in these countries. At any rate, once the structural deficiencies are overcome, the dairy and cereal subsectors seem to have a higher competitive capacity in the medium term, and in the long term (depending on their ability to respond to the challenges resulting from the adoption of European quality standards), the meat subsectors. In this regard, for example, the overcoming of deficiencies regarding the low meat-fodder conversion rates, would not only enable an increment in competitiveness within the livestock subsector (due to cost reduction), but also the release of a substantial part of the cereal production, which could be used for other commercial ends, such as its sale in the EU-15.

After the accession of the candidate countries to the EU, the CAP will undoubtedly have a very significant role in the medium term growth of their agricultural output. On the one hand, the granting of direct aids may involve a serious hindrance to the much needed restructuring of farms and, especially, it may slow down considerably the discontinuation of activity in the less market-oriented farms. On the other, quotas and other production restrictions (plantation rights, maximum guaranteed areas and so forth) may involve a significant hindrance that, in the light of a productive capacity that is at present mostly unknown, might have a negative influence in the development of some CMOs in the acceding countries. Obviously, the structures policy typified by the regulation on rural development may imply an important source of funding for the restructuring process, although in order to take full advantage of this instrument, the AC must overcome the serious deficiencies the SAPARD programmes have at present and that have prevented them from being successful (Wilkin, 2001). Finally, the medium and long-term uncertainty itself that always characterises the CAP may weigh down restructuring in these countries by hampering decision-making by farm businessmen regarding the expected future profitability of agricultural productions.

1.4 Rural areas in the acceding countries

As shown in Annex 1, population densities in the AC vary, especially when comparing the three Baltic countries (about 40 inhabitants per Km^2) with, for example, Central European countries (about 125 inhabitants per Km^2 in the AC-3). The population of Central European countries, however, would be distributed more homogeneously along the territory, exhibiting, thus, more populated rural areas than those observed in the EU-15 (especially because of the influence in the latter of the uneven population distribution in Southern European countries).

According to Davidova *et al.* (2000), despite the heterogeneity of rural areas between the AC, there are some general differential features with the EU, chiefly:

- More dependence on agriculture, both in employment and output.
- A higher risk of depopulation due to the substitution on farms in the next years of labour force with capital.
- Disappearance of sources of extra-agricultural employment (state industries) that existed during the socialist period.

The rural areas in the AC would have suffered especially the effects of the economic transition process that took place in the 1990s. Thus, from the SAPARD programmes themselves developed so far follows that rural areas in the AC are facing problems that stem from the general debilitation of its rural economy, specific weaknesses of its agricultural sector and difficulties for reemploying its surplus labour force in agricultural activities. The main characteristics of this economic weakness are: low incomes, exodus of young population and ageing of resident population, low development of infrastructures, low educational level and, especially, nonexistent training for the development of new business activities and difficulty of access to credits. The defects of the agricultural sector have been widely discussed previously, but it should be highlighted that those that would have a major impact on likely processes of rural development are the ineffectiveness of agricultural structures and the lack of commercial chains and agro-food industries in rural areas. Obviously, the difficulties to reemploy surplus labour force outside agriculture stem from the high rates of unemployment, so at present this possibility is almost nonexisten in countries like Poland, whereas in countries with lower rates of unemployment like the Czech Republic or Hungary they could adapt more easily to policies of activity diversification and assessment of agricultural production, such as those used generally in the EU.

The high levels of subsistence agriculture and rural unemployment in the AC, makes the problematic of these countries' rural areas completely different from that of the EU-15. Thus, whereas in the EU-15 the main problem of the European rural areas is a problem of depopulation and absence of productive activities (not of wealth), in the AC the rural areas are facing a situation of poverty, overpopulation and present and future exodus to urban areas. In fact, rural development in the AC should not be understood in the traditional sense of a search for diversified activities that enable to keep low population levels in rural areas, but as a real policy of agricultural development and of infrastructures that provides human training and the development of an economic fabric in medium and small size cities. However, the problematic in some regions of the most industrialised and urban countries such as the Czech Republic or Slovakia is more similar to that of the EU-15. On the other hand, we can generalise about the problem of lack of infrastructures in rural areas, as can be judged by the density rates regarding roads, telephone lines, electrification and water supply, and so forth (Fernández Salido, 2002).

According to Cunder (2001), however, in spite of the great differences between the problematic of rural areas in the EU and in the AC, accession negotiations regarding rural development have taken place alongside negotiations regarding the instruments included in the first pillar of the CAP, that is, discussing quantities instead of instruments. In spite of analysing the real problematic of the rural areas in the AC and pondering over the type of instruments and policies required, the solution has always been to try to increase the amount of aid provided within the framework of the Regulation (CE) 1257/99, on rural development, even though its sectorial nature prevents it from giving answers to the major problems in the AC.

2. Economic and political convergence of the acceding countries with the EU-15

The aim of this second chapter is to discuss the level of convergence achieved during the 1990s in agriculture between the AC and the EU, in the context of the accession of these countries to the EU and, as a result of their adoption of the CAP. In order to do that, the economic convergence will be analysed first, focusing on two aspects: the relative development of agricultural prices and of bilateral agricultural trade between the EU and the AC. Secondly, the agricultural policy convergence will be discussed, focusing on the development of public support to agriculture in the AC and the existing problems regarding the adoption of the community acquis.

2.1. Economic convergence

2.1.1. Development of agricultural prices

At the beginning of the 1990s, most prices regarding agricultural products in the AC were way below the average prices in the EU (for example, for the main cereals, wheat, corn and barley, the differential was –60%), and even below world prices (differential –15% for main cereals[3]). However, throughout the decade a price convergence has taken place that has affected all products and countries, though it has been more substantial in some of them (Poland being the most significant case).

In addition to this price convergence there has also been a significant quality differential among products (notably in beef or milk) which would make that a significant part of the price differential still existing were a result of the quality differential. Partly because of this, and partly because of the high self-sufficiency rate of acceding countries regarding products of animal origin, the price of the latter would keep a differential in relation to the community price higher than that of cereals. It is expected that in this type of products the adoption of community quality standards rise prices, first because it will imply the withdrawal from markets of lower quality products (which may aggravate the situation of consumers with less purchasing power) and, second, because it will mean a boost for the restructuring of commercial chains and industry, increasing the quality and processing level of the products offered.

When analysing price convergence, the major devaluation of domestic currency undertook by acceding countries, especially at the beginning of the 1990s, must not be obviated. This devaluation meant the maintenance of farm prices in euro, but also a significant fall in prices of their domestic currency, which between 1996 and 1999 had fallen accumulatively 26% in Poland and 20% in Hungary and Czech Republic (Pouliquen 2001). Besides, the fall experienced by farm prices in the EU, especially in real terms, as a result of the successive reductions of intervention prices in a significant part of the CMOs that make up the CAP, has contributed substantially to this price conversion.

However, although convergence of farm prices to those of the EU is a common feature to all AC and products, the differences are significant in both cases. Annex 5 enables the analysis of the development of the existing differential between the prices of the main farm products in the AC-3 and those of the EU. We can see that the trends are homogeneous for each product in the three countries.

[3] Own estimation with data from DG Agriculture

Products such as milk, beef, sugar, rice or other cereals (specially rye) whose prices in 1993 were in general more than 50% lower than community prices, show now price differentials ranging between 10 and 30% (it can be seen that the differential is more persistent in pig products, because of the quality differences and sanitary requirements the products have depending on the place). As for products, the most significant fact would be the price of wheat in Poland, which would be higher than that of the EU since the mid-1990s. As regards to countries, the largest price differentials are observed in the case of the Czech Republic.

2.1.2. Development of bilateral agricultural trade

During the first half of the 1990s, the AC subscribed trade association agreements with the EU that provided them more advantages in the access of their farm products to community markets. Since then, however, whereas agricultural exports from the AC to the EU have doubled, those from the EU to the AC have multiplied by ten, going from a negative balance of 1,000 million euro to a positive balance for the EU of 2,000 million euro (Swinnen, 2001). As Annex 4 shows, this situation of bilateral trade favourable to the EU would be constant between all the AC countries except Hungary. By subsectors, the trade balance would be balanced or even favourable to the AC in livestock production, quite favourable to the EU in agricultural output and very favourable in the case of processed products, which are the main factors contributing to the great expansion of community exports to the AC. As to trade with third countries, the structure of trade balances is similar, being negative for all the countries except Hungary, due mainly to the deficit in the balance of farm products, but especially in processed products. Following the figures shown in Annex 4, the share of processed products exported by the AC to the EU is much lower than the share of products of animal origin and agricultural products, which is an indicator of how greater product quality requirements in the EU would deflect processed products from the EU to third countries.

At any rate, apart from the absolute figures it is important to note how agriculture would account for less than 10% of the AC-10 total trade (8.4% of imports and 7.2% of exports, see Table 4.1, Annex 4), and even less in the bilateral trade of these countries with the EU (6.1% of exports and 9.1% of imports). This is a common feature to all the countries, with the exception of Slovenia, whose trade with the EU would be eminently agricultural. This contrasts with the significance that agricultural exports have for some of the present Member States of the EU (Sumpsi, 2002), like Greece (21% of total exports), Denmark (21%), The Netherlands (17%) or Spain (11%), as a result of both the greater competitiveness of agriculture and the AFI of community countries on the one hand, and the presence of a system of export subsidies harboured by the CAP on the other.

2.2. Agricultural policy convergence

2.2.1. Convergence of agricultural policies

The group of AC differs substantially in relation with the agricultural policies they implement and the development these policies have undergone throughout the decade. Thus, in Poland and the Baltic Republics, the first reaction after the end of the socialist era was characterised by a total suppression of all the instruments of support to agriculture (Table 2.1 shows how even in the case of the Baltic Republics the producers' support estimates (PSE) reach negative values in different years), although they were gradually recovered in the second half of the decade. Alternatively, in the Czech Republic, Slovakia and Hungary deregulation of agriculture was more gradual and was followed, in the second half of the 1990s, by a general adoption of similar instruments to those used by the CAP.

In the AC, the policies aimed at supporting agricultural prices, especially by means of border protection, have had greater significance than direct aids, especially in comparison with the EU, where these payments would have an increasingly significant role in the state intervention on agriculture. In fact, direct aids would be extensively used only in Slovakia, Lithuania and Latvia. Compared to these market policies, in line with those corresponding to the first pillar of the CAP, the AC would have scarcely developed policies of rural development, limiting themselves to the dawning programmes stemming from the pre-accession instrument SAPARD.

Nevertheless, when analysing the kind of policies implemented by these countries, we must take into account the significance of subsistence agriculture as a social cushion against a generalised growth of the unemployment rate, especially high in rural areas. Thus, border protection focuses especially on the most intensive products as regards to labour force (products of animal origin, potatoes and beet). Besides, these products have a competitive advantage against products from the EU, for the environmental, sanitary and quality requirements in these countries are less demanding, so part of the production can be exported to third countries, especially to the former USSR (obviously these policies can turn against these countries after the accession and certainly prompt a major restructuring of production to make easier the adoption of higher standards required by the EU).

At the end of the socialist period, public support to agriculture was wider in the AC than in the EU (see Table 2.1), with the exception of Poland (where support was much lower) and Hungary (where support was about the same). Since then, the smaller financial power of these transition economies to maintain the budgetary cost has made public support to agriculture fall, with present values corresponding to, approximately, 50% of the values in the EU-15, with the exception of Slovenia. Obviously, the major reduction has taken place in the case of support through direct aids, insomuch as the budgetary burden of these policies is much higher than aid policies via prices (supported to a large extent in border protection mechanisms).

Table 2.1.

Public support to agriculture, estimated as % PSE[1]

	1988	1991	1994	1997	1999
Slovakia	46	35	23	13	25
Slovenia			32	37	52
Estonia	79	59	–10	5	5
Hungary	35	11	24	7	20
Latvia	82	83	6	4	17
Lithuania	80	–262	–15	3	14
Poland	27	1	18	22	25
Czech Republic	53	52	20	9	25
EU	42	51	42	38	49
OECD	38	41	37	31	40

Source: OECD

[1]%PSE: Producers' Support Estimates

When analysing the values in the previous table some remarks on the geographical similarities regarding public support to agriculture should be made. Thus, the levels of support in Poland, Czech Republic, Slovakia and Hungary would be very similar (25% in the first three and 20% in Hungary), lower in the case of the Baltic countries and much higher in Slovenia (52%). Obviously, the levels of public support to agriculture differ noticeably too among products. Thus, table 2.2 details the levels of public support in the last years to some products in Poland, Hungary, and Czech Republic. As can be noted, in spite of the lower level of public support in these countries to agriculture as compared to the EU, it is higher in the case of products that receive little support in the EU such as eggs and poultry.

The differences between the AC and the EU as regards to public support to a number of agricultural products may also be seen as an indicator of the competitive capacity of the AC in the case they received similar support to the one they would after accession. In this regard, a significant increase in competitiveness of cereal and oilseed in Hungary and Czech Republic may be expected (more moderate in the case of Poland), minimal in stock products such as milk, beef and pigmeat (mainly because of the above mentioned differences in quality), and loss of competitiveness in the case of poultry (since this sector receives much more support in the AC).

Table 2.2.

Public support to agriculture, AC-3, per product[1]

	Poland		Hungary		Czech Republic		EU	
	1997	1999	1997	1999	1997	1999	1997	1999
Wheat	21	15	–13	–8	–9	3	44	58
Corn	25	2	–32	–10			35	42
Other cereals	23	25	–6	15	–11	–8	56	67
Oilseeds	10	23	1	29	–25	–16	49	46
Sugar	36	46	48	54	23	38	44	58
Milk	8	9	41	50	30	36	46	58
Beef	10	–2	12	5	13	8	56	60
Pigmeat	27	41	2	0	–1	43	10	10
Chicken	30	30	28	43	31	42	20	35
Eggs	44	62	51	36	34	40	1	16
The products as a whole	22	25	7	20	9	25	38	49

Source: OECD

[1]The data for 1999 are provisional figures

Finally, as regards to the implications of the EU enlargement to a EU-25 within the framework of a new round of negotiations at the World Trade Organisation, the effects are difficult to assess due to the large number of factors at play: development of community and world prices, development of the CAP and trade agreements, development of the dollar-euro exchange rate. Most of the simulations carried out (Huan-Niemi and Niemi) show less significant effects for the EU, especially regarding commitments for the reduction of export subsidies, though variable among products (for example, the Enlargement would make easier the fulfilment of commitments in products such as cheese or chicken, whereas it would make it more difficult in powdered milk), or even in terms of considered compromise (thus, the fulfilment of volume compromises as regards to the pigmeat sector is expected, whereas subsidies per exported ton might be reduced).

Analysing present levels of border protection in both the EU-15 and the AC-10, van den Hoven *et al.* (2002) conclude that the accession would mean a significant increase in tariffs for non-processed agricultural products in the AC (especially in products like wheat, sugar, beef, milk and dairy products). For the WTO this tariff increase might involve compensation claims by the rest of countries, especially the United States. However, today's poor commercial flow between the United States and the AC, and the greater leadership capacity of a EU-25[4] seem to guarantee that the difficulties in the next negotiation for the EU stemming from the process of Enlargement would not be very different from the ones it would have to face in the case that process didn't exist (Sumpsi, 2002).

[4]Especially understood as a previous stage to a EU-27, with the accession of Bulgaria and Romania, creating a great appealing market for exporting countries that would try to reach preferential agreements with the EU, following this widely used Community policy.

2.2.2. Adoption of the community acquis

After ten years of preparation of the AC for accession to the EU the institutional differences are still very substantial. In fact, the significant economic transition these countries have undergone during this period in order to access democratic political systems and market economies, has partially prevented them from focusing their efforts on the adoption of institutions and administrative systems similar to those of the EU. This situation makes at least questionable, even in the present situation prior to the effective accession to the EU, the ability of the AC to manage all the administrative systems that the adoption of the community acquis requires. In this regard, the great administrative complexity involved in the management of the CAP in matters such as area and production management, quota regulations, granting, follow-up and management of subsidies, etc., must not be obviated. As to the structural policy, the difficulties would even be greater, for it also requires significant programming ability (Wilkin, 2002, regards this aspect as one of the main lessons to be learnt from the relative failure of the SAPARD programme). For example, the last reports for the case of Poland show how the required operational structures for the integrated system of management and control for farm support (ISMC) would not be ready yet, nor the mechanism for animal identification and recording or the instruments for the management of milk quotas.

Specifically, it is extremely important the ability of the AC to control their external borders after their accession to the EU. This is one of the two areas the Commission would consider impossible the granting of transitional measures[5]. In this regard, the challenge for the AC is very significant, given the dimension of the new borders, the need to implement the new systems of control and quality standards of the EU, and the fact that failure in these systems would mean the immediate closure to the free movement of goods between the present borders of the EU-15 with the AC.

[5]The second one would be the follow-up and control that stems of the regulation in force regarding the Bovine Spongiform Encephalopathy.

3. The negotiation process of the enlargement

3.1. The beginnings of the negotiation

The ten acceding countries just integrated in the EU formalised their application for membership between July 1990 (Cyprus and Malta) and June 1996 (Slovenia)[6]. Negotiations for membership formally began in March 1998 for a group of five countries (Czech Republic, Estonia, Hungary, Poland and Slovenia). From that moment on each acceding country begins a long process of negotiation with the EU divided into 30 chapters. Due to the significance of the CAP in the EU, the seventh chapter, agriculture, has been the last chapter to be opened (in June 2000) and closed, obviously together with chapter twenty ninth, financial and budgetary aspects. When evaluating the slow process of negotiation as regards to agriculture, it must be taken into account that at present the CAP absorbs 45% of the EU's budget, the significance of agriculture in the AC, and the complexity of matters such as the setting of direct aids; quotas, production rights and maximum guaranteed areas; the historical yields used for the estimation of subventions; the transposition to the AC of market mechanisms; the implementation and financing of structure and rural development policies, and so forth.

An important aspect of the negotiation process involved the preaccession programmes: PHARE *(Assistance for Economic Restructuring in Central and Eastern European Countries*[7]), ISPA *(Instrument for the Structural Policies for Preaccession)* y SAPARD *(Special Accession Programme for Agriculture and Rural Development)*. These programmes were implemented both to facilitate the incorporation of the AC to the EU and to foster familiarity in the administrations of the AC[8] with the way of functioning and programming of the EU (a specially significant aspect regarding agriculture and rural development). Obviously, from the perspective of agriculture, SAPARD is the most interesting programme, with an annual budget of 520 million euro[9]. This programme, which has not been applied in Cyprus and Malta, enabled the AC to implement a rural development policy cofinanced by the EU (to be awarded by EAGGF-O, 80% maximum ceiling of) through the election of specific measures from a menu including 15 possible measures[10]. However, a significant part of the objectives included in the programme were not achieved due to the substantial delay in their implementation (Wilkin, 2002).

There is no doubt that a milestone in this process of negotiation was the European Commission's agricultural offer proposal to the AC (EC, 2002c), completed with an associated financial offer (EC 2002d). In this agricultural offer of January 2002 a significant part of the elements that have made the closure of negotiations possible was advanced, especially the phasing-in as regards to granting of direct aids to producers in the new Member States, who would receive at first 25% of the payments granted to producers in the EU-15 in 2004, to end up receiving 100% in the year 2013. The offer of phasing-in access to direct aids solved, first, a long polemic on the legitimacy of direct aids demand on the part of the AC (Massot, 2002a). In this regard, it should be borne in mind that the Commission's initial position (June 2000) was to turn down the granting of direct aids to the new countries, preferring instead to give a significant boost to the measures included in the second pillar of the CAP (rural development).

[6]However, the oldest membership application belongs to a country that has not been admitted yet, Turkey, 1987.
[7]The lack of correlation with regards to the initials is because PHARE is born in the year 1989 to assist financially Poland and Hungary (Poland and Hungary Assistance for Restructuring Economies).
[8]These programmes were at the disposal of both the AC-10 and also Bulgaria and Romania.
[9]The annual budget of PHARE is 1,500 million euro, and of ISPA 1,040 (EC, 2002f).
[10]Eleven of them included in the Regulation (EC) 1257/99, of rural development, and four specific measures for the AC: in favour of product quality and the establishment of veterinarian controls, measures for the establishment and improvement of systems of registry of land ownership, assistance to the establishment of producer groups, and technical assistance. For more information see the annual reports of programme implementation (EC, 2002).

Besides, the phasing-in seemed a good intermediate solution between the access of the AC to direct aids and its likely negative effect on the production restructuring processes in these countries.

The offer of January 2002 meant for the AC to take part in the support coming from the first pillar without restraining the weight given to measures belonging to the second pillar (Regulation 1257/99, on rural development), which were, in fact, supplemented with specific measures for these countries, such as the possibility of granting specific support to semi-subsistence agriculture. In addition, the offer focused the negotiation largely on returns, areas and production rights, and, in general, it was characterised for providing wide flexibility to the new Member States as regards to the final granting of aids among a number of agricultural subsectors. The offer also enabled to keep the budgetary cost of the Enlargement within the limits established by the Berlin Summit of 1999.

However, despite the significant progress that the agricultural offer of January 2002 meant, the negotiations slowed down in the following months, basically for three reasons: Firstly, because the AC thought that the offer made by the Commission was not very generous, especially Poland, the largest of the AC. Concretely, apart from the logical discrepancies on the amounts bid for returns, areas and production rights, the AC required a faster timetable for the access of their producers to the same direct aids as producers from the old Member States. Secondly, because of the discrepancy among present Member States whether to make a deep reform of the CAP before the Enlargement or not, an argument that became more heated after the ambitious proposal for reform of the CAP put forward by the Commission in July (EC, 2002e). And, in third place, because of the elections in France and Germany.

3.2. The final stage of the negotiation: the Council of Brussels of October 2002

The prevailing scepticism at the beginning of the Danish presidency of the EU on whether a final agreement on accession would be reached by the end of the presidency making possible the incorporation of the AC-10 to the EU in 2004, would be over at the European Council held in Brussels on October 24-25. A substantial part of this scepticism was due to German fears that the Enlargement, even in the terms established by the agricultural offer of January 2002, soared EU's budget in the following years. That offer enabled to keep agricultural costs until 2006 well under the limits fixed at the Berlin Summit of 1999, but couldn't avoid their soaring after 2006, with the development of pending reforms such as those of the MCO regarding milk and sugar, which could absorb substantial budgetary resources.

A pre-agreement reached by France and Germany on previous dates completely cleared the way for the development of the European Council of Brussels of October 2002. Firstly, the Council gave its approval to the entrance of the AC-10 starting from 2004, and the postponement of the entrance of Bulgaria and Romania until 2007. The key issue for this acceptance was the agreement reached by the Council regarding the stabilisation of the agricultural expenditure[11] during the period 2007-2013 at the level established during the Berlin Summit for the year 2006, increased at 1% annually, which meant, in constant euro, the acceptance of a small annual reduction of the budget. This freeze of most of the CAP budget, heading 1A, composed of market regulation expenses and direct aids to farmers (first pillar of the CAP), but that didn't include heading 1B, support to rural development (second pillar of the CAP), was in line with the Commission's position regarding the negotiation offer of January 2002 mentioned in the previous epigraph.

[11]In its main component, direct support and market support schemes, heading 1A of the CAP budget

At the Brussels Summit, the Council endorsed the Commission's proposal for phasing-in direct support to the new member States as it had been defined in the proposal of January 2002. Since this phasing-in implies low percentages of direct aids in the first years after the accession and, as it was noted in section 3.1, since the AC receive at present pre-accession funds, the agreement of the Council of Brussels included also the assignation of temporal economic compensations in case that during the period 2004-2006 some new member State were in a worse net budgetary situation than in the year before their accession (2003). Finally, the Council confirmed the inclusion in the Accession Treaties with the new Member States of a specific protective clause that could be appealed to during the three years after the accession by any member State or by the European Commission itself in case that an acceding country did not honour its obligations.

3.3. The Agreement of the Council of Copenhagen of 2002

At last, the agreement for the Enlargement of the EU was closed on 13 December, 2002, at the European Council of Copenhagen, setting May 1, 2004, as the accession date for the ten new member States[12].

The final agreement is very similar to the one agreed in Brussels in October. In fact, throughout the year 2002, the various AC had focused on the renegotiation of returns, areas and production rights that would be acknowledged in the accession treaties and accepted, broadly speaking, the pre-agreements reached (Annex 6 details the applications of the AC and the final agreement in relation with reference areas, returns and production rights in a number of MCOs). Only Poland went to Copenhagen with an evident belligerent attitude, demanding a hastening of the timetable for the phasing-in of direct aids.

Thus, apart from the additional funding of 408 million euro to the AC to strengthen the protection of their external borders and some concessions to Poland in relation with adaptations of its milk and sugar quotas, the chief concession to the AC was to provide significant flexibility at the time of completing direct aids with either funds aimed at rural development or with domestic resources. There is no doubt this meant a step backwards with regards to the Commission's firm conviction (as can be judged by all previous offers) of the priority nature of rural development schemes in relation with direct payments (first pillar of the CAP). In principle, in accordance with the Commission's agricultural offer of January 2002, the new Member States will receive an amount equivalent to 25% of the payments received by farmers of the EU-15 in the year 2004, 30% in 2005, 35% in 2006, 40% in 2007, and from that year on an additional 10% each year, until they reach 100% in 2013. However, in the Council of Copenhagen the EU agreed that the new Member States be able to complete the aids transferring up to 30% of the credits aimed at rural development from 2004 to 2006 or using domestic resources so:

- Support reaches 55% of the community level starting from 2004, 60% in 2005, and 65% in 2007. From 2007 on these countries will have to continue providing this supplement by means of domestic funds only,
- Or to a level equivalent to the one farmers in the acceding country would have received before the accession (2003), under a similar national system, with a 10% increment (in the case of Cyprus and Slovenia the ceiling rises to 15% in 2005, 20% in 2006 and 25% in 2007)

[12]Taking that agreement as an starting point, the timetable for the final accession goes through the final drafting of the Accession Treaties, the opinion of the Commission and the Parliament, the signing at the European Council of Athens on 16 April, 2003, and ratification of the Treaties by each new member State through referendum in each country. This timetable will enable the participation of the new member States in the elections to the European Parliament next year, 2004.

In accordance with the Commission's opinion in its agricultural offer of January, the new member States will have the possibility of implementing a simplified system of direct payments, granted per area and released from production (and even from the product sown). This transitional system, with a three-year validity and renewable twice for one more year, has a close relation with the proposal of aids disconnection submitted by the European Commission in July (EC 2002e), denoting once again, the close relation between the process of Enlargement and the future of the CAP, aspect that will be discussed in chapter 5 of this work.

As to market support measures included in the CAP through the various MCOs, producers would have full access to them starting from 2004.

As regards to the rural development policy, financed up to a maximum of 80% by the EU, the final agreement with the AC includes four new measures specifically aimed at these countries: support to the adoption of community rules, specific measures on semi-subsistence farms, and measures on the establishment of producer groups and technical assistance. In particular, under these measures on semi-subsistence farms, the new member States may grant aids of up to 1000 euro per year. In addition, as regards to measures under Regulation 1257/99, small changes are introduced in relation to access requirements to support measures regarding farm investments and production processing and marketing, and the support measure regarding recruiting of management services (Regulation 1257/99, article 33) is extended to the hiring of counselling and agricultural extension services.

Thus, the EU's financial undertakings at the Copenhagen summit set the cost of the Enlargement for the 2004-2006 triennium in 40,800 million euro, of which 27,000 would come from present member States and 13,300 from the new member States. Table 3.1 shows this budget in detail per years and chapters, whereas countries are specified in table 3.2.

Table 3.1.

Budget of enlargement costs during 2004-2006

Sections	2004	2005	2006	TOTAL
AGRICULTURE	**1.897**	**3.747**	**4.147**	**9.791**
Market measures and direct aid	327	2.032	2.322	4.681
Rural development	1.570	1.715	1.825	5.110
STRUCTURAL EFFORTS	**6.095**	**6.940**	**8.812**	**21.847**
Structural Funds	3.478	4.788	5.990	14.256
Cohesion Funds	2.617	2.152	2.822	7.591
INTERNAL POLICIES AND TRANSITIONAL COSTS	**1.421**	**1.376**	**1.351**	**4.148**
Existing policies	882	917	952	2.751
Transitional measures for nuclear security	125	125	125	375
Transitional measures for the implementation of institutions	200	120	60	380
Transitional measures for Schengen	286	286	286	858
Administration	503	558	612	1.673
TOTAL OF CREDITS UNDERTAKEN	**9.952**	**12.657**	**14.958**	**37.567**
TEMPORARY BUDGETARY REDUCTIONS	**1.260**	**1.129**	**896**	**3.285**
Special treasury	998	650	550	2.198
Temporary budgetary compensation	262	479	346	1.087
TOTAL BUDGET ENLARGEMENT 2004/06				**40.854**

Source: European Council of Copenhagen, conclusions of the Presidency. Data in millions of euro

Tabla 3.2.

Budget of agricultural costs for the enlargement during 2004 - 2006

Distribution per country

	Direct aid			Market support			Rural development		
	2004	**2005**	**2006**	**2004**	**2005**	**2006**	**2004**	**2005**	**2006**
Cyprus	9	11	13	5	12	12	20	22	24
Slovakia	73	88	103	17	48	49	108	118	126
Slovenia	27	33	39	15	38	39	77	84	89
Estonia	17	22	26	14	33	34	41	45	48
Hungary	265	316	370	64	152	152	164	179	191
Latvia	25	31	36	9	22	24	89	98	104
Lithuania	68	84	98	23	56	59	133	146	155
Malta	0,1	0,3	0,4	0,7	1,7	1,7	7,3	8	8,5
Poland	557	675	790	135	350	377	781	854	908
Czech R.	169	204	240	45	109	111	148	162	172
AC-10	**1.211**	**1.464**	**1.743**	**327**	**822**	**858**	**1.570**	**1.715**	**1.825**

Source: European Council of Copenhagen, conclusions of the Presidency. Data in millions of euro

4. Enlargement and reform of the CAP

In order to assess the impact of the Enlargement on the European agricultural economy, one must know, or at least reflect upon, the most likely scenarios of reform of the Common Agricultural Policy (CAP) in the next years. In fact, the agricultural policy in the European Community involves a very high level of intervention and support to the agricultural sector, which conditions substantially business decision-making and, as a result, the impact of the Enlargement on the EU's agricultural economy. This impact will be totally different if the CAP keeps itself practically unaltered (status quo scenario) or changes substantially, in the sense of diminishing significantly the sector's public support (radical reform scenario).

For many years, an intense debate on the reform of the CAP[13] has been taking place in Europe. But, although there is an increasing number of academicians, experts and non-agricultural groups, and even agricultural ones, that put forward a profound change of the CAP, it continues to develop very slowly. This is so because of the strong pressure exerted by agricultural lobbies, that is, agricultural groups, and the opposition of many governments that consider that the acceptance of a significant reduction of direct aids would mean the loss of electoral support and the exit from power as a result[14]. Thus, the following analysis has been carried out from the perspective of today's reality and not from a utopian point of view. In other words, in the following sections the ***desirable development*** of the CAP won't be analysed, but the ***foreseeable development*** of the CAP will be the focus of our attention, two developments that have not been moving alongside for a long time and that will probably continue doing so.

4.1. Short and medium-term development of the CAP

The foreseeable development of the CAP will be analysed in two temporal scenarios: before and after 2006. For the first scenario, the decisive happening is the Brussels Summit held on October 24-25. That Summit, preceded by the agreement between Chirac and Schroeder, cleared the way once and for all for the Enlargement (see epigraph 3.2) and set a clear course for the reform of the CAP, closing, in addition, the circle of mutual interactions between the processes of Enlargement and CAP reform and settling the rather hair-splitting discussions whether the CAP reform comes before the Enlargement, or whether the Enlargement comes before the CAP reform. After the Council of Brussels of October it does not seem likely that any significant change of the CAP take place before 2006, at least as regards to aids cutbacks put forward by the Commission in the Mid Term Review (MTR) made public on 10 July 2002.

[13]Among the works that analyse the various options of CAP reform the following should be highlighted: Buckwell et al, 1997; Swinbank y Tangermann, 2000; Burell,2000; Swinnen, 2001; García Azcárate, 2002; Massot 2002a; Saraceno, 2002; Sumpsi, 2002;Sumpsi y Buckwell 2002; Wilkin, 2002). Besides, unlike past periods when possible CAP reforms were discussed without a previous positioning of the countries, now there are many member States that have developed and published documents stating their official position, especially the United Kingdom, Netherlands, Spain, Portugal and Finland.

[14]That explains how elections condition discussions on the reform of the CAP. Everyone knew that the reform of the CAP would not be discussed, let alone decided, the first semester of 2002 as a result of the French elections, and the same happened with the German elections. It is not a coincidence that the blockade of the Enlargement, and partly of the CAPreform, has taken place in the Council of Brussels on October 24-25, once the French and German elections have been held. This is one of the weaknesses that the lack of progress in the European political union lays down on the processes of reform of community policies.

In fact, the Commission itself in its Regulations proposal approved on 23 January 2003 (EC, 2003), does not lay down a reduction of direct aids for the period 2003-2006. Firstly, because with the agreement of the Council of Brussels, which established the CAP budgetary framework for 2007-2013, there is no need to reduce aids, as we can see in the chart of Annex 7 (MAPA, 2002). In fact, as we can see in the chart, there won't be any budget deficit until 2009, even if we take into account the budget's additional needs to finance the dairy sector reform endorsed in the Agenda 2000.

Secondly, because the agreement between France and Germany was reached under the following terms: agricultural budget freeze, chapter 1A (market regulations and direct aids costs) during 2007-2013, in exchange for not modifying the CAP until 2006, especially as regards to modulation[15]of direct aids. And in third place, because insomuch as the starting point to put into practice the freeze of the agricultural expenditure 1A agreed at the Council of Brussels is the agricultural expenditure ceiling for 2006 foreseen at the Berlin Summit of 1999, it seems evident that the direct aids reductions required to achieve the budgetary adjustment of the CAP in the following period of financial perspectives 2007-2013, begin in 2007 and not before.

The only open question as regards to the CAP reform before 2006 is the possibility of de-coupling[16] the present direct aids to consolidate the position of the EU in the commercial negotiations at the WTO. But this will not be necessary if negotiations harden and a strong pressure is put on the EU to dismantle or at least reduce the "blue box", where the present direct aids to the CAP are kept, and whose permanence is only guaranteed until December 2003, date when the peace provision expires. The new Farm Hill, recently passed by the United States, entails a significant increment of public support to its agriculture and the setting up of new mechanisms of agricultural support like anticyclical payments, which are difficult to classify according to the rules endorsed in the agricultural negotiation at the Uruguay Round. This makes one think that the position of the United States in future negotiations, at least as regards to direct aids cutbacks, will not be as hard as it was at the Uruguay Round.

However, the starting offer of the United States is quite hard in terms of aid and tariff reductions, which has raised serious misgivings on the possibility that Farm Hill itself may be able to carry out such reductions. There are many who think that the United States is playing a poker game and that is "bluffing". The same happens with the EU, which has just made its offer, also hard, for it pretends to lower the tariffs an average of 36% (with a minimum of 15%), reduce the budget aimed at export subsidies an average of 45%, and reduce the budget aimed at internal aids that distort trade (amber box) by 55%, though keeping CAP direct aids per hectare and head of cattle approved in the reform of 1992 (blue box)[17].

[15]The term modulation refers simply to the reduction of direct aids, though the name modulation is due to the fact that the reduction is not lineal, so the reduction is bigger or smaller according to the total amount of aid the farmer gets.

[16]De-coupled aids are those which do not depend on, and therefore do not alter, production decisions. That is, these are aids independent of production volume, of what is produced, and they can be received even if nothing is produced. Therefore, the de-coupling of direct aids consists in the conversion of present direct aids, more or less coupled to production, into aids totally de-coupled from production.

[17]An agreement was reached at the Uruguay Round on the classification of agricultural aids into two types: first, those aids coupled to production, that is, those that depend on the volume of production and that are consider to distort international trade (amber box). These are the aids that countries must reduce. The second type includes de-coupled aids, that is, those that do not depend on the production volume and, therefore, they are supposed not to distort international trade (green box). These are the aids countries can keep. When the CAP was reformed in 1992, a third type of aids was set up (aids to hectare and head of cattle), partially de-coupled aids that distortion slightly international trade (blue box).

But even considering the offer of the European Commission at the WTO, the proposal to de-couple all CAP direct aids is not justified. In fact, if the offer keeps the blue box where all the aids per hectare and head of cattle are included, what sense does it make to de-couple these aids unless it is to transform them into green box aids and thus eliminate or reduce substantially the blue box? Supposedly, the Commission is using the WTO negotiations as a pretext to propose a total de-coupling of direct aids. The real motives behind this proposal may be basically four: 1) an increased role of the market in producers decision-making; 2) simplification of aid management, of special significance for the new Eastern member countries; 3) budget consolidation and elimination of annual budgetary adjustments for areas sown; and 4) contribution to an environment-friendly agriculture, though there is not conclusive empirical evidence of the beneficial effects of de-coupled aids on the environment.

The de-coupling, however, may also bring about some adverse effects such as: 1) distortions and artificial changes in the crops system because de-coupled aid is generated by only some crops, but once the aid has been de-coupled, it can be received sowing the same crops than before or different ones; 2) distortions in the land market as a result and agricultural restructuring problems; 3) consolidation of the present aid distribution since it uses the historical reference to estimate de-coupled aid; and last but not least, 4) the consideration of de-coupled aids as direct income aids to farmers makes of the CAP a social policy instead of a policy of sectorial development, an operation of dubious social and political legitimacy. Why do farmers have to receive direct income aids and small retailers, for example, do not?

That is why a coalition headed by France and Spain has been set up, other members being Greece, Italy, Portugal and Ireland, which is against total de-coupling and proposes as an alternative smoother formulas of partial de-coupling that would suffice to assume the undertakings of the agricultural negotiations at the WTO, and would not cause so many distortions as the Commission's proposal of total de-coupling. The problem is that at any time France may go its own way if the script of the Franco-German romance says so and, anyway, all this game of alliances may be disarranged due to the serious differences existing as regards to the Iraq conflict. It is, therefore, difficult to predict what will happen from now to June of 2003 in the Council debates on the reform of the CAP submitted by the Commission in January 2003, although it is likely that a partial de-coupling is agreed, or at least a smoother one than the one proposed by the Commission.

It is very likely that international pressures in the agricultural negotiations at the WTO focus on the amber box. As a result, the EU will have to continue the reform process that began in 1992, extending it to sectors such as milk or sugar, and to de-couple direct aids included in the said box, as is the case of the olive oil, tobacco, cotton and other sectors. It is more difficult to guess the pressure exerted to eliminate or reduce direct aids of the CAP belonging to the blue box, which the Commission, as it has been said, pretends to keep. If the pressure is hard enough as to reduce, or even eliminate, the blue box, then the partial or even total de-coupling of aids per hectare or head of cattle should be brought up, something that was already included in the proposal for the mid term review of the CAP of July 2002, and it is included again in that of January 2003. It is likely, however, that international pressures are not as hard as to require total de-coupling of aids as the Commission proposed, so partial de-coupling continues to be the most likely scenario.

The Enlargement could difficult the fulfilment of the undertakings finally endorsed by the European Union within the negotiations at the WTO, especially those regarding the reduction of agricultural export subsidies (Sumpsi, 2002). Thus, the current negotiation at the WTO, together with other commercial agreements that the EU has concluded with the poorest countries (free access to the community market without limits), will force to include significant changes in sectors such as rice, sugar, cotton, tobacco, fruits and vegetables, olive oil and wine. Some of these changes were already included in the proposal for Mid Term Reform of July 2002, rice for example, but the pending reforms, which are not included in the Commission proposal of

January 2003, will have to be addressed around 2004, before the negotiations at the WTO are over. Some of these reforms will require additional budgets to compensate for reductions in agricultural prices and incomes, which might in turn cause budgetary deficits in the CAP and would force the introduction of further changes in 2006.

4.2. Long-term development of the CAP

Starting from 2006, the possibility of a deep reform of the CAP is open, though it is not easy to foresee neither its direction nor its intensity. In this section the elements of certainty, change, resistance and uncertainty that surround the development of the CAP will be analysed.

a) Certainty elements

Even in a long-term perspective there are significant certainty elements. This is completely new, since one of the main features of the CAP in the 1990s has been its uncertainty. In fact, in just ten years three large reforms have taken place: 1992, 1999, and 2002, the latter still pending of the Council's approval. This situation has had a negative impact on long-term investment decisions in farms, since they require a firm regulatory framework. It is true, though, that the uncertainty has been widely compensated with generous compensatory aids, that still exist after ten years of the first great reform of the CAP in 1992. The evidence that the sector is not doing bad at all, broadly speaking, is that the price of land has continued rising since 1993. As the price of land internalises the sector's incomes, both through the market and through public aids, this development means that the sector's incomes, as was the case, have enjoyed a favourable trend. During the last years, however, the upward tendency of land prices reflects some weariness (see Annex 8), first because prices are extremely high, and second, because the drums announcing falls in the amount of aids coming from the CAP are already beating hard.

What is new now, element of certainty, is that for the first time the CAP has a stable budgetary framework that covers a period of ten years: 2003-2013, from the Council of Brussels of October 24-25, 2002, a historic date that with the stroke of a pen cleared the way to both the Enlargement and the future of the CAP: two major decisions at the price of one, which makes evident, in spite of the Agriculture Commissioner's denials, that both processes were interrelated. The existence of a stable budgetary framework is, in principle, a good news, even though, as we will see, it has its lights and shades.

This stable budgetary framework means simply that the Enlargement's agricultural chapter must be done at zero cost, that is, without additional budget[18], a decision that conditions completely the future of the CAP until 2013. In fact, the Enlargement must be faced with this budgetary corset, as well as other new reforms of sectors such as milk, sugar, olive oil, cotton, tobacco, rice, wine, fruits and vegetables, of which milk and rice are already included in the Commission proposals of January 2003, but not the rest. All this, places the budgetary adjustment at the heart of the debate on the future of the CAP. Bad news, for what seems reasonable is to start with the agricultural policy that Europe needs and then assess its cost, and not the other way around, to start with the available budget and see what kind of policy can be done with that money.

[18]Actually it is not exactly so, since the Council of Brussels decided to increase 1% annually the ceiling of agricultural spending of 2006 set at the Berlin Summit of 1999 so as to take into account inflation; but since inflation will be higher that 1%, it means, in real terms, a drop of the budgetary ceiling.

[19]In fact, most proposals coming from the academic world as well as the various documents drawn up by member countries reflecting their official position, state this idea. Besides, this idea was present at the debate on rural development of the Informal Council of Murcia, held during the Spanish Presidency, where a wide consensus on the idea was observed. Another matter is the volume of the reduction of aids to be transferred from the first pillar to the second pillar, insomuch as most countries propose reasonable reductions, whereas a few of them propose more substantial reductions.

At the moment, to discuss on the future of the CAP is more an exercise of budgetary engineering than of sectorial economic policy. That is, the CAP has become a field of study more for auditors, controllers and public finance experts than for specialists in economy and agricultural policy.

If we join the budgetary corset with the reluctance of most member States, with France heading the way, to reduce substantially CAP aids, the final outcome is that one of the proposals that has brought significant consensus in Europe during the last years[19]: the reduction of the first pillar of the CAP (direct aids and market intervention costs), and the transfer of the saved budget through such reduction to the second pillar (rural development aid), is going to come to nothing. In fact, the savings from the reduction of the first pillar aids, won't be used entirely to increase the budget of rural development aids, for a significant part of those savings will have to be used to finance pending reforms in the above mentioned sectors.

Actually, the Commission's proposal for the CAP reform of January 2003, which will be discussed in the Council the next months, has already taken into account the need of using a substantial part of the savings coming from the reduction of direct aids to finance pending reforms in some productive sectors.

The Commission's proposal of January 2003 includes three horizontal elements: total de-coupling of most direct aids and their conversion into an only de-coupled aid, modulation of the only de-coupled aid and extension of the measures included in the Regulation on Rural Development (second pillar of the CAP). Also, the proposal considers a series of more or less significant modifications in the regulation of the cereal, hard wheat, fodder, dry fruits and milk sectors, the latter having a very significant budgetary impact. The following sections will focus on the three main horizontal elements.

As regards to **de-coupling,** the proposal would be implemented in 2004 and as a result it has been analysed within the epigraph on short and medium term development of the CAP, that is, before 2006. It has been said already that the Commission's chief case to propose the total de-coupling of most direct aids is to enable the EU an offensive strategy in the negotiations at the WTO, although the need for such a drastic de-coupling was also questioned and the advantages and disadvantages of total de-coupling were exhibited, to conclude that the most likely scenario is a partial and smoother de-coupling of the budget by the Commission. An essential element is that the farmer will have to comply with a series of standards on environment, food safety, welfare of animals and job safety. Non-compliance will imply a reduction, or even total loss, of de-coupled aid. Audits will be put in place that will function as an information system for the farmer and will facilitate the administration's control of standards compliance. Audits will be compulsory for farmers with aids over 15,000 euro, or with sales over 100,000 euro.

As regards to direct aid **modulation,** it is an essential element that needs to be discussed in detail. And it must be done here, within the epigraph on long-term development of the CAP, since the Commission's proposal of January 2003 pretends to initiate the modulation after 2006, with the following gradation.

Direct aids	Reduction of direct aids (%)						
EURO	2007	2008	2009	2010	2011	2012	2013
1-5.000	0	0	0	0	0	0	0
5.001-50.000	1	3	7,5	9	10,5	12	13,5
>50.000	1	4	12	14	16	18	19

Thus, the Commission proposes a progressive modulation in accordance with the amount of direct aid received per farm. From the first euro received to the 5,000, first stage, there is no reduction. From the 5,001 euro received to the 50,000, second stage, there will be an average type reduction, from the 50,001 euro, third stage, the reduction will be more significant. Besides, the diminution curb as regards to time of direct aids is not linear, but it is very smooth in the beginning and undergoes a sharp leap in 2009, which surely has to do with the Commission's budget forecasts. In fact, the chart in Annex 7 (MAPA 2002) shows that the first deficits appear in 2009, without taking into account the coming into stage of new reforms such as the sugar, olive oil, tobacco or cotton.

The worst news as regards to the Commission's proposal of January 2003, though after the Council of Brussels we could see it coming, is that only 1% of the direct aids reduction would go to rural development in 2006, 2% in 2007, 3% in 2008, 4% in 2009, 5% in 2010 and 6% in 2011, year in which the maximum top is reached. The rest of direct aids reduction would go to finance pending reforms. That is, those who are going to finance the new aids to the milk or sugar producers of the EU-25 or the additional cost of future market regulations for tobacco, cotton, olive oil and perhaps fruits, vegetables and wine, will be the producers of beef and veal, sheepmeat or goatmeat, cereals, oilseeds and protein crops of the EU-15, insomuch as the Commission's proposal excludes the new member States from the application of direct aid modulation (phased-in reduction), until the farmers of these countries receive 100% of community aids, which will happen in 2013.

As regards to the extension of the **measures contained in the Regulation on rural development,** it is a proposal that introduces new instruments of agricultural policy to give an answer to the concerns of European citizens and consumers. Thus, a whole set of aids is introduced to encourage quality of agricultural and food products, to ensure food safety, and to improve animal welfare and conservation of rural heritage, and transitional and decreasing aids are set up to compensate for the loss of income resulting from the compliance with more demanding standards and to contribute to the financing of audits. Some of these new measures come from measures that had been offered already to acceding countries in pre-accession programmes.

Once again, however, the Commission's good intentions are void of content, or budget that is, as a result of the financial restrictions dictated by Germany at the Berlin Summit of 1999 and consolidated at the Council of Brussels in October 2002. Thus, the measures included in the Regulation on Rural Development are extended, a positive fact, however, the budget for that Regulation barely increases, a negative fact. In deed, according to the Commission's own estimates, in 2007 the budget for rural development (second pillar of the CAP) would increase by 228 million euro, money coming from the reduction of direct aids (first pillar of the CAP), whereas in 2012 it would increase by 1,480 million euro. All that for 27 countries, that is, a joke[20].

b) Elements of change

Among the medium and long-term main elements of change that will put pressure on the reform of the CAP we can make a distinction between the internal and the external ones. As regards to the former, the citizens and the consumers of the European Union stand out, demanding safer food and a well-preserved environment. In addition, the European taxpayers will demand, with increasing insistence, that the agricultural cost be controlled and legitimated. But the level of organisation of consumers, taxpayers and ecologists is not very high, although the mobility and pressure ability of the latter is significant and has been magnified lately by the mass media.

[20]The Council of Copenhagen of December 2002 agreed the accession of Bulgaria and Romania in 2007.

But pressure will be undermined as a result of the Enlargement, for consumers and citizens of acceding countries are much less sensitive in terms of food safety and environment preservation than the citizens and consumers of the EU-15.

As for external elements that will put a pressure on the CAP, the most significant one is the current multilateral trade negotiation. This subject has already been analysed in the previous section, for these negotiations will take place during 2003-2005, that is, before 2006, though, as we noted at the end of section 4.1, some of the changes of the CAP resulting from the multilateral trade negotiations could take place even after 2006. The EU's budgetary situation will not enable to compensate entirely, by means of direct aids, reductions of intervention prices of still non-reformed sectors, though the budget for current direct aids (already reformed sectors) could be redistributed among productive sectors affected by the new reforms, which, as a matter of fact, the Commission proposed in its Document of January 2003.

C) Elements of resistance

The main elements of resistance to change in the CAP are pressures exerted by agricultural professional groups and the main beneficiary countries of the current CAP, besides, of course, the strong budgetary restrictions. As to the former, it should be borne in mind that the level of organisation of agricultural interest groups is significant, for they enjoy a long tradition as well as considerable ability to mobilise and exert pressure. On the other hand, although the agricultural working population in the EU-15 is only 4.3% of the total working population, the rural population linked to agriculture is larger, so the likely loss of rural votes stemming from the adoption of CAP reforms that affect negatively agricultural interests, affects politicians when making decisions in this respect, especially at election times. These pressures will increase as a result of the accession insomuch as the weight of agriculture in acceding countries is much more significant than in the EU-15, as was noted in the first chapter of this work. The hard position of Poland, the most agricultural of all the acceding countries, even in the final stage of the negotiation during the Copenhagen Summit, confirms this thesis.

As to the member countries position, the main receptors of CAP aids, with France leading the way, are in favour of leaving things as they are, whereas net contributor countries or those that receive little such as the United Kingdom, the Netherlands, Sweden and Germany are for a deep reform. Up to this moment, including the recent Franco-German agreement, endorsed afterwards by the Council of Brussels of October, it has always prevailed the position of countries that are in favour of keeping the status quo or undertaking slight reforms. The future seems to bring more of the same and the chances are that the new member countries join the advocates of the present CAP. In fact, as Poland made it clear in the hard final negotiations at the Copenhagen Summit of October, these countries put into practice the saying "a bird in the hand is worth two in the bush", and that is why they prefer direct aids, financed entirely by Brussels, to rural development aids (see section 3.3 of this work), for the latter require national co-financing and public and private ability to foster and manage projects, which is not very common in these countries. Therefore, the new members will be natural allies of countries within the EU-15 that support the current status quo, that is, the preservation of direct aids (first pillar of the CAP), even if it means to give up more budget for rural development aids (second pillar of the CAP)[21].

[21]In the future Council the 10 new member States will have, from 1 January, 2005, 82 votes out of a total of 321 and 16.6% of the population of the EU. These figures are far from the 232 votes or 62% of the population required for a qualified majority. However, it empowers them to form blocking minorities as regards to agriculture (it's enough with 90 votes and 38% of the population) if they add to the votes and population percentage of, at least, three more States. For example, with current cohesion countries (Spain, Greece, Portugal, and Ireland) plus Italy they would get 171 votes and 42.7% of the population. On the other hand, France, Spain, Greece, and Portugal, plus the ten new countries would get 164 votes and 43% of the population. These minority arrangements may also provide an additional situation: two large countries of the EU such as France and Spain or Italy, would need one another to block an agricultural decision that they consider goes against their interests and they would also need the support of all the 10 new members or, alternatively, to replace two or three of them, for example Czech Republic, Slovenia and Slovakia, by three small countries of the EU-15, for example Greece, Ireland and Portugal. As regards to demography, the position of Poland at any moment and under any circumstance will be essential, as well as Romania's, starting from 2007.

Finally, current budget restrictions make it difficult to think about deep reforms, unless they are neutral as regards to total cost. But even if they did not increase the total budget, it is certain that a profound reform would result in a redistribution of the money that each member States receives from the CAP, which means that the "losing" countries would oppose such reform or would make it very difficult. Any radical reform would affect France, the big loser of direct aides, which explains its leading role in all movements and coalitions to protect the present CAP, especially its second pillar.

C) Elements of uncertainty

The main elements of uncertainty are two: the final result of the European Convention and the future enlargements. As to the former, the European Convention can modify the rules of functioning, decision making and financing of the Union. The EU-25 won't be able to function the same as the EU-15, so the Enlargement will affect the role, responsibilities and functioning of the three community institutions: Council, Commission and European Parliament. Also, the weight of each country (weighing of national vote) will have to change to comply with what was agreed in the Treaty of Nice, and the decision-making rules will also undergo changes, virtually eliminating the unanimity rule and generalising the qualified majority. Finally, it is likely that the present financing outline of the community budget may also be changed, so part of it may be financed directly by European taxpayers by means of an specific tax or other formulas. A change of this nature would mean for the European citizens to feel more involved in the process of European construction, and for net contributing countries to relax their radical opposition to any community budget increase, which conditions significantly the finance of community policies and, thus, their design. All these budget and institutional changes would have significant implications in the future development of the CAP, insomuch as they would open new possibilities for its reform.

A second element of uncertainty has to do with the accession of Bulgaria, Romania and Turkey. The first to are expected to take place in 2007. Turkey, however, would begin its negotiation in 2005, provided it meets a series of conditions that at present are not met. This country's agricultural weight is equivalent to that of the twelve countries that will accede in 2004 (10) and 2007 (2), so if this enlargement takes place the community's agricultural policy would undergo significant budget strains that could bring about such a radical change to the CAP that it is difficult to foresee now.

4.3. Likely scenarios for the future CAP

The conclusion of all that has been put forward in this chapter is that the likely scenario for the future CAP, elements of uncertainty aside, would be one in which the CAP would not undergo major changes in comparison with its present situation, only minor adjustments, more or less relevant, so as to adapt itself both to the budgetary framework agreed at the Council of Brussels of October (slight reductions of direct aids), and to the undertakings to be endorsed at the multilateral negotiations at the WTO (new market reforms regarding milk products, sugar, olive oil, cotton, tobacco, and partial or total de-coupling of direct aids). Most adjustments of the CAP will have to take place in 2003 so as to enable agreement at the WTO trade negotiations, although others may take place or be reviewed after 2006, as is the case of direct aids reduction to achieve budget balance of the CAP[22].

[22]One could ask what is the sense of passing in 2003 a modulation of aids that won't become effective until 2007. According to the Commission it helps to clear up the future and the farmer already knows (2003) what to expect in the future (2013). But it may also be that the Commission has taken into account that it is easier to pass the aids reduction in 2003 (EU-15) than in 2006 (EU-25), see note 21 at the bottom of the page.

As a matter of fact, if in 2010 a deeper reform of the dairy sector took place, introducing, for example, the elimination of the dairy quota, and the cost of the enlargement to Bulgaria and Romania had to be absorbed, the budget balance of the CAP would only be possible if aids modulation (phased-in reduction) was larger than the one foreseen by the Commission in its proposal of January 2003. In fact, according to estimates by Massot (see Annex 9), budget balance of the CAP would require a 3% compound annual reduction of the phased-in aids exceeding 10,000 euro (Massot, 2002b). Even Massot's estimates underrate the effect that stems from the partition of farms in order to minimise the reduction of direct aids.

It is not likely in the next decade a Common Agricultural Policy scenario where market interventions and direct aids, whether de-coupled or not, play a secondary role and, on the other hand, aids to agricultural modernisation, food quality promotion, provision of goods and services, and diversification and modernisation of rural economy, play a main role, and all that despite the Commission's numberless statements on the multifunctionality of the European agricultural model. However, for truth's sake, the Commission is not responsible for the tremendous inertia of an obviously outdated and inappropriate CAP for a EU-27, although it is also for a EU-15 (Sumpsi, 2002). The historical responsibility of this political autism lies on the countries that make up the Union today and their governments, especially those that more emphatically support the maintenance of the current status quo, putting national interests before those of the Union. France, with its radical negative to reduce significantly the huge volume of aids that receives from the CAP, embodies the paradigm of this nationalistic attitude[23]. It is true, though, that the lack of long-term vision of agricultural professional organisations and the preponderance of the budgetary anxiety over the anxiety of carrying out a more efficient policy on the part of the countries that call for radical changes, contribute to the inertia of the present CAP and makes them co-responsible for this situation.

If we add in the analysis of the likely scenarios of the future CAP the elements of uncertainty mentioned in the epigraph 4.2, the possibility of deep changes taking place after 2010 increase considerably, among other things, because in the context of a EU-28, Turkey included, the deep reform of the CAP would be inevitable. Another matter is to anticipate what will happen with Turkey and foresee the direction and intensity of the reform that could take place after 2010, which would be daring, and even reckless on our part.

[23]It is really surprising that a country so prosperous as France that contributes so much to the community budget, be, thanks to the CAP, one of the chief net receivers of community funds.

5. Effects of the enlargement in agriculture and the rural areas

This analysis is based on data and studies currently available and on part of the likely scenario of the future CAP described in epigraph 4.3, and has taken into account the CAP certainty element for 2003-2013 from the Council of Brussels of October 2002, the Council of Copenhagen of December 2002, and the Regulations on CAP reform submitted by the Commission in January 2003. After 2006, however, when the Union's next period of financial perspectives becomes effective and the institutional and financial changes from the European Convention are implemented, or 2009, when the EU-27 is fully operative and market reforms are adopted in key sectors such as the dairy sector, for example the elimination of the dairy quota, new CAP reforms might be needed, and it is very likely that it will be so, but it is very difficult to foresee their direction and, especially, their intensity, for it depends on how the elements of uncertainty mentioned in epigraph 4.2 are sorted out, in particular the likely institutional and financial changes resulting from the European Convention.

To venture how the agricultural and food sectors of the AC will develop as a result of their accession to the EU and how such development will affect the community agricultural sector, is a very difficult task. But the literature on the subject is extensive, and many quantitative studies and estimations have been carried out the last five years by means of various models[24]. The conclusions that they reach, however, are sometimes unlike. Their methodology is also different but with a common element: the assessment of the Enlargement's impact on agricultural production of the new members is carried out by comparing the results of the base scenario (projections of agricultural output in acceding countries in case accession does not take place), with those of the accession scenario (projections of agricultural output in acceding countries in case the CAP is implemented).

Precisely, most of the disparities in the outcomes of the various models are due to differences between the scenarios of the CAP simulated in each study. It must be borne in mind that in the year 2000 it was still believed that farmers of the AC were going to be excluded from the reception of direct aids and all the studies reviewed were published in 2000 or before[25]. But if we get into more specific details, the inclusion of an hypothetical imposition of milk quota in the new member countries, or the inclusion of the opposite hypothesis, alters completely the results in the sector. In other words, the results are highly sensitive to the various CAP scenarios considered, which is obvious if we take into account the level of intervention and public support of the community's agriculture.

The work of Fernández Salido (2001) shows the substantial differences observed in the estimations carried out by the various authors. In fact, although most results support the thesis that the Enlargement would cause a significant agricultural growth in the AC, the variations are evident. Thus, the work of Liapsis Tsigas (1998) considers that in Bulgaria, Slovakia, Czech Republic, Poland and Romania in the horizon of 2005 there will be a much larger growth in the livestock sector, especially milk, than in the cereal sector. This is so because the scenario does not include direct aids per hectare in cereals nor the imposition of milk quota in the acceding countries.

[24]An excellent and very thorough revision of the studies and estimations published on the subject can be checked in Fernández Salido (2001).

[25] Banse y Tangerman, 1996; Hertel et al, 1997; Liapis y Tsigas, 1998; Münch, 1999; Fuller et al, 1999 y 2000; Bach et al, 2000; Frandsen y Jensen, 2000.

However, the estimations of Bach *et al*. (2000) for the same countries and temporal horizon, predict a larger productive growth for cereals than for beef and veal, and a zero increment for milk, which results from the inclusion of direct aids per hectare in cereals and the imposition of a milk quota to the AC. The work of Frandsen and Jensen (2000) provides intermediate outcomes because it includes direct payments for cereals, but in lesser quantity, and a smaller percentage of compulsory set-aside area, together with the imposition of a less restrictive milk quota.

Increments are more moderate in the works of Münch (1999) and Fuller *et al.* (2000). In addition, their estimations are more realistic since, these being partial balance models, they cover the scenarios of sectorial policy in more detail. Münch (1999) estimates for Poland, Hungary, Czech Republic, Slovakia, and Slovenia in 2013 a 10% increase in cereal production, 20% in meat production and 8% in milk production. This last percentage is the result of an hypothetical elimination of the milk quota starting from 2005.When this hypothesis is left out and the abolition of the quota system is not included, milk production does not increase and even diminishes. This result confirms the essential role played by supply control instruments when assessing the impact of the Enlargement on some production sectors. But Münch's study shows that, in addition to the parameters peculiar to the CAP scenario (intervention prices, direct payments, quotas and other mechanisms of supply control), there are other elements that explain the impact of the Enlargement on the growth of agricultural output in the AC, such as changes in production costs, in productivity of labour, in interest rates and in exchange rates.

The work of Fuller *et al.* (2000) estimates for Poland, Hungary and Czech Republic in 2009 a 15% increase in cereal output and drops in the meat and milk productions as a result of the reduction of livestock due to the imposition of the milk quota.

However, a review of the studies shows some shortages that induce to be cautious when using the results achieved. To begin with, none of them includes the effects that an increased use of fertilisers, pesticides, herbicides and select seeds could have in the rise of cereal returns and other herbaceous crops in the AC. This is a key issue insomuch as during the transition to a market economy, Eastern farms reduced substantially the implementation of variable production means, which caused negative effects on agricultural returns (se epigraph 1.3). As a result, it seems reasonable to think that the accession of Eastern countries to the EU will result in a wider use of fertilisers, herbicides and pesticides on their farms. The studies mentioned previously, however, only take into account linear growth rates of returns, so the results achieved must be considered as an incomplete estimation of the impact of the Enlargement on the agricultural output of the future members of the Union.

Secondly, the studies ignore the existence of serious structural problems (see epigraph 1.2.2) in Eastern countries which could bring to a halt the growth of their agricultural output stemming from accession to the Union. In fact, the significance of small subsistence farms, the presence of large farms with very low labour productivity, heir to old cooperatives and state farms, the institutional problems, the insecurity of property rights, the malfunctioning of the land market and the almost non-existent rustic leasing and other developments that would enable land mobility, are factors that, unless modified as a result of the accession, which is unlikely at least in the short and medium term, could seriously hamper agricultural restructuring and modernisation of Eastern countries. Thus, the results stemming from the above studies must be considered and excess estimation of the impact of the Enlargement on the agricultural output of the Union's future members.

Finally, we will comment on another basic shortage: the definition of the common agricultural policy scenarios simulated in the studies. In fact, given that Enlargement's agricultural chapter was not closed until December 2002, and that the proposal on Reform Regulations of the CAP was passed in January 2003, none of the models in the studies includes the scenarios that stem

from these agreements, unknown until very recent dates. This problem does not bring about a systematic slant, for in some studies it says less than it should and in others it says more.
The fact that we know the final agreement on the agricultural chapter of the Enlargement reached at the Council of Copenhagen in December 2002 (see section 3.3), the CAP budgetary framework for 2007-2013 passed at the Council of Brussels of October 2002 (see section 4.1 and Annex 7) and the proposal on Reform Regulations of the CAP agreed by the Commission on 22 January 2003[26], gives us the basic instruments to analyse, though only qualitatively, the impact of the Enlargement on both agriculture and the community's rural areas. The method to be followed in this chapter is to join reliable qualitative assessment with cautious quantitative assessment.

We have divided this final chapter into three epigraphs. The first one will deal with the impact of the Enlargement on agricultural productions, systems, incomes and markets; the second one will focus on the agro-food industry and the third one on rural areas. The analysis will be based on a bibliographical review of the works published in the last years estimating the quantitative impacts of the Enlargement, and a qualitative assessment of the authors of this report based on the available data, the agreements of the Council of Brussels of October 2002 and Copenhagen of December 2002, and the proposal for the CAP reform submitted by the Commission in January 2003.

5.1. Impact on agricultural productions and markets

A key element to assess the impact of enlargement on the European agricultural economy is the situation of agricultural productivity in the acceding countries, which has been previously examined in the epigraph 1.3. An analysis of the available information (Hughes, 1999; Berkowitz y Münch, 2000; Tangerman and Banse, 2000; Macours and Swinnen, 2000; Swinnen, 2000; Fernández Salido,2001; Sumpsi, 2002), shows that the development of agricultural output is similar in most crops and candidate countries. Thus, returns drop substantially in the first half of the 90s and recover in the second half, a result of the various stages the economic transition of this countries has gone through. Yet, despite the recovery of agricultural returns in the candidate countries during the last years, they do not reach, not nearly, the average level of agricultural returns in the EU-15. Livestock returns are more stable during the 1990s, and even a sustained increase may be observed in some acceding countries like Hungary and Czech Republic, were livestock returns are comparable to average returns in the EU-15.

There is a significant productive stretch, therefore, for the main continental agricultural products of Eastern countries, that seems larger in agricultural productions than in livestock. If these countries develop their productive capacity and consumption does not increase in the same proportion, significant surpluses could take place in Eastern countries (Pouliquen, 1998). In deed, the estimates on impacts in the studies already mentioned agree that the domestic consumption expected for Eastern countries wouldn't be enough to absorb the growth of their agricultural output, which would translate into agricultural surpluses in the new members. These surpluses could not be exported by means of subsidies due to the undertakings regarding subsidy reduction to exports concluded by the EU at the Uruguay Round, undertakings that will surely be extended to reach an agreement at the present Round of Negotiations at the World Trade Organisation (Sumpsi, 2002). In that case, agricultural surpluses from the new countries should be sold in the domestic market, and prices would undoubtedly show a downward tendency, affecting countries with less competitive continental productions, as is the case of Spain.

[26]This proposal must be considered as maximalist and, therefore, is not definite insomuch as the Council has to discuss it the next months. However, it shows the path to reform which, with the inclusion of some changes, is likely to be passed during 2003.

However, for farmers of the future member countries to develop the existing productive capacity, three conditions have to be met, which will be analysed next: more remunerative agricultural prices, acceleration in the agricultural restructuring and modernisation, and non-restrictive production rights.

Remunerative agricultural prices

The accession won't mean a significant increase in agricultural prices in the acceding countries insomuch as a price convergence between acceding countries and the EU-15 is apparent[27] (Hartell y Swinnen, 1998; EC, 1998; Burrell and Oskam 2000; Münch, 2000; Fuller *et al.,* 2000; Swinnen, 2000; OECD 2000). This convergence stems from two opposite trends: on the one hand, a rise in agricultural intervention prices in acceding countries, as a result of the adoption of new agricultural policies (OECD, 2000), on the other, the reduction of agricultural intervention prices in the EU, as a result of the Reform of the CAP of 1992 and the Agenda 2000. In fact, the differences in prices between the EU-15 and the acceding countries are at present between 10 and 30%, whereas only five years ago such differences were around 20 and 50% (Swinnen, 2001). Therefore, the approximation of prices as a result of the accession of the new members won't involve significant increments in agricultural prices in those countries; on the contrary, intervention prices will continue dropping as required by the negotiations at the WTO (cereals, meat, milk and sugar), and such reduction will most likely drag market prices, especially if those countries' productive capacity develops and subsidised exports are not possible as a result of the agreement at the WTO (Sumpsi, 2002).

Acceleration of agricultural restructuration and modernisation

As regards to the second question, we can use as a reference the Spanish experience itself following (Cadenas and Cantero, 1997; Fernández Dalido 1998 and 2001), though with some corrections. In fact, these authors use the Spanish experience of accession to the EEC to assess the likely impacts of the accession on the agriculture in Eastern countries. Big mistake, because the present situation in the economy of Eastern countries is not comparable with Spain's in the 1980s, but with that of Spain in the 1950s. In this regard, we must remember that the key elements that explain the intense process of agricultural modernisation carried out in Spain during the 1950s and, especially, during the 1960s are basically three: 1) the massive outflow of surplus working farm population due to the job opportunities that farm labourers and small farmers were able to find in the main areas of industrial development, first in Europe and then in Spain; 2) the increase and diversification of domestic demand for farm products, as a result of the Spanish economic development and the resultant increment of consumers' purchasing power; and 3) the significant agricultural structural policy (parcel concentration, vocational training, irrigation farming, research and agricultural extension, promotion of associative agriculture, fostering of leasing) promoted by the economic development policy carried out in Spain in the 1960s.

However, without underestimating the contribution of the agricultural structural policy to the modernisation of Spanish agriculture in the 1950s and 1960s, the main element in the restructuration and modernisation of the agricultural sector was the massive outflow of day labourers and small farmers. The massive exodus of excess working population rose agricultural wages which, in turn, encouraged agricultural mechanisation and the utilisation of fertilisers, pesticides, herbicides, select seeds, and mixed feed for the new intensive livestock, and mobilised lands through buying and selling and leasing.

Thus, the agricultural structure of Eastern countries, which has as a distinguishing feature, the coexistence of a large number of small subsistence farms and large farms with low labour productivity, is not the main hindrance to these countries' productive capacity[28]. The main hindrance is the significant excess of working farm population and its main corollaries: underemployment, disguised unemployment and low labour productivity in agriculture. The abundance of labour force in the Eastern countries does not ensure competitiveness in community agricultural markets. On the contrary, excess farm labour force may hamper the structural adjustments needed in those countries. In fact, abundant labour force means lower wage costs, but does not ensure increased agricultural output volumes in the perspective of integration in the Union, insomuch as the lack of capital would result in low productivity of the labour factor. Pouliquen even questions that reception of CAP direct aids and the resultant improvement of the financial situation of farms in the new member, suffice to achieve a competitive agricultural output within the EU (Pouliquen, 1998).

Of the three elements that we have just noted, the third one is likely to be present in Eastern countries, insomuch as in the next years the agricultural structural policy of acceding countries will strengthen as a result of the implementation in those countries of aids coming from the Regulation on Rural Development (second pillar of the CAP), plus some further aids specifically devised for those countries[29]. The second one will also take place, for there is no doubt that in the medium term the integration of acceding countries in the EU will boost their economic development and purchasing power, though it is more difficult to predict the pace of the process. The first one is the most difficult one to be accomplished given that the excess of working farm population is still very significant, espcially if we include Romania and Bulgaria, whose accession is foreseen for 2007. In Poland, Romania and Bulgaria is estimated that there were about 5 million small subsistence farmers in 1998, and it is not easy to foresee to what extent a massive rural exodus will take place to relieve the pressure that may seriously difficult the agricultural restructuration process in those countries[30]. As a matter of fact, part of the exodus has already taken place in the 1990s, mostly to EU countries, though there is still a significant contingent left that makes up a great stock of labour force that not only keeps wages low, but also the productivity of labour.

As follows from the work of Swinnen *et al.,*(2000) on adjustments in agricultural employment in Eastern countries, the reforms of both property rights of production means and the organisation of agricultural production, explain the differences in the development of working farm population in Eastern countries.

[28]There are many studies that have analysed the efficiencies and inefficiencies of the agricultural structure in Eastern countries and have been included in the excellent revision by Fernández Salido (2001). However, those studies are not conclusive, for whereas some suggest that large farms are more efficient than small ones (Hughes, 1998; Gorton and Davidova, 2000; Ratinger, 2000; Gorton et al, 2001), others think the opposite (Hughes, 1999; Mathijs et al, 1999; Macours and Swinnen, 2000), depending on the countries, productive sectors and types of farm under consideration (family, cooperative or private state farm). This is one of the typical subjects of study and discussion in agricultural economy: the role of economies of scale. There is no doubt that those Eastern countries whose agricultural structure is controlled by large farms have a comparative advantage that sooner or later they will take advantage of. These large farms may be inefficient now but when they capitalise and modernise they will certainly become competitive business. However, agriculture in those countries were small farms prevail, can also be modernised. In fact, the experience in many countries of the EU-15, including Spain, is that through associative formulas (common mechanisation), or through externalisation of agricultural tasks, especially those requiring machinery and expensive equipment, it is possible to overcome the restrictions involved in the small size of the farms. On the other hand, there are evident symptoms that the structural development of acceding countries tends to the homogenisation of the size of farms, lessening, thus, the structural dualism existing in the mid-1990s. The chief motor of this process of agricultural homogenisation, basically resulting from the reduction of the average size of old collective farms, are the differences in labour productivity among the various types of farms.

[29]Among those aids specifically designed for the new members, those aimed at subsistence agriculture should be highlighted, whose goal is to support their conversion to a commercial agriculture that enables poor farmers to survive and do not have to emigrate to cities within their country or to more developed countries in the EU. In epigraph 3.3 the various specific aids are detailed and described.

[30]In addition to the excess of working farm population, the direct aids small subsistence farmers will receive after the enlargement might also hamper structural adjustment, for these aids help to support a significant part of those farmers (Buckwell *et al.,*1997; Sarris *et al.,* 1999).

Thus, in Slovakia, Czech Republic and Hungary, accession is not expected to imply drastic labour adjustments, since the institutional reforms carried out have contributed to the reduction of the impact of the agricultural sector on employment promotion. However, in countries such as Romania or Bulgaria, Swinnen (2000) has noted that the institutional reforms either have not been sufficient or have not been right, which has slowed down the outflow of labour force from the agricultural sector.

In fact, the number of small farmers not only hasn't decreased in the 1990s, but it has grown, especially in Poland, Romania and Bulgaria, where the lack of job opportunities in their cities and the difficulty of emigrating to EU countries has made them to settle as small farmers in rural areas so they can at least have something to eat (subsistence agriculture). Now, what will the future bring? In principle, all the conditions are set for the rural exodus to continue, the question is whether the EU-15 or their own countries will be able to absorb it. The big difference with what happened in Spain is that then, the 1960s, Europe was growing at very high rates and industrial development was expanding rapidly, whereas the economic situation in Europe at the beginning of the 21st century is precarious and it is not ready to absorb the surplus working farm labour from Eastern countries. For example, Germany, natural destination for millions of poor farmers from neighbouring candidate countries, with four million unemployed, a very significant public deficit and for the third year in a row with an almost non-existent economic growth, is not ready to take this massive exodus of small subsistence farmers. This is why a transition period of seven years has been set before the free movement of people from acceding countries to the EU-15 becomes effective.

Thus, the Commission's strategy during the accession negotiations regarding financing of direct aids was not to be very generous, for it was thought that it could even slow down these counties' agricultural structural adjustment (Buckwell *et al.,* 1997), and to be more generous, however, as regards to financing structural policies both in the regional development policy and the rural development policy. It is very likely that the implementation in these countries of structural policies contributes in large measure to their development, which will enable that a significant part of that rural exodus go to cities and large industrial areas within their own countries contributing, thus, to absorb a large share of the surplus farm labour. On the other hand, rural development aids (second pillar of the CAP), would contribute to the diversification of the rural economy, which would enable that the rest of the surplus farm labour remained in the countryside, either as part-time farmers or even leaving the farm activity to work in other sectors of the rural economy.

The last subject to be raised is the influence of CAP direct aids in the future development of the agricultural structure in Eastern countries. This is a controversial subject insomuch as some authors and studies support the idea that direct aids slow down structural adjustment (Buckwell *et al.,* 1997; Gorton *et al.,* 1997, Gorton and Davidova, 2000), whereas others conclude that improvement of the financial situation of farmers in Eastern countries, as a result of the reception of direct aids, would facilitate the transition to an agricultural structure with better sized and more efficient farms (Fernández Salido, 2001). At the very least, the effects of CAP aids, especially if they are de-coupled, on land prices in Eastern countries, will be negative as regards to land mobility and structural adjustment[31].

[31]For example, Frandsen and Jensen estimate that access to CAP direct aids might translate into land price increments of over 100 per cent in Eastern countries (Frandsen and Jansen, 2000).

Non-restrictive production rights

As regards to the third condition, non-restrictive production rights (guaranteed maximum quantities, production quotas, area or cattle herd entitled to aids), negotiations have been very hard insomuch as the differences between the rights requested by acceding countries and the rights finally agreed have been very significant[32]. It is understood then, that the possibilities for productive expansion of the agricultural sector in the acceding countries was at stake, no more, no less[33]. The EU wanted to limit such possibilities at any price, in order to avoid the generation of non-exportable surpluses that would end up depressing community agricultural markets, so it offered and negotiated limited production rights, whereas acceding countries fought for their right to modernise the sector and increase their agricultural output, so they requested more production rights, which was understandable considering that their agricultural returns are much lower than those of the EU-15.

As the analysis in Annex 6 shows, the Commission's criterion has prevailed and the production rights finally allocated to the new members are, on average, about 70% of what they requested, and in some productions they don't even reach 50%. Broadly speaking, restrictions from production rights are much stronger in the case of livestock than in the case of crops. Thus, the base area for COP crops (cereals, oilseeds and protein crops) requested by the AC-10 was 19.3 million hectare, and it was agreed 18.2 million hectare, that is, 92% of the area requested. This base area for the AC-10 means a 25% increment of the base area for the EU-15 COP crops. However, the milk quota requested by the ten acceding countries was 26 million tons, and it was agreed 19 million tons, that is, 72% of the quota requested. This milk quota means an increment of only 13% of the EU-15 milk quota. The AC-10 requested premiums for 3.2 million calves, and 1.7 millions were allocated, that is, 54% of the premiums requested, which means an increment of only 15% of the premiums allocated for calves by the EU-15. Finally, the AC-10 requested premiums for 2.3 million suckler cows, and only 0.73 millions were allocated, that is, 32% of the premiums requested, which means an increment of only 6% of the premiums allocated for suckler cows by the EU-15.

The above analysis provides very interesting conclusions. The Commission's harder negotiation as regards to stock production rights in comparison to COP crops has a twofold interpretation: first, the Commission considers a larger productive capacity in the AC-10 livestock than in the COP crops. Second, the Commission is more concerned with market imbalances and failure to comply with the commitments reached at the WTO, that may give rise to the development of livestock in the AC-10, than with the development of COP crops. It is not evident that the livestock productive capacity is larger than the agricultural productive capacity, first interpretation, but the Commission is right to fear much more the "mess" that can be brought about by the livestock productive development than that stemming from the increase in COP production. In fact, the CAP reform has been very hard as regards to the COPs, so European prices are very close to international ones.

[32]Annex 6 shows the differences between what the acceding countries requested and what was finally granted, or agreed to be fair, as regards to production rights at the Council of Copenhagen. For example, Poland, the acceding country with more agricultural productive power, asked for a milk quota of 13.76 million tons and a quota of 9.38 millions was agreed, a quota of 260 thousand tones of starch potatoes and a quota of 145 thousand tons was agreed, a quota of B-sugar of 216 thousand tons and a quota of 91 thousand tons was agreed, a quota of tobacco of 70 thousand tons and a quota of 38 thousand tons was agreed, calf premiums for 2.2 million heads and only 0.92 million heads were agreed, and suckler cows premiums for 1.5 million heads and only 0.32 million heads were agreed.

[33]The studies that quantify the impact of the enlargement on the production output of acceding countries can be very unlike as regards to production rights, especially the milk quota. In some instances, for example aids to hectare and head of cattle, it is not prohibited to produce above the production rights allocated, but that production does not receive aids, so in practice the effect is almost the same as prohibiting to produce above the production rights. In these cases, more that speaking about production rights we should speak about aid rights. In the case of milk and wine, quotas do imply the prohibition of marketing the production above the quota. In the case of milk, each litre exceeding the quota has to pay a fine of 115% the indicative price, so the quota completely limits productive expansion.

If the AC-10 increase their productions and surpluses are generated, they could be exported almost without subventions and that would soothe the domestic market without breaching agreements concluded at the WTO. It cannot be said the same of meat and even less of milk, less reformed sectors with prices still markedly higher than those at an international level. If the AC-10 increased significantly their livestock productions, the surpluses could not be exported due to commitments regarding the reduction of export subsidies and should be sold in the domestic market, prices showing a downward tendency. It is true that a beef and veal reform is going to be carried out and, above all, the reform of the dairy sector will be finally implemented. But the process is going to be slow and serious imbalances could take place unless the AC-10 are allocated restrictive quotas.

It is possible that in the medium term, as livestock reforms progress, restrictions to livestock production rights may soothe. In this sense, the Spanish experience is also helpful. Once inside the EU, the new member countries will put pressure to increase their production rights and concessions will have to be made, as was the case with Spain's milk quota and other production rights. So it is very likely that in the mid-term these countries get wider production rights, especially if this type of mechanisms are made more flexible in future CAP reforms and, thus, they may increase their productions. On the other hand, it is unlikely that these countries' capacity increases in agricultural production can be absorbed by their domestic consumption, resulting in more or less significant surpluses.

The conclusion of what has been discussed in this epigraph is that direct aids allocated to Eastern farmers starting from 2004, probably already de-coupled, and the restrictive production rights endorsed at the Copenhagen Summit, will function in the short and medium term as restraints to agricultural restructuration and modernisation and, therefore, won't be very intense in the beginning. Therefore, short and medium-term development of the productive capacity will be limited. In the case of COP crops, the likely de-coupling of aids together with prices that will barely rise in Eastern countries due to their closeness to those of the EU (Annex 5), no major productive increases are expected which, on the other hand, would not bring about major imbalances because they could be exported to third countries with almost no subsidies.

As for products of animal origin (milk, beef and veal, and pigmeat), the impacts would be stronger, because the productive system in Eastern countries is good, especially as regards to milk, and, in addition, the differential price between the EU-15 and the AC-10 is significantly larger than that of cereals (Annex 5), so a substantial productive development of meat/milk (cattle) could be expected, restrained only by a restrictive scheme of dairy quotas and premiums to calves and suckler cows. Given that the dairy quotas scheme could disappear or be made more flexible from 2009, imbalances in this market are very likely to take place starting from that date, coinciding with the predictions of some works (Berkowitz and Munch, 2000), imbalances that would affect mostly EU countries with a less competitive milk sector, as is the case of Spain. In the beef and veal sector some problems may also arise for Spain, in the extensive production systems, though not in cattle and pig intensive feeding places, where Spain is very competitive.

Medium and long-term economic development in Eastern countries will promote agricultural restructuration and modernisation, as it happened 50 years ago in Spain, but the pace will be slower for Eastern countries insomuch as the possibility of rural exodus to the EU-15 will be limited, as a result of the low rate of economic growth in the EU and especially in Germany. The modernisation process, therefore, will not only reach stock farms but also farms with extensive herbaceous crops, so in the medium and large-term problems can be expected not only for livestock but also for crops such as cereals, oilseeds, beet, and potato, sectors in which the new member countries have a large productive capacity and competitiveness perspectives. Sooner or later, the development of such capacity will bring about problems to less competitive farmers in Southern Europe, so it is basic for Spain to develop an intense policy of restructuration and modernisation of these productive sectors.

The impact will be very different on Mediterranean agricultural productions. In fact, with the exception of some very specific horticultural productions, in general, the productive capacity of Eastern countries in Mediterranean sectors is very limited. However, these products exhibit a high demand/revenue elasticity, which means that the economic development of the AC-10 promoted by their accession to the EU will translate into a significant demand for fruits and vegetables, providing new opportunities to our horticultural exports. By the way, this sector does not receive direct aids but has shown a very high competitive level in the last 10 years, with an increased market share both in the EU and outside the EU, but especially in.

5.2 Impact of the agro-food industry

If we analyse the development of the agro-food trade flow between the EU-15 and the Eastern countries (see Graph and Table 4.2, Annex 4), we can see that from late in the 1980s to late in the 1990s, exports from the EU to candidate countries have increased much more than imports coming from those countries, so the net balance for the EU-15 has changed from negative to positive[34]. It must be noted that the data on external trade includes not only agricultural products but also processed agro-food products (agro-food balance), and that the significant increment of EU-15 exports to acceding countries is due to the export of manufactured products not fresh products, which indicates the limited competitiveness of the agro-food industry in acceding countries compared to the EU-15 modern and competitive agro-food industry.

If we analyse the data on external agro-food trade not in an aggregated manner but for the various EU-15 and acceding countries (see Table 4.1, in Annex), we can see the different role external trade plays in those countries, both in exports and imports. Thus, in most acceding countries agro-food exports account for a very limited share, less than 10% in most countries, on total exports. This datum shows the exporting weakness of the agro-food sector in the acceding countries, as a result of the limited competitiveness of their agriculture and food industries and also because of the non-existence of a system of export subsidies as strong as the one enjoyed by agriculture in the EU. On the other hand, in several countries in the EU-15, agro-food exports exceed, in some instances widely, the 10% of total exports: Greece (24%), Denmark (21%), the Netherlands (17%) and Spain (11%). However, the share of agro-food imports on total imports is much higher in the acceding countries than in the countries of the EU-15. Finally, if we analyse the data on bilateral trade between the EU and the acceding countries, per countries, it can be said that the external agro-food trade in the acceding countries is highly dependent on the EU, whereas it doesn't happen the same the other way around (Annex 4).

The lack of capital and financing sources is another problem. Although special credit programmes have been implemented their funds are limited. The uncertainty in some countries as regards to property rights makes it difficult the concession of loans to improve and renew premises. In some sectors, as the milk or meat sectors, financial difficulties impede to carry out the necessary improvements to comply with the EU hygiene and health regulation, which makes exports difficult from these countries to the EU, and this is likely to happen during the first years after accession (protective clauses).

[34]Following the work of Fernández Salido, most studies reviewed predict that, after accession, Eastern countries will continue being net importers of agricultural products from the EU-15 (Fernández Salido, 2001).

Most agro-food industries in the acceding countries are obsolete and, in some instances, such as slaughter houses or milk factories, oversized. Foreign investment has played a significant role in the modernisation of the agro-food industry. However, foreign investment rates have been insufficient and tend to focus on industries of high value added and easy market penetration (Gow and Swinnen, 1999).

The agricultural and food sectors in Eastern countries need to undertake significant reforms. The adjustments that have taken place so far do not guarantee the feasibility of these countries' agro-food sector in the community market. It is not only a matter of production levels, but also a question of marketing, quality and competitiveness of products in the acceding countries. At present they are way below the standards of the EU-15 countries. The present situation gives EU-15 countries a clear comparative advantage to penetrate the markets in Eastern countries after the Enlargement (Fernández Salido, 2001).

The Spanish agro-food industry has, therefore, an interesting opportunity to expand to the East. However, the EU-15 agro-food industry as a whole has its eyes set on the expansion to those markets, which may be significant given the low level of demand and its foreseeable increment as a result of the likely economic development. Some EU-15 countries, in fact, have already taken positions there in the last years. The question is the share Spain can get from these emergent markets. Again, it is very likely that our share be larger in Mediterranean products, where our industry is very strong, than in continental products (sugar, cereals, potato, milk, pigmeat, beef and veal), where our industries are less competitive than those of France, Germany, the Netherlands or Denmark, neighbouring countries with the EU new members.

But it is likely that the agro-food industry in Eastern countries streamlines faster than agriculture, for the land factor implies a hindrance for the latter but not for the former. In addition, the common agricultural policy and the structural policies have powerful instruments and aids to promote the agro-food industry. In fact, Italy at the end of the 1970s and 1980s, Greece in the 1980s and Spain and Portugal in the late 1980s and during the 1990s streamlined their agro-food industry by means of significant EU aids, and there is no reason for the same to happen in Poland, Hungary, Slovakia, Czech Republic and other acceding countries through both domestic and foreign investment from the EU-15, as it is in fact already happening.

The EU-15 agro-food industry, therefore, has a twofold opportunity: on the one hand, to increase exports to these emergent countries, on the other, to invest in the streamlining and enlargement of Eastern agro-food industry. To what point the Spanish industry will take advantage of this twofold opportunity and get a significant share of both issues will depend on the Spanish industry itself, on its expansion strategies, on its ability for foreign market penetration and on its competitiveness, which makes us think, again, that shares will be larger, as a general rule, in Mediterranean production sectors (fruits, vegetables, wine and olive oil) and intensive stock-farming sectors (pigmeat and poultry), whereas they will be lower in continental production sectors (cereals, oilseed, sugar, potato, milk, beef and veal).

5.3 Impact on rural areas

Farmers' access to CAP direct aids in Eastern countries, even if it is in a phased-in manner (see epigraph 3.3), will mean a significant injection of funds for the rural areas that will enable social strains to soothe, especially in those countries with an excess of working farm population, with preponderance of very poor small farmers, as is the case of Poland, Romania and Bulgaria. However, farmers' income growth from CAP aids will be different depending on the countries and, within the same country, depending on sectors. Thus, in Poland and the Baltic countries, where the current level of aids is low, the accession will mean a significant increment of farm

aids, whereas in Slovenia, where the level of aid is already high, the impact of accession on incomes will be limited. Cereal, oilseed and protein crops producers will receive, in general terms, more aids than meat and milk producers, not only because unitary aids are larger, but also, as we have seen, because production rights were more generous for COP crops than for meat and milk.

The restructuration and modernisation of agriculture, that will sooner of later take place in the candidate countries as a result of the accession, will bring about significant adjustments not only in their farm labour markets, but also in those of the EU-15. A significant outflow of farm labour force is foreseen in Poland, Romania and Bulgaria after the accession. Although this process began some years back, it is not enough yet (Swinnen, 2000; Swinnen *et al.,* 2000). Part of these countries rural exodus has headed for rural areas in EU countries that have found, thus, a way to recover both population in marginal areas of very low population density and agricultural trades that were being lost as a result of lack of labour force, for example shepherds in Castilla León and Castilla-La Mancha.

However, not all the excess poor farm population will be able to emigrate to the EU-15 nor to urban centres within their own countries. As a result, the promotion of alternative sources of rural employment and the training of labour force affected by the adjustment should be primary elements within the rural development measures drawn up by the EU to be implemented in those countries. The EU will provide significant amounts of money for rural development aids in Eastern countries (second pillar of the CAP), but their ability to use those funds efficiently and properly is, to say the least, questionable, especially if we take as an example the negative experience of the pre-accession SAPARD programme. The AC haven't been able to implement the LEADER programme either, which had a great impact on the diversification of the rural economy in EU-15 countries, and it seems unlikely that they are able to do it until some years after the accession due to lack of human, social and institutional resources.

Another problem in rural areas of the AC-10 is their infrastructure deficit. But it is almost certain that their accession will involve an investment flow in infrastructures from the Structural Funds (ERDF, EAGGF-O, ESF) and especially by means of regional development schemes, where infrastructures have a preponderant role. There is no doubt that roads, telecommunications, airports, transport, dams and other factors will improve significantly during the next years in the AC contributing to the regional and rural development insomuch as many underdeveloped regions have a very significant rurality component. On the other hand, countries like Spain will lose a substantial part of the investments made by means of Structural Funds in objective 1 regions.

Finally, the need to address the Enlargement without a budget increment for the CAP, decision taken at the Council of Brussels of October 2002 has meant that the Commission's initial proposal (July 2002) to decrease direct aids (first pillar of the CAP) up to 20% in six years and transfer the savings to rural development aids (second pillar of the CAP), has come to only 6% of the savings being used for rural development, to the detriment of the rural policy in the EU-25. It is not a direct result of the Enlargement, but an indirect one, which has been widely covered in Chapter 4.

6. Conclusions

The European Union Enlargement is a challenge for the European and Spanish agriculture and agro-food industry that will raise some problems for some products but will also offer significant opportunities for others. The problems may affect the so-called continental products (cereals, oilseeds, sugar, milk, beef and veal, and potato) and their significance will depend on the pace of the new members to develop the productivity capacity in those products and the rate of development of their economy, which, in turn, will set the growth rate of their domestic consumption. If the former is strong and the latter is weak, serious problems may arise because surpluses would not be absorbed by those countries domestic consumption and could not be exported to third countries as a result of the reductions in export subsidies, so such non-exportable surpluses would go to the community market, depressing prices and creating difficulties to less competitive countries, like Spain.

It is not evident, however, that the development of their productive capacity is going to be that fast and intense, for they will have to overcome many technological, institutional and organisational problems, plus productive restrictions laid down in the Enlargement negotiations (quotas, base areas, guaranteed maximum quantities, base cattle herds), which makes us think that, at least in the short term, the problems for the Spanish continental productions won't be very serious. Another matter is what will happen in the medium and long-term, but by then the competitiveness of continental productions should improve substantially by means of productive restructuration and modernisation.

However, the Mediterranean agricultural sectors (wine, olive oil, fruits and vegetables) may take advantage of the Enlargement insomuch as demand of these products might grow as their economies develop, and the competitive situation of Spanish Mediterranean products is advantageous, not only as regards to prices, but also in terms of quality and export organisation. Some export expansion of Spanish Mediterranean products to the new community members is therefore expected.

The European and Spanish agro-food industry, much more competitive than that of the Eastern countries, will have new opportunities as regards to: an increase in exports or an increment in investment on new processing plants in these countries. The latter has been taking place for some years now, though the penetration of the Spanish industry in Eastern countries is not as significant as that of countries such as Germany, France or the Netherlands.

The countryside in Easter countries will undergo significant transformations, especially in its infrastructures and labour market. In some present candidate countries (Poland) and future ones (Romania and Bulgaria), the weight of the farm population is still very significant. There is, thus, a surplus of farm labour force made up of small subsistence farmers that should either abandon the sector or become part-time farmers. The outflow of excess farm population together with a new agricultural structural policy will push forward the process of structural adjustment and modernisation of agriculture in the acceding countries, although in order to achieve this, structural problems such as the deficient functioning of land and leasing markets will have to be overcome.

The outflow of surplus working farm population still existing in some rural areas in Eastern countries will be made difficult by the EU's low growth rate, especially in Germany. The emigration option, thus, will only be possible for part of the surplus population, so that way out will not be the same as it was in Spain in the 1950s and 1960s. For that reason, it is very important that regional and rural development policies, financed to a large extent by Structural Funds, be implemented effectively in those countries so structural adjustments are as smooth as possible and do not bring about social disruption. Development schemes will have to improve

infrastructures, create a new business atmosphere and promote supplementary and alternative jobs for small farmers, both inside and outside their rural areas.

The impact of the Enlargement is not limited to the foreseeable development of agricultural productions and their markets, but it also has an effect on the Common Agricultural Policy. In the short term (2004-2006), the most significant happening is the Brussels Summit of October 2002, which set the stage for the reform of the CAP. It does not seem likely that before 2006 a major change as regards to the CAP is going to take place, at least as far as direct aids reduction is concerned. The only open question before 2006 is the possibility of de-coupling current direct aids so as to reinforce the position of the EU at the WTO trade negotiations. But that will only be possible if negotiations get tough and if significant pressure is put on the EU to dismantle of reduce the "blue box", since even considering the European Commission's offer at the WTO, the proposal of de-coupling all CAP direct aids is not justified. Although it is difficult to predict what will happen in the following months during the Council debates on the CAP reform submitted by the Commission in January 2003, it is likely that a partial de-coupling is agreed upon, or at least a smoother one than the one proposed by the Commission.

Starting from 2006, the possibility of a deeper reform of the CAP is open, but its direction and especially its intensity are not easy to foresee. The elements of certainty, change, resistance and uncertainty that surround the development of the CAP will have to be analysed. By analysing these elements and leaving relatively aside the elements of uncertainty, the most likely scenario for the future CAP would be one in which the CAP would not undergo major changes in comparison with its present situation, but only minor adjustments, more or less relevant, so as to adapt itself both to the budgetary framework agreed at the Council of Brussels of October 2002, slight reductions of direct aids, and to the undertakings to be endorsed at the WTO multilateral negotiations, new reforms of some sectors and partial or total de-coupling of direct aids. Most CAP adjustments will have to take place in 2003 so as to enable agreement at the WTO trade negotiations, although others may take place or be reviewed after 2006, as is the case of direct aids reduction to achieve budget balance of the CAP.

It is not likely in the next decade a new CAP in which market interventions and direct aids play a secondary role and, on the other hand, aids to agricultural modernisation, food quality promotion, provision of goods and services, and diversification and modernisation of rural economy, play a main role, and all that despite the Commission's numberless statements on multifunctionality and the European agricultural model.

References

ARZENI, A.; ESPOSTI, R. y SOTTE, F. (2001): *Agriculture in Transition Countries and the European Model of Agriculture.* World Bank - FRDV, Module 4. Zadar.

BACH, C.; FRANDERSEN, S. y JENSEN,H. (2000): «Agricultural and Economic Wide Effects of European Enlargement: Modelling the Common Agricultural Policy». *Journal of Agricultural Economics,* Vol. 51 (2).

BANSE, M. y TANGERMANN, S. (1996): «Agricultural Implications of Hungary's Accession to the EU –Partial versus General Equilibrium Effects». *Working paper,* 1/1. Research project FAIR funded by the DGVI of the European Commission. University of Götitingen.

BERKOWITZ, P. y W.MUNCH (2000): «The Competitiveness of Meat and Milk Production in Central and Eastern Europe», Federal Agricultural Research Center.

BUCKWELL, A. *et al.* (1997): Towards a Common Agricultural and Rural Policy for Europe, *European Economy,* Reports and Studies, n.º 5.

BUCKWELL, A. y TANGERMANN, S. (1999): «The Future of Direct Payments in the Context of Eastern Enlargement, MOCT/MOST», *Economic Policy in Transition Economies,* n.º 9.

BURRELL, A. (2000): «The World Trade Organisation and EU Agricultural Policy», en Burrell A. y A. Oskam (eds.), *Agricultural Policy and Enlargement of the European Union,* Wageningen University Press.

BURRELL, A. y OSKAM, A. (eds.) (2000): *Agricultural Policy and Enlargement of the European Union,* Wageningen University Press.

CADENAS, A. y CANTERO, C. (1997): «Implicaciones Agroalimentarias de la Adhesión a la Unión Europea de los PECO. Aspectos Agrarios y Rurales». *Serie Estudios,* 136. Ministerio de Agricultura y Pesca y Alimentación, Madrid.

COMISIÓN EUROPEA (2002): *Informe Anual SAPARD Año 2001.* Informe de la Comisión al Parlamento Europeo, al Consejo, al Comité Económico y Social y al Comité de las Regiones.COM(2002) 434 final. Bruselas, julio.

COMISIÓN EUROPEA (2003): *Propuesta de Reglamentos al Consejo.* COM (2003) 23 final. Enero. Bruselas.

CUNDER, T. (2001): *Economic and social impact of the opening of the CEECs for agriculture and rural development in mountain areas.* Department of Agricultural Economics, Agricultural Institute of Slovenia, Ljubljana.

DALTON, G. y THOMPSON, K. (1999): *Rural Development in the CEECs and Pre-Accession Aid: How does SAPARD help?,* Paper presented at the Working group on enlargement meeting, CEPS, April 1999.

DAVIDOVA, S.; GORTON, M. y CHAPLIN, H. (2000): *Analysis of Diversification of Farm Enterprises and Household Income in CEECs: definitions and propositions.* Working paper 2/3. Wye Colege, University of London. October.

EUROPEANCOMMISSION (1998): *Agricultural Situation and Prospects in the Central European Countries,* Summary report, Working Document, DG VI, Brussels.

EUROPEAN COMMISSION (2002a): *Agricultural Situation in the Candidate Countries.* European Commission, DG Agriculture. Brussels. July.

EUROPEAN COMMISSION (2002b): *Analysis of the impact on Agricultural Markets and Incomes of EU Enlargement to the CEECs.* European Commission, DG Agriculture, Brussels. March.

EUROPEAN COMMISSION (2002c): *Enlargement and agriculture: Successfully integrating the new Member States into the CAP.* Issues paper SEC (2002) 95. European Commission, DG Agricultura.

EUROPEAN COMMISSION (2002d): *Common Financial Framework 2004-2006 for the Accession Negotiations.* Issues paper SEC (2002) 102. European Commission, January. Brussels.

EUROPEAN COMMISSION (2002e): *Communication from the Commission to the Council and the European Parliament. Mid-Term Review of the Common Agricultural Policy.* COM (2002) 394. European Commission, July.

EUROPEAN COMMISSION (2002f): *EU agriculture and enlargement.* Fact sheet. European Commission, DG Agriculture, July. Brussels.

FERNÁNDEZ SALIDO, J. (1998): «The Implications of the Accession of Poland to the CAP: A comparative Analysis with the Spanish Case». *CEPS Review, 7.* Center for European Policy Studies. Brussels.

FERNÁNDEZ SALIDO, J. (2001): «Efectos de la ampliación de la Unión Europea sobre la agricultura de los países de Europa Central y Oriental. Una revisión de la evidencia científica» *Revista Española de Estudios Agrosociales, Pesqueros y Alimentarios,* 193, MAPA.

FERNÁNDEZ SALIDO, J. (2002): «The Common Agricultural Policy and EU enlargement: implications for agricultural production in the Central and Eastern European countries». Comunicación presentada al *X*

Congress of the European Association of Agricultural Economics. Zaragoza, agosto.

FRANDSEN, S y JENSEN, H. (2000): «Economic Impact of the Enlargement of the European Union. Analysing the Importance of Direct Payments». SJFI Working Paper, 15/2000. Copenhagen.

FULLER, F.; BEGHIN, J.; FABIOSA, J.; MOHANTY, S; FANG, C. y KAUS, P. (1999): «The Impact of the Berlin Accord and European Enlargement on Dairy Markets». *FAPRI Working Paper* 99-WP 231. Center for Agricultural and Rural Development. Iowa State University. Ames.

FULLER, F.; BEGHIN, J.; FABIOSA, J.;MOHANTY, S; FANG, C. y KAUS, P. (2000): «Accession of the Czech Republic, Hungary and Poland to the European Union: Impacts on Agricultural Markets». *FAPRI Working Paper* 0-WP 259. Center for Agricultural and Rural Development. Iowa State University. Ames.

GARCÍA AZCÁRATE, T. (2001): *Los retos de la PAC ante la ampliación.* Universidad Complutense de Madrid, Cursos del Escorial.

GORTON, M. y DAVIDOVA, S. (2000): The International Competitiveness of CEEC Agriculture. Department of Agricultural Economics and Business Management. *Working Paper* 2/1. Wye College. University of Newcastle. Newcastle.

GORTON, M.; DANILOWSKA, A.; JARKA, S.; STRAZEWSKI, S.; ZAWOJSKA, A. y MAJEWSKI, E. (2001): *The International Competitiveness of Polish Agriculture.* Department of Agricultural Economics and Food Marketing Working Paper. University of Newcastle. Newcastle.

GOW, H. y SWINNEN, J. (1999): «Foreign Direct Investment and Vertical Contracting in the Agro-Food Sector of Transition Economies». Policy Research Group. *Working Paper,* 18, Department of Agricultural Economics, Katholieke Universiteit Leuven.

HARTELL, J. y SWINNEN, J. (1998): «Trends in Price and Trade Policy Instruments in Central European Agricultural and Food Markets», *The World Economy* 21 (2).

HERTEL, T.; BROCKMEIRE, M. y SWAMINNATHAN, P. (1997): «Sectoral and Economy-wide Analysis of Integrating Central and Eastern European Countries into the EU: Implications of Alternative Strategies». *European Review of Agricultural Economies,* Vol. 24 (3/4).

HUAN-NIEMI, E. y NIEMI, J. (2001): *The Next WTO Round on Agriculture and EU Enlargement: Pressures for reforms in the EU Common Agricultural Policy.* MTT Agrifood Research Finland, Economic Research (MTTL), Working Paper 22/2001. Helsinki.

HUGHES, G. (1998): The Economic Advantages of Farm Size in Central and Eastern Europe. *Working Paper,* 2/5. University of London, Wye College.

HUGHES, G. (1999): *Total Productivity of Emergent Farm Structures in Central and Eastern Europe.* University of London, Wye College. Kent.

IERIGZ (1999): *Unit costs and profitability of agricultural production on individual holdings* (annual report in Polish).

LIAPIS, P. y TSIGAS, M. (1998): «CCEC Accession to the EU: A General Equilibrium Analysis», in Burfisher, M., and E. Jones (eds.), *Regional Trade Agreements and US Agriculture.* USDA- *Economic Research ServiceAgricultural Economics Report,* 771, November, Washington, DC.

MACOURS, K. y SWINNEN, J. (2000): «Causes of Output Decline in Economic Transition: The Case of Central and Eastern European Agriculture»: *Journal of Comparative Economics,* 28 (1).

MAPA (2002): *Estimación del compromiso financiero del Consejo Europeo de Bruselas.*

MASSOT, A. (2002a): «La Política Agrícola Común y la ampliación hacia el Este». *Boletín Económico de ICE* 2731: 25-36.

MASSOT, A. (2002b): «El acuerdo del Consejo Europeo de octubre de 2002: entre la ampliación real y la reforma de la PAC virtual». Ponencia presentada al seminario sobre *Los efectos en el sector agroindustrial de Galicia de la ampliación.* Fundación Pedro Barrié de la Maza. Coruña 13 de noviembre de 2002

MATHIJS, E. (2000): *Perspectives on Restructuring during Transition,* presented at the *KATO Symposium,* Berlin.

MATHIJS, E. y VRANKEN, L. (2000): «Farm Restructuring and Efficiency in Transition: Evidence from Bulgaria and Hungary», Selected Paper*, American Agricultural Economics Association Annual Meeting,* Tampa.

MATHIJS, E.; BLAAS, G. y DOUCHA, T. (1999): «Organizational Form and Technical Efficiency of Czech and Slovak Farms». *MOCT-MOST. Economic Policy in Transitional Economies,* 9 (3).

MÜNCH,W. (1999): *Effects of CEC Accession on Agricultural Markets in the CEC and on Government Expenditure.* Paper prepared for the FAIR programme of the EU Commission (FAIR 1-CT95-0029).

MÜNCH,W. (2000): «Effects of CEEC-EU Accession on Agricultural Markets in the CEEC and on Government Expenditure», en Tangermann, S. y Banse (eds.), *Central and Eastern European Agriculture in an Expending European Union,* CAB international.

OECD (2000): *Agricultural Policies in Emerging and Transition Economies.* Paris.

POULIQUEN, A. (1998): «Agricultural Enlargement of the EU under Agenda 2000: Surplus of Farm Labour versus Surplus of Farm Products». *Economics of Transition,* Vol. 6, 2.

POULIQUEN, A. (2001): *Competitiveness and farm incomes in the CEEC Agri-food sectors.* Study for the European Commission, DG Agriculture. October 2001.

RATINGER, T. (2000): «The Competitiveness of Czech Agricultural Producers in an Integrated European Market». In: Swinnen, J. and J. Hartell (eds.), *Agriculture and East-West European Integration.* Aldershor. Ashgate.

SARACENO, E. (2002), Rural development policies and the «second pillar» of the CAP Contributed Paper from X European Conference of Agricultural Economists. Zaragoza 28-30 agosto de 2002

SARRIS, A.; DOUCHA, T. y MATHIJS, E. (1999): «Agricultural Restructuring in Central and Eastern Europe: Implications for Restructuring and **Rural** Development». *European Review of Agricultural Economics,* 26 (3).

SUMPSI, J.M. (2002): «Las implicaciones de la ampliación para la Política Agrícola Común», *Papeles de Economía Española,* n.º 91: 239-252.

SUMPSI, J.M. y BUCKWELL, A. (2002): *Greening the CAP: the future of the «first pillar» Contributed Paper X European Conference of Agricultural Economists.* Zaragoza 28-30 agosto de 2002.

SWINBANK, A. y TANGERMANN, S. (2000): *A Proposal for the Future of Direct Payments under the CAP,* Working paper n.º 1, Project QLRT-1999-01510, Centre for Agricultural Strategy, University of Reading.

SWINNEN, J.; BUCKWELL, A. y MATHIJS, E. (1997): *Agricultural Privatisation, Land Reform and Farm Restructuring -in Central and Eastern Europe.* Aldershot *et al.:* Ashgate.

SWINNEN, J. (2000): «Ten Years of Transition in Central and Eastern European Agriculture», presented at the *KATO Symposium,* Berlin.

SWINNEN, J.; DIVES, L. y MACOURS, K. (2000): «Transition and Agricultural Labour». *Policy Research Group Working Paper,* 16. Department of Agricultural and Environmental Economics. Katholieke Universiteit Leuven.

SWINNEN, J. (2001): *A Fischler reform of the Common Agricultural Policy?* Special Report of the Centre for European Policy Studies (CEPS), Brussels.

TANGERMANN, S. (2000), «Widening the EU to Central and Eastern European Countries: WTO and Perspectives of the New Member Countries», en Burrell, A. y A. Oskam, *Agricultural Policy and Enlargement of the European Union,* Wageningen University Press.

TANGERMANN, S. y BANSE,M. (eds.) (2000): *Central and Eastern European Agriculture in an Expending European Union,* CAB international.

THOMSON, K. (2000): «Economic Problems of EU Accession for Rural Areas in Central Europe», presented at *International Conference: European Rural Policy at the Crossroads.* University of Aberdeen. Aberdeen.

VAN DEN HOVEN, A.; FELLOW, J. M. y SCHUMAN, R. (2002): Enlargement and the EU's Common Commercial Policy. Paper presented at the *Bigger and Better? The EU, Enlargement and Reform - ECSA-C Conference.* Toronto (Canada). June.

WILKIN, J. (2002): *The future of EU agricultural and rural policy from the perspective of the CEE candidate countries*. Akademie fur Raumforschung und Landesplanung (ARL), Hanover, Germany. September.

Annexes

Annex 1. Main macroeconomic indicators

	Area	Populat	Density	GDP in PPP					Inflation rate	Unemployment rate
				Total	Per cápita					
	Km²	(000)	h/km²	Mill. €	€			EU15=100	%	%
	2002	2001	2001	2000	1994	1997	2000	2000	2000	2000
Cyprus	9.251	677	73	12.948	Nd	nd	18.500	82,2	nd	Nd
Slovakia	49.030	5.403	110	58.087	7.200	9.300	10.800	47,9	12,0	18,6
Slovenia	20.270	1.995	98	31.032	10.500	12.800	15.600	69,2	8,9	6,9
Estonia	45.223	1.361	30	12.413	5.300	7.100	8.600	38,2	4,0	13,8
Hungary	93.030	9.973	107	115.061	nd	9.200	11.500	51,0	9,8	6,4
Latvia	64.599	2.351	36	15.959	4.300	5.400	6.700	29,7	2,7	13,2
Lithuania	65.300	3.681	56	27.578	5.300	6.600	7.500	33,3	1,0	11,4
Malta	316	384	1.217	4.921	nd	nd	11.900	52,9	nd	Nd
Poland	312.690	38.629	124	342.104	5.600	7.300	8.900	39,5	10,1	16,0
Czech Republic	78.870	10.275	130	135.549	10.200	12.100	13.200	58,6	3,9	8,8
CA-10	738.579	74.729	101	755.652	6.560	8.423	10.113	44,9	7,6	13,3
EU-15	3.235.394	379.449	117	8.524.943	–	–	22.530	100	2,0	4,5
EU-25	3.973.973	454.178	114	9.280.595	–	–	20.487	90,9	2,9	5,9

Source: own estimation with data from the DG Agriculture, Eurostat, OECD and FAOSTAT.
PPP: Purchasing Power Parity.

Annex 2. Agricultural structure of acceding countries

	Useful Agricultural Area (UAA)		Number of farms	Average area per farm	Average area per agricultural employment
	(000) Ha	% sup. Total	(000)	Ha	Ha
	2001	2001	2000	2000	2000
Cyprus	134	14,5	44,8	3,0	9,6
Slovakia	2.440	49,8	6,7	364,2	20,5
Slovenia	486	24,0	90,61	5,4	6,0
Estonia	986	21,8	176,42	5,6	30,8
Hungary	5.856	62,9	967,1	6,1	25,8
Latvia	2.488	38,5	124,9	19,9	9,5
Lithuania	3.489	53,4	477,8	7,3	29,6
Malta	12	38,1	11,4	1,1	4,0
Poland	18.397	58,8	1880,9	9,8	6,8
Czech Republic	4.282	54,3	56,5	75,8	22,2
CA-10	3.8570	52,2	3.837,1	10,1	10,3
EU-15	130.004	40,2	6.989	18,6	21,5
EU-25	168.574	42,4	10.826,1	15,6	17,2

Source: own estimation with data from the DG Agriculture, Eurostat, OECD and FAOSTAT
1: 1997
2: Estimated

Annex 3. Agriculture in the economy of acceding countries

	Value of agricultural output		Agricultural employment					
	Millions of euro	% in relation to total	Number of jobs (000)			% in relation to total		
	2000	2000	1994	1997	2000	1994	1997	2000
Cyprus	329	3,5	nd	nd	14	nd	nd	9,2
Slovakia	847	4,5	214	202	119	10,1	9,2	6,7
Slovenia	560	3,2	98	115	81	11,5	12,7	9,9
Estonia	309	6,3	101	61	32	14,6	9,4	7,4
Hungary	1.816	4,1	328	288	227	8,7	7,9	4,8
Latvia	314	4,5	nd	325	262	nd	20,7	19,6
Lithuania	832	7,5	nd	209	118	nd	20,6	13,5
Malta	78	2,0	nd	nd	3	nd	nd	1,9
Poland	4.984	3,3	3.515	3.116	2.698	24,0	20,5	18,8
R. Czech	1.996	3,9	338	284	193	7,0	5,8	7,4
CA-10	12.065	3,8	4.594	4.600	3.747	20,5	18,0	16,5
EU-15	167.544	2.0	–	–	7.129	–	–	4,3
EU-25	179.609	2,2	–	–	10.826	–	–	8,5

Source: own estimation with data from the DG Agriculture, Eurostat, OECD and FAOSTAT

Annex 4. External agricultural trade in the acceding countries

Table 4.1.

Weight of agricultural trade on international trade in the acceding countries (year 2000)

	% of agricultural trade in relation to total trade in the AC		% of agricultural trade in relation to AC trade with the EU-15	
	Exports	Imports	Exports	Imports
Cyprus	2,6	3,1	3,1	1,3
Slovakia	4,3	7,0	1,8	5,5
Slovenia	4,5	6,8	24,0	51,3
Estonia	5,6	11,6	2,5	10,3
Hungary	10,1	4,0	6,3	2,9
Latvia	7,3	13,3	3,2	12,0
Lithuania	12,7	10,3	8,5	10,4
Malta	0,2	0,8	0,1	1,0
Poland	9,8	7,9	6,1	6,2
R. Czech	4,8	6,7	2,7	5,1
CA-10	8,4	7,2	6,1	9,1

Source: EC (2002a)

Table 4.2.

Distribution of agricultural trade in the acceding countries (1997-2000 average)

	Total trade (millions of euro)												Trade with the European Union (millions of euro)											
	Imports				Exports				Balance				Imports				Exports				Balance			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Cyprus[1]	405	41	149	210	114	22	63	30	–291	–19	–89	–180	251	34	72	139	76	9	45	19	–175	–25	–27	–180
Slovakia	810	72	253	417	429	70	156	179	–381	–2	–97	–238	313	22	104	157	99	27	29	32	–214	5	–74	–125
Slovenia	700	79	232	328	352	68	31	216	–348	–12	–201	–112	360	36	125	180	101	22	14	43	–259	–13	–110	–137
Estonia	421	59	115	187	137	67	21	41	–284	8	–93	–146	245	29	79	116	43	23	10	4	–111	–6	–69	–111
Hungary	1.022	112	309	485	2.305	762	736	774	1.283	650	426	289	468	70	135	195	1.074	463	331	258	606	394	196	63
Latvia	381	33	131	186	123	28	13	64	–258	–5	–119	–122	186	10	85	84	32	10	3	6	–154	0	–82	–78
Lithuania	497	51	181	212	387	173	72	116	–111	122	–109	–96	231	28	93	94	118	46	24	32	–112	19	–69	–62
Malta[1]	304	54	76	168	65	1	4	58	–239	–54	–71	–111	230	40	40	146	7	0	3	4	–223	–40	–38	–142
Poland	3.453	329	1.441	1.303	2.646	648	734	1.194	–806	320	–707	–109	1.748	177	630	746	1.135	320	453	319	–613	143	–178	–427
R. Czech	1845	138	722	861	1194	248	330	552	–650	110	–291	–308	893	78	315	421	435	85	126	179	–457	7	–189	–253
CA-10	9.836	969	3.608	4.356	7.752	2.088	2.160	3.223	–2.085	1.119	–1.350	–1.133	4.922	524	1.676	2.278	3.120	1.007	1.038	894	–1.711	483	–638	–1.657

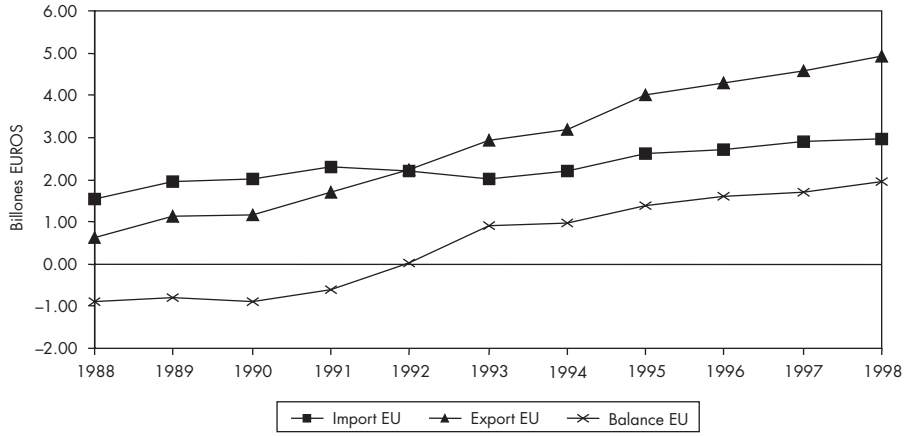
Source: EC (2002a)

A: All agricultural and food products (except fish products); B: Animal products; C: Vegetable products; D: Processed products and beberages;

1: Figures for 2000 only

Graph 4.1.

Development of the agro-food trade between the EU-15 and the CEECs (thousands of millions of euro)



Source: European Commission

Annex 5. Agricultural output, prices and self-sufficiency in the AC-3

	POLAND					HUNGARY					CZECH REPUBLIC				
	%VAB (2000)	Price differential with the EU (%)			% Autos. (2000)	%VAB (2000)	Price differential with the EU (%)			% Autos. (2000)	%VAB (2000)	Price differential with the EU (%)			% Autos. (2000)
		1993	1997	2000			1993	1997	2000			1993	1997	2000	
Cereals	18,0	–	–	–	87	17,6	–	–	–	111	20,1	–	–	–	98
Wheat	8,0	–27	+20	+10	85	5,9	–44	–10	–8	128	12,2	–46	–27	–24	112
Barley	2,3	–30	+8	–4	77	1,5	–46	–7	–27	90	5,8	–42	–28	–38	82
Corn	0,4	–35	–2	–4	50	9,4	–40	–32	–13	106	0,8	–38	–9	–5	56
Oats	2,8	–	–	–	100	0,2	–	–	–	104	0,4	–	–	–	94
Rice	3,0	–46	–10	–14	93	0,1	–55	–11	–5	109	0,7	–48	–17	–23	71
Other cer.	1,4	–46	–12	–14	96	0,5	–53	–16	–15	117	0,2	–47	–33	–171	112
Rapeseed	1,8	–12	+6	+6	94	1,0	–47	–21	+5	140	5,0	–25	–27	–10	127
Sugar	2,9	–58	–25	–8	120	3,5	–28	–33	–21	–	0,4	–43	–33	–27	97
Horticultural	7,4	–	–	–	103	11,2	–	–	–	1351	1,9	–	–	–	62[1]
Potatoes	6,9	–	–	–	114	3,7	–	–	–	–	4,0	–	–	–	99
Fruits	6,3	–	–	–	85	7,5	–	–	–	981	1,7	–	–	–	55[1]
Milk	13,6	–60	–50	–33	103	10,3	–39	–41	–18	101	20,6	–41	–35	–28	121
Beef & veal	4,3	–62	–30	–29	115	2,3	–49	–46	–50	99	7,5	–42	–30	–28	97
Pigmeat	18,7	–3	–30	–12	105	15,8	–3	–34	–21	116	16,1	+4	–16	–14	99
Eggs	3,4	–	–	–	97	3,3	–	–	–	1041	3,1	–	–	–	102[1]
Chicken	5,4	–21	+13	–29	105	10,3	–14	–16	–15	158	4,6	–26	–23	–45	99
Sheepmeat	0,1	–	–	–	300	0,7	–	–	–	130	0,1	–	–	–	100

Source: Own estimation with data from Eurostat, DG Agriculture
1: 1999

Annex 6. Reference quantities applied for and granted in the MCOs

Start

	Cyprus		Slovakia		Slovenia		Estonia		Hungary		Latvia	
	S	C	S	C	S	C	S	C	S	C	S	C
Base area COP[1] (1.000 Ha)	89,2	79,0	992	1.003,5	150	125,2	650	362,8	3.653,4	3.487,8	753	443,6
Return COP (Tm/Ha)	2,45	2,30	4,99	4,06	6,12	5,27	3,50	2,40	5,04	4,73	3,59	2,50
Quota of starch potatoes (Tm)	–	–	s.c.[8]	729	2.800	0	10.000	250	–	–	–	5.778
Traditional hard wheat (Ha)	15.000	–	5.000	–	–	–	–	–	15.000	2.500	–	–
Hard wheat established production[2](Ha)	0	–	0	–	–	–	–	–	50.000	4.305	–	–
Base area for rice (Ha)	–	–	–	–	–	–	–	–	18.000	3.222	–	–
Rice return (Tm/Ha)	–	–	–	–	–	–	–	–	–	3,10	–	–
Dehydrated forage (Tm)	–	–	s.c.[8]	13.100	5.000	0	30.000	0	200.000	49.593	–	–
A-sugar (1000 Tm)	–	–	190	189,8	67,5	48,2	65	0	400	400,5	100	66,4
B-sugar (Tm)	–	–	45.000	17.672	7.500	4.816	10.000	0	80.000	1.230	10.000	105
Total sugar (1.000 Tm)	–	–	235	207,4	75	53,0	75	0	480	401,7	110	66,5
A-isoglucose quota[3] (Tm)	–	–	50.000	42.547	–	–	–	–	130.000	127.627	–	–
B-isoglucose quota (Tm)	–	–	10.000	0	–	–	–	–	10.000	10.000	–	–
Olive oil GMQ[4] (Tm)	6.450	6.000	–	–	600	400	–	–	–	–	–	–
Linen, long fibre GMQ (Tm)	–	–	800	73	–	–	0	30	s.c.[8]	0	1.500	360
Linen, short fibre, hemp (Tm)	–	–	1.600	189	–	–	0	42	s.c.[8]	2.061	3.500	1313
Total tobacco[5] (Tm)	1.000	350	2.600	1.715	–	–	–	–	15.000	12.355		
Dairy quota (1.000 Tm)	150	145,2	1.235,9	1.040,7	695	576,6	900	646,4	2.800	1.990,1	1.200	728,6
Calves special premiums[6]	13,7	12	80	78,3	95	92,3	50	18,8	245	94,6	75	70,2
Suckler cows premiums[6]	0,5	0,5	50	28,1	150	86,4	2	13,4	300	117	25	19,4
Slaughter premiums for cattle[6]	26,5	21	260	204,1	163	161,1	106,6	107,8	480	141,6	145	124,3
Slaughter premiums for calves[6]	0	0	60	62,8	22	35,9	79,3	30		94,4	75	53,3
Additional payments. Cattle[7]	s.c.[8]	309	s.c.[8]	4.501	4.501	2.964	s.c.[8]	1.135	12.000	2.936	3.500	1.330,7
Sheepmeat and goatmeat premiums[6]	421	472,4	400	305,8	125	84,9	142	27,5	1.550	1.146	50	18,4

End

	Lithuania		Malta		Poland		R. Czech		AC-10		Total EU-15	% AC10/EU-25
	S	C	S	C	S	C	S	C	S	C		
Base area COP[1] (1.000 Ha)	1.355	1.146,6	4,5	4,6	9.248	9.308,3	89.183	2.253,6	19.296,9	18.214,9	53.593	25,37
Return COP (Tm/Ha)	3,59	2,70	–	2,02	3,61	3,00	4,20	4,20	–	3,51	4,84	42,04
Quota of starch potatoes (Tm)	8.500	1.211	–	–	260.000	144.985	45.000	33.660	341.300	186.613	1.762.148	9,58
Traditional hard wheat (Ha)	–	–	–	–	–	–	–	–	35.000	8.683	3.190.000	0,27
Hard wheat established production[2](Ha)	–	–	–	–	–	–	–	–	50.000	9.022	73.000	11,00
Base area for rice (Ha)	–	–	–	–	–	–	–	–	18.000	3.222	433.123	0,74
Rice return (Tm/Ha)	–	–	–	–	–	–	–	–	–	–	–	–
Dehydrated forage (Tm)	20.000	650	–	–	160.000	0	s.c.[8]	27.942	s.c.[8]	91.285	4.855.900	1,85
A-sugar (1.000 Tm)	150	103,0	–	–	1.650	1.586,2	s.c.[8]	441,2	s.c.[8]	2.835,2	11.894,2	19,25
B-sugar (1.000 Tm)	15.000	0	–	–	216.000	91.926	s.c.[8]	13.653	s.c.[8]	129.402	2.587.919	4,76
Total sugar (1.000 Tm)	165	103,0	–	–	1.866	1.678,1	505	454,9	3.511	2.964,6	14.482,1	16,99
A-isoglucose quota[3] (1.000 Tm)	–	–	–	–	15.000	18.701	–	–	195.000	188.875	249.713	43,06
B-isoglucose quota (1.000 Tm)	–	–	–	–	5.000	1.870	–	–	25.000	11.870	51.012	18,88
Olive oil GM[4] (Tm)	–	–	–	–	–	–	–	–	7.050	6.400	1.777.261	0,36
Linen, long fibre GMQ (Tm)	6.000	2.263	–	–	0	924	8.000	1.509	s.c.[8]	5.159	75.250	6,42
Linen, short fibre, hemp (Tm)	8.500	3.463	–	–	0	462	7.080	2.183	s.c.[8]	9.713	135.900	6,67
Total tobacco[5] (Tm)	–	–	–	–	70.000	37.933	–	–	88.600	52.353	256.067	16,97
Dairy quota (Tm)	2.250	1.704,8	60	48,7	13.740	9.380,1	3.100	2.737,9	26.130,9	18.999,3	119.533,1	13,71
Calves special premiums[6]	154	150	s.c.[8]	3,2	2.200	926	305	244,3	3.217,7	1.689,8	9.287,2	15,39
Suckler cows premiums[6]	62	47,2	s.c.[8]	0,5	1.500	325,6	230	90,3	2.319,5	728,3	10.824,2	6,30
Slaughter premiums for cattle[6]	335	367,5	s.c.[8]	6,0	2.021	1.815,4	530	483,4	3.827,1	3.432,2	23.494,6	12,75
Slaughter premiums for calves[6]	290	244,2	s.c.[8]	0,02	1.017	839,5	131,1	27,4	1.914,4	1.387,5	5.984,3	18,82
Additional payments. Cattle[7]	s.c.[8]	1.942	s.c.[8]	64	s.c.[8]	27.300	s.c.[8]	8.776	s.c.[8]	54.258	493.000	9,91
Sheepmeat and goatmeat premiums[6]	12	17,3	s.c.[8]	8,5	720	335,9	130	66,7	3.550	2.483,4	79.164	3,04

Source: Agro Europe (grants), EC (2002c) (applications)

A: application, G: grant

Notes: 1: COP – cereals, oilseeds and protein crops; 2: Areas with established production; 3: Isoglucose; 4: GMQ – Guaranteed Maximum Quantity; Divided into four types: flue cured, light air cured, dark air cured, and fire cured; 6: Number of premiums, in thousands of units; 7: In thousands of euro; 8:Not quantified.

Annex 7. Financial balance sheet for 2007-2013 (MAPA, 2002)

Chart 1.

Estimation of the undertaking at the European Council of Brussels (current values)

	2006	2007	2008	2009	2010	2011	2012	2013
Payments direct aids AC-10		35%	40%	50%	60%	70%	80%	90%
Heading 1 A								
1 A Direct aids EU-15 (without dairy products)	31,575	31,575	31,575	31,575	31,575	31,575	31,575	31,575
Direct aids AC-10	1,629	2,012	2,300	2,874	3,449	4,029	4,599	5,174
Rest of EAGGF EU-15 (without dairy products)	7,449	7,561	7,674	7,789	7,906	8,025	8,145	8,267
Rest of EAGGF CEEC-10	843	856	868	882	895	908	922	936
Direct aids to dairy sector A-2000	979	1,958	2,937	2,937	2,937	2,937	2,937	2,937
Market aids to dairy sector A-2000	1,768	1,267	808	820	832	845	858	870
I **Subtotal 1 A**	44.243	45.228	46.163	46.877	47.594	48.319	49.035	49.759
Subtotal EU-15	41.771	42.361	42.994	43.121	43.251	43.382	43.515	43.650
Subtotal CEEC	2,472	2,868	3,168	3,756	4,344	4,937	5,521	6,110
II **CEILING COUNCIL OF BRUSSELS**	45,306	45,759	46,217	46,679	47,146	47,617	48,093	48,574
MARGIN (II-I)	1,063	531	54	(198)	(449)	(702)	(942)	(1,185)

Source: MAPA, 2002. For the EU-15 direct aids payments and other aids are taken from the Commission's forecast of the development of the agricultural expenditure attached to the Mid Term Review.

For the dairy sector adjustments have been made in direct aids and other expenses in accordance with the implementation of the Berlin Compromise (A2000). Direct aids (CEEC-10) are increased according to the phasing-in established. Payments of aids for year n are made the year n+1.

— Freeze of direct aids.

— The increase of other expenses in accordance with the expected inflation (1.5% annual).

Increase of Ceiling at 1% annual in accordance with the agreement of the European Council.

Annex 8. Development of land prices (1983-2001)

Chart 2.

Development of land prices 1983-2001 (base 1997)

Years	Current prices		Constant prices	
	Euros/Ha.	Index 1983=100	Euros/Ha.	Index 1983=100
1983	2.564	100,0	2.564	100,0
1984	2.799	109,2	2.524	98,5
1985	3.116	121,5	2.588	101,0
1986	3.492	136,2	2.616	102,0
1987	3.957	125,3	2.798	109,1
1988	4.435	173,0	2.960	115,5
1989	4.718	184,0	2.946	114,9
1990	4.585	178,8	2.668	104,1
1991	4.343	169,4	2.363	92,2
1992	3.816	148,8	1.945	75,9
1993	3.806	148,4	1.856	72,4
1994	4.058	158,3	1.905	74,3
1995	4.284	167,1	1.917	74,8
1996	4.616	180,0	1.995	77,8
1997	5.272	205,6	2.227	86,9
1998	6.124	238,9	2.526	98,5
1999	6.823	266,1	2.740	106,9
2000	7.292	284,4	2.830	110,4
2001	7.552	294,6	2.813	109,7

Source: Poll on land prices, MAPA (2001)

Annex 9. The Financial framework of the Berlin Summit, 24-25/10/2002, for the firt Heading - period 2007-2013: limits and availability (payment credits in millions of euro at current prices)

	Base 2006	2007	2008	2009	2010	2011	2012	2013
I. Maximum Ceiling set by the Council (at constant prices)	45.306	45.306	45.306	45.306	45.306	45.306	45.306	45.306
II. Maximum Ceiling set by the Council (in current euro + 1%) of which	45.306	45.759	46.217	46.679	47.146	47.617	48.093	48.574
a) EU-15	42.834	42.361	42.994	43.121	43.251	43.382	43.515	43.650
b) 10 new acceding countries	2.472	2.868	3.168	3.756	4.344	4.937	5.521	6.110
III. Available budget 2006 for EU-15 at current prices (except dairy expenses, VI) (*), of which del que:	(39.024)	(39.136)	(39.249)	(39.364)	(39.481)	(39.600)	(39.720)	(39.842)
a) EU-15 direct aids (frozen)	(31.575)	(31.575)	(31.575)	(31.575)	(31.575)	(31.575)	(31.575)	(31.575)
b) Other market interventions	(7.449)	(7.561)	(7.674)	(7.789)	(7.906)	(8.025)	(8.145)	(8.267)
(with structural scope for action – IV.b)	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800
IV. New consolidated funds available	1.800	2.253	2.711	3.173	3.640	4.111	4.587	5.068
a) Via 1% annual increase (II-I)	0	453	911	1.373	1.840	2.311	2.787	3.268
b) Via differential from commitments not implemented (on historical bases)	1.800	1.800	1.800	1.800	1.800	1.800	1.800	1.800
V. Supplementary cost for enlargement at 10: CEECs + Cyprus + Malta (**) of which	(2.472)	(2.868)	(3.168)	(3.756)	(4.344)	(4.937)	(5.521)	(6.110)
a) Direct aids	(1.629)	(2.012)	(2.300)	(2.874)	(3.499)	(4.029)	(4.599)	(5.174)
b) Other market interventions	(843)	(856)	(868)	(882)	(895)	(908)	(922)	(936)
VI. Cost of renewed MCOs for dairy sector (***) of which	(2.747)	(3.225)	(3.745)	(3.757)	(3.769)	(3.782)	(3.795)	(3.807)
a) New direct aids to EU-15	(979)	(1.958)	(2.937)	(2.937)	(2.937)	(2.937)	(2.937)	(2.937)
b) Other market interventions	(1.768)	(1.267)	(808)	(820)	(832)	(845)	(858)	(870)
VII. Room for manoeuvring in force (I + IV) – (III + V +VI)	**2.863**	**2.330**	**1.855**	**1.602**	**1.352**	**1.098**	**857**	**615**
VIII. Additional funds available:								
a) Through 40% reduction in export subsidies, to be phased in between 2005 and 2011	752	1.128	1.504	1.880	2.256	2.256	2.256	2.256
b.1) b.1) Through a 2% non-cumulative compulsory modulation of direct aids (III.a + VI.a) with 10,000 euro duty-free	453,1	466,8	480,4	480,4	480,4	480,4	480,4	480,4
b.2) b.2) Through a 3% cumulative compulsory modulation, up to 20%, with 10,000 euro exemption (III.a + VI.a) (****)	0	700,1	1.441,2	2.161,8	2.882,4	3.603	4.323,6	4.804
— First option (a + b.1)	1.205,1	1.594,8	1.984,4	2.360,4	2.736,4	2.736,4	2.736,4	2.736,4
— Second option (a + b.2)	752	1.828,1	2.945,2	4.041,8	5.138,4	5.859	6.579,6	7.060
IX. Margin available for other sector-based reforms								
— First option (VII + VIII.a + VIII.b.1)	**4.068,1**	**3.924,8**	**3.839,4**	**3.962,4**	**4.088,4**	**3.834,4**	**3.593.4**	**3.351,4**
— Second option (VII + VIII.a + VIII.b.2)	**3.615**	**4.158,1**	**4.800,2**	**5.643,8**	**6.490,4**	**6.957**	**7.436,6**	**7.675**
X. Pro Memoria: Cost forecast for the accession of Bulgaria and Romania (at constant prices)	—	—	951	1.091	1.230	1.370	1.510	1.649
XI. Pro Memoria: Cost forecast of a new dairy reform from 2010 (*****):								
a) Status quo option	—	—	—	—	3.143	3.102	3.061	3.020
b) Continuation of Agenda 2000	—	—	—	—	5.075	5.041,6	5.008,2	4.974,8
c) Abolishing of quotas	—	—	—	—	5.876	5.876	5.876	5.876

Notes:

(*) Calculations made based on the budget for the year 2006 (Commission, 2000d – Chart 1) with direct aid frozen and a 1.5% increase in the remaining interventions based on inflation. MCO milk expenditures are excluded for they are subject to reform and to provide room for a supplementary cost (VI). The differential between the what has been set and what has been implemented, stabilised at around 1,800 million euro according to historical bases, is included in order to be later estimated as an additional consolidated fund available (IV.b)

(**) With gradual increases in direct aid according to the phasing-in set at Brussels (with effective payment of 35% of the total in 2007; 40% in 2008; 50% in 2009; 60% in 2010; 70% in 2011; 80% in 2012; and 90% in 2013).

(***) Reform to be implemented between 2006 and 2008, with increasing direct aid and decreasing interventions. However, a progressive increment of the cost of the dairy MCO as a whole can be observed.

(****) Once implemented the exemption of 10,000 euro on 30.79% of the aids (III.a + VI.a), the amounts subject to modulation amount to: 22,657.6 million euro in 2006 (only for the hypothesis b.1); 23,338.9 in 2007; and 24,020.3 millions for 2008-2013. In the hypothesis b.2, modulation percentages are 3%, 6%, 9%, 12%, 15%, 18%, and 20% between 2007 and 2013.

(*****) Calculations based on the working document of the Commission SEC (2002) 789, chart 7 - p. 38. For the first two options a gradual linear evolution of expenditures was estimated based on the figures in the document for the years 2010 and 2015 (3,143 and 2,938 for the status quo; and 5,075 and 4,908 for continuing with Agenda 2000). On principle we reject the fourth option presented by the Commission, the dual quota system, as we consider it to be unfeasible after the condemnatory resolution of the WTO arbitration committee on the Canadian system.

Source: Massot, 2002b from chart 1of the Commission's (EC, 2002e) Communication COM (2002) 394 and assessments by AGRA EUROPE weekly (2002) and MAPA services (MAPA, 2002).

BUDGETARY CHALLENGES OF THE EUROPEAN UNION ENLARGEMENT

Budgetary challenges of the European Union enlargement

Ignacio Zubiri
Professor of Public Finance

EUROPEAN ACADEMY FOR SCIENCES AND ARTS
SPANISH DELEGATION

Budgetary Challenges of the European Union Enlargement

Published by:
European Academy for Sciences and Arts

printed by: Sociedad Anónima de Fotocomposición
Talisio, 9. 28027 Madrid

CONTENTS

1. Introduction

A European Union enlargement is going to take place in 2004 involving substantial challenges. The new countries will increment the EU population by nearly 20% (almost 75 million inhabitants) but they will increase income in less than 5%. They are, therefore, relatively very poor countries whose per capita income (without Purchasing Power Parities, PPP, adjustments) is less that 25% of the present EU average. Besides, these are countries with a substantial part of their population often working in low productivity farming.

The new member States are, therefore, potential candidates to a large amount of resources coming from the EU basic budgetary policies: Agriculture (CAP) and cohesion (structural operations). Furthermore, the accession of Romania and Bulgaria, presumably in 2007, will increase the requirements on the budget.

This enlargement involving a group of countries that will become net recipients of community resources takes place at a time when, unlike in previous enlargements, present member States are not willing to provide too many additional resources. This is due in large measure to a lasting economic crisis affecting many EU countries, as well as to the existence of some disillusionment with the belief in the European ideal.

The accession of countries that will be net recipients of resources together with the reluctance of present members to provide additional resources, bring about various conflicts that affect in large measure to present member countries with less income, that see how the structural resources they are receiving are at stake. There is, simply, a strain between those countries that want an enlargement without much extra spending (i.e., paying for it in part by transferring budget resources from present member countries with low income to the new member States), and those that prefer to keep significant levels of expenditure.

In this context, the aim of this paper is to analyse the budgetary and distributive implications of the enlargement, as well as to suggest short and medium term reforms. In order to do that, section 2 starts off by reminding the basic features of the new member States. The various budgetary agreements reached by the European Commission are reviewed in section 3, and the foreseen benefits for the new States are compared to those of the present members. In section 4 the cost of the enlargement is assessed and section 5 analyses its distributive implications. In this section we also make a budget proposal for the period 2007-2013. This proposal of budgetary reform is developed in section 6, where a reflection is made on the direction long-term policies should take. Finally, section 7 provides a summary of the main conclusions.

2. The new member countries: basic features

The present EU consists of 15 members and has almost 380 million inhabitants. On May 1, 2004[1], ten countries will join (Poland, Czech Republic, Hungary, Slovakia, Lithuania, Latvia, Slovenia, Estonia, Cyprus and Malta), with nearly 75 million inhabitants. Furthermore, Romania and Bulgaria (almost 30 million inhabitants) will join the EU in a near future, maybe as early as 2007[2]. Finally, it is the case of Turkey (almost as populated as the ten countries that will become part of the EU in 2004) where, in spite that its accession application dates back to 1987[3], a date for its accession has not been set yet, not even a tentative one.

Table 1 details the basic economic characteristics of the candidates to the accession and compare them to those of the present EU-15. Broadly speaking, the accession of the ten new acceding countries (AC-10) will increase the EU area by nearly 23%, and its population by almost 20%. However, 80% of the population increase concentrates on only three countries: Poland (which accounts for 51% of the new population), Czech Republic (which contributes with almost 14%) and Hungary (whose population is similar to that of the Czech Republic). Poland, and to a much lesser extent Czech Republic and Hungary, are therefore key countries to assess the impact of the enlargement. Comparatively, in terms of population Poland is very similar to Spain, whereas Czech Republic and Hungary are identical with Greece.

In economic terms, the AC-10 contribution to the EU is quite lower than in demographic or physical terms. Thus, the EU's GDP will grow slightly under 5% (a fourth of its population increase). When the adjustment is made based on price differences and the increase of the purchasing power parity (PPP)-corrected GDP is taken into account, the growth of the EU' GDP is 9%. Therefore, the PPP adjustment nearly doubles the AC-10 imputed income. This makes evident the significance of this adjustment and that it may substantially affect the relative wealth level of countries depending on whether it is made or not.

The AC-10 difference between population and income makes clearly evident that, as a whole, the AC-10 are quite poor in relation to the EU-25. In fact, the AC-10 per capita income is not even 25% of the EU-15 income, though after the PPP-adjustment it increases to over 45%. It should be borne in mind that many decisions in the EU (such as the qualification to become objective 1 region) as well as analysis (studies on cohesion), are carried out in terms of PPP-adjusted income.

In terms of wealth, however, there are substantial differences between countries. On the one hand, Slovenia and Cyprus nearly reach 75% of the EU-15 average in terms of PPP-adjusted per capita GDP[4]. On the other, the three Baltic Republics (Estonia, Latvia and Lithuania) and the largest country – Poland – barely reach 40%. Without price adjustments the differences with the EU-15 would be more dramatic since none of them reaches 65% of the EU-15 per capita GDP and Poland's wealth, for example, is just 22% of the EU-15 average.

[1]Initially the date for accession to the EU was January 1, 2004. However, this date was postponed in order to diminish the contribution of the new countries to the EU and to improve their accession conditions (by acceding later their contribution has been reduced by a third, whereas the resources they receive from the EU are not expected to be reduced significantly).
[2]This date has been set as an orientation for the accession of these countries.
[3]This date is before – in most cases long before – the applications of the countries that will join the EU in 2004.
[4]See the importance of the PPP-adjustment inasmuch as without it Cyprus' income would be 63% of the EU-15 average and Slovenia's only 49%.

Table 1

Basic features of the candidate countries (2002)

	Poland	Czech Republic	Hungary	Slovakia	Lithuania	Latvia	Slovenia	Estonia	Cyprus	Malta	TOTAL AC10	EU15	AC10/ EU15 (%)	Romania	Bulgaria	Turkey
A) PHYSICAL CHARACTERISTICS																
Area (thousands of KM^2)	312,7	78,9	93,0	49,0	65,3	64,6	20,3	45,2	9,3	0,3	**738,6**	**3.234,6**	**22,8**	238,4	110,9	769,6
Population (millions, 2003)	38,2	10,2	10,2	5,4	3,5	2,3	2,0	1,4	0,8	0,4	**74,3**	**379,0**	**19,6**	21,8	7,8	70,2
Density (Inhabitants/KM^2)	122	129	110	110	54	36	99	31	86	1.333	**101**	**117**		91	70	91
B) INCOME																
GDM (milliards of euro, 2002)	200,2	73,9	69,9	25,1	14,9	8,9	23,4	6,8	10,8	4,1	**438,0**	**9.161,0**	**4,8**	48,4	16,6	191,7
GDP in PPP (milliards of euro, 2002)	365,6	147,3	138,2	61,1	32,6	19,8	35,4	13,4	12,5	0	**826**	**9.161**	**9,0**	131,9	46,7	383,3
Per capita GDP (index, EU-15 =100, 2002)	22	30	29	19	18	16	49	21	63	43	**24**	**100**	**24**	9	9	11
Per capita GDP in PPP (index, EU=100, 2002)	39	60	57	47	39	35	74	41	73	55 [2]	**46**	**100**	**46**	25	25	23
Real GDP growth (annual average 1998-2002)	3,5	1,5	4,5	2,7	4,0	5,6	4,1	4,0	4,8	3,2	**3,4**	**2,7**		0,5	3,9	–0,4
C) NEED OF COMMUNITY FUNDS																
Population % in farming (2001)	19,2	4,9	6,1	6,3	16,5	15,1	9,9	6,9	4,9	nd	**13,3**	**4,2**		44,4	9,7	37,0
GVA% from farming (2001)	3,8	4,2	4,3	4,6	7,1	4,7	3,1	5,8	4,0	2,4	**4,1**	**2,1**		14,6	13,7	11,3
Per capita GDP in PPP (index, EU-25 = 100, 2002)	43	66	62	52	43	39	81	45	80	60	**51**	**110**	**24**	27	27	25
Population % in objective 1 regions[3]	100	88,5 [4]	71,7 [5]	88,6 [6]	100	100	100	100	0,0	100	**92,8**	**22,0**		100	100	nd
D) MONETARY CONVERGENCE CRITERIA																
Budget balance (in GDP%, 2002)	–4,2	–6,5	–9,1	–7,7	–1,8	–2,5	–1,8	1,3	–3,5	–6,1		**–1,9**		–2,6	–0,7	–13,7
Debt (% of the GDP, 2000)	40,9	17,0	58,2	32,4	23,6	13,0	25,8	5,3	63,0	60,6		**64,1**		22,8	76,9	56,4
Inflation (2002)	1,9	1,4	5,3	3,3	0,3	1,9	7,5	5,6	2,8	2,2		**1,9**		22,5	5,8	45,0
E) OTHER																
Unemployment (2002)	20,0	7,3	5,6	19,4	13,1	12,9	6,0	9,1	5,3	7,5	**15,1**	**7,5**		8,0	18,6	10,4
Level of education[1] (2001)	83,0	87,8	73,9	87,1	88,5	81,5	77,2	88,2	67,4	nd	**82,8**	**65,8**		74,7	74,0	nd

[1] Defined as 100 – population % with a low level of education = population % with a medium-high level of education. [2] Datum for 1999. [3] Data for 2000. [4] Includes the whole country except Prague whose per capita income is 35% higher than the EU-25 average. [5] Includes the whole country except Budapest region whose per capita income is 83,4% of the EU-25 average. [6] Includes the whole country except Bratislava whose per capita income is 8% higher than the EU-25 average.

Sources: EUROSTAT (2003a, 2003b), COM (2003) 34.

It should be emphasised that in the last few years growth rates in the AC-10 have risen moderately more than in the EU-15 (3.5% annually vs. 2.7%), and in countries like Latvia it has risen to over 5%. These growth rates suggests that AC-10 countries are achieving good economic results. However, given the initial income gap with the EU-15, it would take several decades for a significant convergence of growth rates in the AC-10 to take place, even if they kept higher than in the EU-15 countries. For example, the European Commission[5] estimates that many AC-10 countries will take more than thirty years in reaching a per capita income of 75% of the EU-15 average[6].

Table 1 shows some preliminary indicators of the AC-10 need for EU funds. As regards to the CAP (Common Agricultural Policy), as should be expected of less developed economies, the AC-10 depend on agriculture substantially more than the EU-15. Thus, the share of population working in agriculture in the AC-10 more than triples that of the EU-15. This means that the AC-10 get from agriculture a percentage of the GVA that doubles the one obtained by the EU-15[7]. There are significant differences between countries again, and it is the largest country – Poland – the one with the largest share of population working in this sector (nearly 20%).

As for the need of cohesion funds, with the present criteria all these countries would be recipients since none of them has a per capita income (in PPP) higher than 90% of the EU-25. Besides, nearly all the regions from the new countries will be considered objective 1 in terms of structural funds, inasmuch as only the regions of Prague, Bratislava, Budapest and, especially Cyprus exceed 75% of the EU-15 average income (in PPP).

In addition, all the AC-10 have lower levels of debt than those of the EU-15 though in many instances the levels of public deficit are high, exceeding widely the 3% limit set down in the Stability and Growth Pact. The most extreme case is Hungary's, whose public deficit is close to 10% of the GDP.

Inflation seems to be under control in all AC-10 countries, except for Hungary, Latvia and Slovenia. Unemployment is high in many countries, in particular in Poland (where it exceeds 20%) and Slovakia (19.4%). Finally, it should be stressed that in every AC-10, the level of education is higher than in the EU-15. In principle, this should translate into qualified labour capable of competing in the EU.

Taking the aforementioned into account, the EU enlargement entails the integration of a group of countries with a very low income and a great dependence on agriculture (in relation to present EU countries). This means that all the new countries are potential recipients of structural and cohesion funds as well as CAP funds.

So far the analysis has focused on countries, AC-10, that will join the EU in the near future (May of 2004). Table 1 also provides information on countries that may join the EU in the short term, as is the case of Romania and Bulgaria, or in the medium term, as may be the case of Turkey.

[5] EU (2001).
[6] This will be the case for Lithuania, Malta and Poland. According to EU (2001) Slovenia will take one year in reaching 75% of the EU average, Czech Republic, Hungary, Estonia and Slovakia between ten and twenty, and Latvia between twenty and thirty.
[7] The differences in production are lower than the differences in employment due, obviously, to the very low agricultural productivity in the AC-10 (even lower in relation to the EU-15 than the productivity of other sectors).

Romania and Bulgaria together account for nearly 30 million inhabitants (slightly fewer than in Poland) and their features and integration problems are similar to those of the AC-10, only that magnified: in both countries per capita income is very low. Without price adjustments the per capita income of both countries does not reach 10% of the EU average. What is more, it doesn't even reach half of the income of the poorest new member countries. In addition, both countries depend substantially on agriculture, which in the case of Romania (the largest of the two) employs nearly 45% of the population.

Finally, we have the case of Turkey. Its integration in the EU is an exercise full of political and cultural problems. In fact, as we said, Turkey submitted its accession application in 1987 (long before many new members) and it neither has a timetable with a tentative date of entry nor it is clear when it will have it. At any rate, the integration of Turkey will also be a substantial economic challenge insomuch as the country has nearly as many inhabitants as the ten countries that will join the EU in 2004. The difference lies in the fact that Turkey is poorer than any of them (11% of the EU-15 average without price adjustments and 23% with PPP-adjustment), its agriculture is three times more significant (37% of the Turkish population as opposed to slightly under 13% in the AC-10), and the level of education of its population is much lower[8].

[8]Turkey is, together with Portugal, the OECD country with lowest levels of education. Thus, for example, 66% of its population does not go beyond elementary school, whereas the EU average is 15% (OECD, 2002).

3. Budgetary effects of the EU enlargement

Several EU enlargements have taken place in the past. The difference between the present enlargement and previous ones lies in two basic aspects: Firstly, the level of relative poverty of the new member countries is much higher than in preceding enlargements. Besides, this relative poverty is more significant since now the community budget devotes more to redistribution than in the past[9].The second basic difference is that, unlike in previous occasions, this enlargement is going to take place, at least initially, without a community budget increase. The member countries have just been reluctant to increase the budget, in part because the enlargement has taken place in a context of economic stagnation of the EU-15 and, in part, because in many countries it is beginning to prevail the view that they are contributing too much to the financing of a community budget whose aims and purpose are not very clear and that, in addition, it is financed in a questionable manner giving rise to an unfair distribution[10] of net balances.

3.1. The Berlin Agreement (1999)

With the aim of not increasing the budget with the enlargement or, to be more precise, of not increasing it above what was projected, The EU maintained over the entire negotiation process with the AC-10 that the financial perspectives for the period 2000-2006 adopted at the European Council of Berlin (May 1999) and approved at the Interinstitutional Agreement of 6 May 1999 were irremovable. The financial perspectives were drawn up at the Berlin Council under the assumption that six countries would join the EU in 2002[11]. In order to limit the cost of the enlargement the Council adopted several measures that had been proposed in the Agenda 2000. Those measures included limiting at 4% of the GDP the structural transfers (structural funds plus the cohesion fund) that one country could receive and excluding the new members from direct aids to agriculture[12]. In addition, the pre-accession structural resources were limited to 0.45% of GDP. Finally, the limit of resources that the EU could get was limited to 1.27% of GNP.

The result was the financial perspectives for the period 2000-2006 summarised in table 2. In order to analyse these perspectives it should be borne in mind that appropriations for commitments are the maximum ceiling of payment commitments that can be acquired in a given year. The commitment payment may be made in the year in question or, often, in the future (in the case of multinnual expenditure[13]). The appropriations for payments are identical with the maximum payments that can be made in a given year (corresponding, obviously, to commitments of the year in question or previous years). Nevertheless, each year's actual commitments and payments may remain – and generally do – below the corresponding appropriations.

[9]For example, when Spain and Portugal (that were also substantially poorer than the then member States average) joined the EU in 1986, slightly over 15% was devoted to redistribution (structural funds). Today it is over 30%.
[10]For more details see Zubiri (2002).
[11]It was supposed that the so-called Luxembourg group would join (Poland, Czech Republic, Cyprus, Estonia, Hungary and Slovenia).
[12]This was revoked subsequently in the accession negotiations of the new members.
[13]This often happens in structural operations, which entail investments of over one year.

Table 2

Financial perspective for the period 2004-2006 for EU-21[1] agreed at the Berlin Council (1999)

In EUR million at 1999 prices[2]

	2000	2001	2002	2003	2004	2005	2006
1. Agriculture	**40.920**	**42.800**	**43.900**	**43.770**	**42.760**	**41.930**	**41.660**
Agricultural expenditure (except rural development)	36.620	38.480	39.570	39.430	38.410	37.570	37.290
Rural development	4.300	4.320	4.330	4.340	4.350	4.360	4.370
2. Structural Operations	**32.045**	**31.455**	**30.865**	**30.285**	**29.595**	**29.595**	**29.170**
Structural funds	29.430	28.840	28.250	27.670	27.080	27.080	26.660
Cohesion fund	2.615	2.615	2.615	2.615	2.515	2.515	2.510
3. Internal policies	**5.930**	**6.040**	**6.150**	**6.260**	**6.370**	**6.480**	**6.600**
4. External action	**4.550**	**4.560**	**4.570**	**4.580**	**4.590**	**4.600**	**4.610**
5. Administration	**4.560**	**4.600**	**4.700**	**4.800**	**4.900**	**5.000**	**5.100**
6. Reserves	**900**	**900**	**650**	**400**	**400**	**400**	**400**
7. Pre-accession	**3.120**	**3.120**	**3.120**	**3.120**	**3.120**	**3.120**	**3.120**
Agriculture	520	520	520	520	520	520	520
Pre-accession structural instrument	1.040	1.040	1.040	1.040	1.040	1.040	1.040
PHARE	1.560	1.560	1.560	1.560	1.560	1.560	1.560
8. Enlargement	**0**	**0**	**6.450**	**9.030**	**11.610**	**14.200**	**16.780**
Agriculture	0	0	1.600	2.030	2.450	2.930	3.400
Structural operations	0	0	3.750	5.830	7.920	10.000	12.080
Internal policies	0	0	730	760	790	820	850
Administration	0	0	370	410	450	450	450
CEILING OF APPROPRIATIONS FOR COMMITMENTS[3]	**92.025**	**93.475**	**100.405**	**102.245**	**103.345**	**105.325**	**107.440**
CEILING OF APPROPRIATIONS FOR PAYMENTS[4]	**89.600**	**91.110**	**98.360**	**101.590**	**100.800**	**101.600**	**103.840**
(of which enlargement)	**0**	**0**	**4.140**	**6.710**	**8.890**	**11.440**	**14.220**
CEILING OF APPROPRIATIONS FOR PAYMENTS (% OF GNP)	**1,13**	**1,12**	**1,14**	**1,15**	**1,11**	**1,09**	**1,09**
OWN RESOURCES CEILING (% OF GNP)	**1,27**	**1,27**	**1,27**	**1,27**	**1,27**	**1,27**	**1,27**
Margin for unforeseen expenditure (% of GNP)	0,14	0,15	0,13	0,12	0,16	0,18	0,18

[1] Includes the EU-15 plus the enlargement to the Luxembourg Group (Poland, Czech Republic, Cyprus, Estonia, Hungary and Slovenia).

[2] To convert these figures into 2004 prices they have to be multiplied by 1,10408.

[3] Sum from 1 to 8. Summarises the maximum quantities that can be committed in the year.

[4] It is the maximum quantity that can be paid each year supported from the budget. It differs from commitments in that they can be multiannual or may not materialise.

Source: EC, Budget Directorate (europa.eu.int/comm/budget/furtherinfo/index_en.htm, framework2000).

In any case, table 2 makes evident that the increase in the enlargement expenditure agreed in Berlin was moderate. In the period 2002-2006 the enlargement expenditure was under 9% of the payment appropriations and, even in the year of maximum expenditure (2006), it didn't reach 14%. Besides, the EU's total expenditure diminished from 1.13% of GNB in 2000 to 1.09% in 2006, in spite of the fact that the new members contributed more to the expenditure than to the GDP. Furthermore, the cost of the enlargement for the EU-15 was lower than expected inasmuch as part of the additional cost was paid with resources contributed by the new countries.

As Mayhew indicates (2003), these financial perspectives were key to speed up the enlargement process for they showed the member countries that the enlargement could be carried out without the EU expenditure going too far nor becoming a major burden for member States.

3.2. The Conditions for the Integration: The Copenhagen Agreement (2002)

The conditions for the integration foreseen in 1999 were not met and, in the end, the timetable for the enlargement changed. The new countries were no longer to be six in 2002, but ten starting from 2004. This change meant that instead of joining the EU 60 million people, as was contemplated in Berlin, the figure rose to nearly 75 millions (15% more). In spite of it, the EU has kept the expenditure limits laid down at the Berlin Agreement and even, as we will see, in the final financial agreement it has reduced the commitments for payments. Perhaps, the most surprising fact is that although expenditure has been kept constant with ten members (which was already quite adjusted with six members), the EU claims that the agreement with the AC-10 is not discriminatory with them nor will entail the weakening of solidarity among countries. What is more, it doesn't seem to have found reasons for a budget increase[14].

In any case, the limitation of the budgetary cost of the enlargement has been carried out through the limitation of the benefits received by the new member countries. After negotiations where the AC-10 had to accept the restrictions laid down by the EU-15, the accession conditions were finally set down at the Copenhagen Council (December 2002). The major agreements in relation to the AC-10 were the following:

a) In the case of the CAP, a transitory period is established for the new members to have access to the same benefits as present member States. According to this timetable, in 2004 the new members will only be entitled to 25% of direct aids received by farmers of present member States[15]. This percentage will gradually increase until reaching 100% in 2013. Thus, the transitory period lasts 10 years.

   In any case, in order to compensate them, at least partly, the AC-10 are allowed to top-up direct payments to their farmers up to 30% of what they would receive from the EU[16]. In general, the money for these supplements should come from each country's budgets. However, under certain conditions, in the period 2004-2006 part of these supplements may be paid from what each country receives from the EU as rural development funds[17].

   With supplements, direct payments may reach in 2004 up to 55% of the EU-15 payments (20% from the EU budget plus 30% supplement) and 100% by 2010[18]. Thus, in six years AC-10 farmers may receive 100% of the aids, though until 2013 the member country will have to pay part of these aids, not the EU.

b) As regards to structural policies, the main restriction for the new countries is that the total amount received annually (structural funds plus the cohesion fund) may not exceed 4% of each country's GDP[19]. Structural funds and, to a lesser extent, the cohesion fund require, on the one hand, national co-financing and, on the other, a significant management ability (to seek suitable projects, comply with EU requirements and so forth). This, according to the EU, limits the AC-10 annual capacity of resource absorption and justifies – or becomes the excuse – to establish a 4% limit of the GDP to the resources each country is entitled to. This restriction is very important when limiting expenditure since 4% of a very low GDP (as that of the AC-10) is little money (in percentage of the EU-15 GDP).

[14]There are reasons to think that, and sometimes this is the case, since it was initially foreseen the accession of six countries in 2002 and they will finally be ten but two years later, the delay as regards to the time of accession compensates for the fact that they are more countries and that explains why it is not necessary to increase expenditure. However, this reasoning is not correct inasmuch as budgets are submitted annually and what is saved one year cannot be transferred to another. In other words, what has been saved as a result of the enlargement being later cannot be used to finance the accession of more countries.

[15]Restrictions affect only direct aids. After the CAP reform, however, these aids are the basis of the CAP.

[16]Except to Cyprus and Slovenia.

[17]It may be used as supplement up to 20% of the amount received for rural development until reaching 40% of the EU-15 average. Alternatively, it may be used 25% of the rural development funds in 2004, 20% in 2005 and 15% in 2006.

[18]In this year, however, 70% of the payment would be financed by the EU and 30% by supplements. Total financing by the EU is expected for 2013 (where no supplement will be necessary).

Poland and Czech Republic argued that during the first years of the accession they might have cash-flow problems and managed that the EU provided for a cash-flow facility which involved basically that the countries received cash transfers in exchange for an equal reduction in the assignation of structural funds. The advantage is that they receive the money earlier without complex bureaucratic red-tape.

The access requirements for the AC-10 have entailed a serious limitation to the resources they receive from the community budget. By subtracting to these resources the contribution of the AC-10 to the community revenues, the net balance they received was lower than the one they got from the EU before their accession. In order to avoid this, which would be highly unfavourable for the government of these countries at the time of explaining the benefits of the accession, a budgetary compensation has been provided for aimed at those countries that have been financially harmed with the accession (in relation to the transfers they received from the EU before their accession). These payments benefit the Czech Republic, Slovenia, Malta and Cyprus.

Finally, it should be borne in mind that, as we said, in order to enable the AC-10 to get more favourable balances, it was agreed that their accession to the EU took place on 1 May 2004 but, as regards to expenditure, that their payments were not reduced. Thus, the AC-10 contributions to the EU budget in 2004 are reduced by a third whereas what they receive from the budget does not diminishes.

The budgetary implications of the Copenhagen agreements are summarised in table 3. The first block of columns sums up the perspectives of the EU-15 (the same that were agreed in Berlin), the second one shows the Copenhagen agreements on enlargement and refers to AC-10 expenditure. Finally, the third one is the sum of the two previous ones[20] and summarises the EU-25 financial perspectives for the period 2004-2006.

If we compare table 2 and 3, the appropriations for commitments in 2005 and 2006 are lower in the EU-25 than in the EU-21 and the appropriations for payments are the same (though as note 19 indicates, they are in fact lower too). That is, with three more countries and a 15% increase in population, the expenditure limits are lower.

Furthermore, the AC-10 absorb nearly 13% of the expenditure commitments for the period 2004-2006, but in terms of payments the figure is much lower. The reason is that for the EU-15 actual payments are supposed to be 99% of the potential payments (commitments). In the case of the AC-10, the appropriations for payments are only 61% of the potential commitments. This makes evident that the AC-10 are expected to be unable to use nearly 40% of the resources that they have been allocated, the reason being, basically, the structural funds. According to Commission estimations, on a total of 21.7 thousand million euro of potential expenditure (appropriations for commitments) in the three-year period 2004-2007 the new countries will only use 8.9 thousand million euro, i.e., slightly over 40%.

In any case, we should remember again that the cost of enlargement is lower than the expenditure on enlargement, inasmuch as part of the expenditure is financed with contributions by the AC-10 to the community budget.

[19]As noted in section 3.1, this restriction was already explicit in the financial perspectives of Berlin.
[20]This is not so in the case of commitments for payments. This makes evident that the perspectives are not completely sound inasmuch as they impute to the EU-25 a quantity for payments higher than the sum of what is imputed to the EU-15 and the AC-10. In any case, since the perspectives are a maximum ceiling to expenditure this does not entail any serious problem.
[21]See Budget Directorate (2003).

Table 3

Financial perspectives 2004-2006 for EU-25 agreed at the Copenhagen Council (2002)

In millions of EUR at 1999 prices[1] (without including the budgetary implications of a political agreement on the situation of Cyprus)

	EU15			AC10 [4]			EU25		
	2004	2005	2006	2004	2005	2006	2004	2005	2006
1. Agriculture	**42.760**	**41.930**	**41.660**	**1.897**	**3.747**	**4.147**	**44.657**	**45.677**	**45.807**
Agricultural expenditure (except rural development)	38.410	37.570	37.290	327	2.032	2.322	38.737	39.602	39.612
Rural development	4.350	4.360	4.370	1.570	1.715	1.825	5.920	6.075	6.195
2. Structural Operations	**29.595**	**29.595**	**29.170**	**6.070**	**6.907**	**8.770**	**35.665**	**36.502**	**37.940**
Structural funds	27.080	27.080	26.660	3.453	4.755	5.948	30.533	31.835	32.608
Cohesion fund	2.515	2.515	2.510	2.617	2.152	2.822	5.132	4.667	5.332
3. Internal policies	**6.370**	**6.480**	**6.600**	**1.457**	**1.428**	**1.372**	**7.827**	**7.908**	**7.972**
4. External action	**4.590**	**4.600**	**4.610**				**4.590**	**4.600**	**4.610**
5. Administration	**4.900**	**5.000**	**5.100**	**503**	**558**	**612**	**5.403**	**5.558**	**5.712**
6. Reserves	**400**	**400**	**400**				**400**	**400**	**400**
7. Pre-accession	**3.120**	**3.120**	**3.120**				**3.120**	**3.120**	**3.120**
Agriculture	520	520	520				520	520	520
Pre-accession structural instrument	1.040	1.040	1.040				1.040	1.040	1.040
PHARE	1.560	1.560	1.560				1.560	1.560	1.560
8. Compensation	**0**	**0**	**0**	**1.273**	**1.173**	**940**	**1.273**	**1.173**	**940**
Cash-flow facilities				1.011	744	644	1.011	744	644
Budgetary compensation payment				262	429	296	262	429	296
CEILING OF APPROPRIATIONS FOR COMMITMENTS[2]	**91.735**	**91.125**	**90.660**	**11.200**	**13.813**	**15.841**	**102.935**	**104.938**	**106.501**
CEILING OF APPROPRIATIONS FOR PAYMENTS[3]	**91.910**	**90.160**	**89.620**	**4.981**	**9.335**	**10.286**	**100.800 [5]**	**101.600 [5]**	**103.840 [5]**
CEILING OF APPROPRIATIONS FOR PAYMENTS (AS % OF GNI[4])							**1,08**	**1,06**	**1,06**
CEILING FOR OWN RESOURCES (AS % OF GNI[4])							**1,24**	**1,24**	**1,24**
Margin for unforeseen expenditure (as % of GNI)							0,16	0,18	0,18

[1] To convert these figures into 2004 prices they have to be multiplied by 1,10408.

[2] Sum from 1 to 8. Summarises the maximum quantities that can be committed in the year.

[3] It is the maximum quantity that can be paid each year supported from the budget. It differs from commitments in that they can be multiannual or may not materialise.

[4] Includes the ten acceding countries.

[4] Gross National Income that replaces GNP. That is why the maximum ceilings change.

[5] These figures, taken directly from the Berlin agreement are higher that the sum of the corresponding AC-10 and EU-15.

Source: EC, Budget Directorate (europa.eu.int/comm/budget/furtherinfo/index_en.htm, framework2000).

3.3. The Budgetary Balances of the New Countries

Table 4 summarises the resources the AC-10 will receive from the EU budget, their contributions and the net balances they will obtain in the period 2004-2006 after the agreement reached in Copenhagen. The amount that each country receives is, on the one hand, the sum of what was foreseen for that country in the enlargement (appropriations for payments in table 3) plus what it gets from pre-accession funds. To this amount the contribution to the EU budget has to be subtracted in order to obtain the net balance (according to cash criterion) for the period 2004-2006. During the three-year period the new countries will receive payments equivalent to 27.9 thousand million euro, being their contributions 14.7 million euro, with a balance for the period of 13.2 million euro (or 4.4 million euro annually). To put these figures in an appropriate perspective it should be noted that in per capita terms this means a transfer of 175 euro (58 euro annually) from the EU-15 to each AC-10 citizen. Or, in per capita terms, that in the period 2004-2006 each EU-15 citizen contributes 35 euro (11.7 annually) to finance the enlargement. In GDP terms, the amount transferred accounts for 0.05% of the EU-15 GDP and 1.4% of the AC-10 GDP.

Any way we look at it, therefore, the cost of the enlargement (during the three-year period 2004-2006) is not too high. However, an important qualification needs to be done. As table 4 shows, with time the annual cost is increasing gradually because of two reasons: the agricultural payments these countries receive are getting closer to those of the EU-15, and the structural funds are being used more widely. This suggests that the annual balances on account of the AC-10 beyond 2006 will be larger. Besides, as the AC-10 will be full members at the time of drawing up the financial perspectives 2007-2013, they will be in a position to protect their interests better. This may also improve their balances beyond 2006.

In any case, balances differ among countries substantially. The most benefited countries will be the three Baltic Republics (Estonia, Latvia and Lithuania) with annual subsidies between 3.5% and 4.5% of the GDP. This translates into a per capita subsidy of around 110 euro annually[22]. This seems natural since these three Republics are the poorest countries acceding to the EU. Poland, however, which is as poor but much larger receives half, both in GDP terms and in per capita terms. Slovakia's situation is similar to Poland's. Malta, on the contrary, receives significant per capita resources (though not in GDP percentage) in relation to its relative wealth. Therefore, the Baltic Republics and, to a lesser extent, Malta are the countries that benefit most in terms of balances, whereas Poland and, to a lesser extent Slovakia are the most affected (in relation to their relative income).

[22]This makes evident how these countries' poverty makes that significant GDP shares (between 3.5% and 4.5%) translate into small absolute subsidies.

Table 4

Budgetary balances of the new member countries agreed at the Copenhagen Council

(millions of euro at 1999 prices[1])

	Cyprus	Czech R.	Estonia	Hungary	Poland	Slovenia	Lithuania	Latvia	Slovakia	Malta	TOTAL
2003											
Pre-accession aid	**16**	**170**	**55**	**197**	**844**	**45**	**115**	**84**	**123**	**11**	**1.661**
As % of 1999 GDP	***0,18***	***0,33***	***1,12***	***0,44***	***0,58***	***0,24***	***1,15***	***1,35***	***0,65***	***0,32***	***0,53***
Per capita (eur)	***21***	***17***	***38***	***20***	***22***	***23***	***31***	***34***	***23***	***29***	***22***
2004											
Allocated expenditure[2]	**131**	**801**	**181**	**824**	**2.983**	**266**	**423**	**264**	**398**	**70**	**6.343**
Pre-accession aid	11	181	67	235	970	51	127	99	120	7	1.869
Agriculture	12	100	29	125	426	43	73	42	57	3	911
Structural actions	6	169	39	209	859	27	94	66	118	7	1.594
Internal actions	5	44	5	42	154	12	11	10	19	2	305
Other expenditure	0	7	25	58	131	38	84	28	21	0	392
Cash-flow facility	28	175	16	155	443	65	35	19	63	12	1.011
Budgetary compensation payment	69	125	0	0	0	30	0	0	0	38	262
Contributions to budget	**105**	**623**	**56**	**554**	**1.579**	**187**	**124**	**70**	**225**	**43**	**3.566**
Traditional resources	27	66	8	97	123	18	22	7	33	14	415
VAT resource	10	74	6	61	194	22	14	8	26	4	420
GNP resource	60	426	37	349	1.114	129	78	48	148	23	2.412
UK rebate	8	56	5	46	148	17	10	6	20	3	320
Net balance	**27**	**178**	**125**	**270**	**1404**	**80**	**299**	**195**	**173**	**26**	**2.776**
As % of 1999 GDP	***0,31***	***0,34***	***2,55***	***0,60***	***0,96***	***0,43***	***2,99***	***3,15***	***0,92***	***0,76***	***0,89***
Per capita (eur)	***36***	***17***	***86***	***27***	***36***	***40***	***81***	***80***	***32***	***69***	***37***
2005											
Allocated expenditure [2]	**191**	**1.255**	**266**	**1.342**	**5.068**	**370**	**690**	**402**	**647**	**119**	**10.350**
Pre-accession aid	6	153	57	199	823	43	110	86	102	2	1.581
Agriculture	37	392	82	544	1.512	125	228	116	205	8	3.248
Structural actions	14	355	88	438	1.776	59	203	151	244	13	3.343
Internal actions	9	76	9	72	266	21	18	17	33	4	524
Other expenditure	1	9	26	61	141	38	125	29	52	0	482
Cash-flow facility	5	92	3	28	550	18	6	3	11	27	744
Budgetary compensation payment	119	178	0	0	0	66	0	0	0	66	429
Contributions to budget	**160**	**963**	**86**	**853**	**2.454**	**288**	**191**	**107**	**350**	**66**	**5.519**
Traditional resources	40	105	12	150	213	29	33	11	54	21	667
VAT resource	16	116	10	95	304	35	21	13	40	6	657
GNP resource	91	653	57	536	1.708	198	120	74	226	35	3.697
UK rebate	12	88	8	72	230	27	16	10	30	4	497
Net balance	**31**	**292**	**180**	**489**	**2.614**	**82**	**499**	**295**	**297**	**53**	**4.831**
As % of 1999 GDP	***0,36***	***0,57***	***3,67***	***1,08***	***1,80***	***0,44***	***4,99***	***4,76***	***1,57***	***1,56***	***1,54***
Per capita (eur)	***41***	***28***	***125***	***48***	***68***	***41***	***135***	***121***	***55***	***140***	***64***
2006											
Allocated expenditure [2]	**194**	**1.294**	**288**	**1.487**	**5.498**	**378**	**750**	**451**	**720**	**121**	**11.182**
Pre-accession aid	1	98	35	124	509	27	66	52	64	0	976
Agriculture	46	483	102	653	1.934	158	294	156	260	10	4.095
Structural actions	18	427	110	524	2.107	73	248	189	289	15	3.998
Internal actions	12	102	12	97	359	28	25	22	45	5	708
Other expenditure	1	9	26	61	140	38	112	28	52	0	466
Cash-flow facility	5	92	3	28	450	18	6	3	11	27	644
Budgetary compensation payment	112	85	0	0	0	36	0	0	0	63	296
Contributions to budget	**163**	**987**	**89**	**873**	**2.519**	**296**	**195**	**110**	**359**	**68**	**5.659**
Traditional resources	40	105	12	150	213	29	33	11	54	21	667
VAT resource	17	119	10	97	310	36	22	13	41	6	671
GNP resource	94	670	58	549	1.752	203	123	76	232	36	3.792
UK rebate	13	93	8	77	244	28	17	11	32	5	529
Net balance	**31**	**307**	**200**	**614**	**2.979**	**82**	**555**	**341**	**361**	**53**	**5.523**
As % of 1999 GDP	***0,4***	***0,6***	***4,1***	***1,4***	***2,0***	***0,4***	***5,6***	***5,5***	***1,9***	***1,6***	***1,8***
Per capita (eur)	***41***	***30***	***138***	***61***	***77***	***41***	***150***	***140***	***67***	***140***	***74***

[1] To convert these figures into 2004 prices they have to be multiplied by 1,10408.

[2] Defined as each country's appropriations for payments plus what they have yet to receive as pre-accession aid.

Source: EC, Budget Directorate (europa.eu.int/comm/budget/furtherinfo/index_en.htm, framework2000).

3.4. Budget Benefits (EU-15 vs. AC-10)

As noted in section 3.2, the EU has managed to delimit the enlargement budget by limiting the benefits to the new member countries. Qualitatively, the most significant limits have been the reduction (temporal) of direct aids in agriculture and the 4% limit of GDP to transfers for structural operations. Table 5 shows some indicators on the quantitative scope of budget limitations imposed by the EU-15 to the AC-10 and, to some extent, the discrimination between new and old members.

As regards to agriculture, table 5 shows two indicators: the euro per worker in agriculture and the total transfer as percentage of agricultural output. In both cases the differences in favour of the EU-15 are overwhelming. In per capita terms, the EU's average farmer receives 20 times more that his counterpart in the AC-10. In terms of value added, the subsidy in the EU-15 *"only"* doubles that of the AC-10.

Table 5

Indicators of budgetary benefits (2004-2006 average, appropriations for commitments)

Item	Indicator	EU15	AC10
CAP	Euro per farmer	6.580,7	337,3
CAP	Resources as % of Agricultural GVA	31,6	18,5
Structural Funds	Euro per inhabitant in Objective 1 regions	479,7	67,4
Cohesion Fund	Euro per inhabitant country entitled to cohesion	94,0	33,7

Source: Estimation from table 3 (budgetary data) and EUROSTAT data.

In structural policies the differences are also overwhelming in favour of the EU-15. As regards to structural funds, the estimations on allocations per inhabitant in objective 1[23] regions are the following: EU-15 residents in objective 1 regions receive 7 times more than those of the AC-10.And this is so in spite of the fact that objective 1 regions in the EU-15 have a much larger per capita income than objective 1 regions in the AC-10.

In the cohesion fund, the per capita resources of residents in countries with a per capita income (calculated in PPP) below 90% of the EU-15 average were estimated. The EU-15 receives three times more per capita than residents in the AC-10 who, in addition, are much poorer than residents in the EU-15.

It should be stressed that the data in the table is based on appropriations for commitments. Had appropriations for payments been used instead, the differences between the EU-15 and the AC-10 would be much larger since, as we said, the EU-15 turns into revenues most of its commitments as opposed to slightly over 60% in the case of the AC-10.

In conclusion, it seems evident that the new member countries have been forced to accept accession conditions highly discriminatory in relation to the EU-15 in terms of resources to be received from the EU budget. Furthermore, in the case of agricultural subsidies, the conditions agreed are not only unfair but also inefficient, since EU-15 farmers are benefited in detriment of those from the AC-10. In other words, although the EU always supports competition on equal terms, it distorts competence again with a system of discriminatory subsidies.

[23] Almost two thirds of structural funds go to objective 1 regions.

4. The Cost of the Enlargement

In order to analyse the cost of the enlargement three periods should be distinguished. First, the period before the enlargement (1990-2003); second, the period from 2004 to 2006 where expenditures in the AC-10 are already quantified (at least in terms of maximum ceilings) in the financial perspectives; and third, the period beyond 2007, where we can only guess on the future cost of the enlargement.

In the first period the EU made a series of payments to the acceding countries, the so-called *pre-accession expenditure.* Between 1990 and 2003 these payments amounted to 12.7 thousand million euro (in euro for 1999)[24]. However, nearly half of this amount belongs to the period 2000-2003. In these last few years, the annual cost for the EU-15 has been approximately 0.02% of the EU-15 GDP, or 4.3 euro a year for each resident of these countries.

Obviously, expenditure in the enlargement countries increases substantially in the period 2004-2006. As shown in table 3, appropriations for commitments for the whole period amount to 40.8 thousand million euro (in euro for 1999), i.e., 0.17% of the annual GDP, or 36.2 euro a year for each resident in the EU-15. These figures, however, must be made more specific. On the one hand, only a maximum of 27.9 thousand million euro will be paid in the period 2004-2006 (appropriations for payments, table 3), whereas the rest, where appropriate, will be paid in the future[25]. In addition, the new countries contribution to the community budget in the same period will be 14.7 thousand million euro. Therefore, the maximum cost in the period 2004-2006 will be 13.2 thousand million plus, if need be, 12.9 thousand million more payable in the future (though a significant part may never be paid due to the limited absorption capacity of the new member countries). This means an annual cost of 0.05% of the EU-15 GDP (equivalent to an annual transfer of 11.4 euro from every resident in the EU-15 to residents in the AC-10), which might increase in the future by a further 0.05% of the GDP (11.4 euro per capita).

The cost of the enlargement after the period 2004-2006 will depend on the agreements reached in the financial perspectives 2007-2013 which, at the moment, is difficult to quantify. At any rate, at least with the present rules, the cost is expected to increase, though not substantially. The reason is that the EU-15 has introduced a series of global and particular limits that prevent the budget from increasing too much (and, by extension, the AC-10 budgetary balances). On the one hand the European Council of Berlin (1999) approved that the transfers received by a country as structural funds cannot exceed 4% of GDP. This limits substantially the total amount of structural transfers to the AC-10[26], because 4% of not too much is not too much. However, the limit involves the paradox that, at least initially, as the new countries improve their economic situation the structural transfers will increase. On the other hand, the Brussels Council (2002) agreed that starting from 2006 the EU-15 expenditure on agriculture (excluding rural development) might increase a maximum of 1% annually. If we accept the assumption (unlikely) that inflation is going to remain constant at 1%, this means to freeze real expenditure on agriculture to levels of 2006[27]. With these limits the cost of the enlargement may not increase in an unacceptable manner in the future.

[24] This figure has been estimated from figures included in Kok for the period 1990-1999 and data on settled EU budgets for 2000-2002.

[25] As we said, the capacity of resource absorption of the new members is limited and, as a result, a significant part of the appropriations for commitments may not be used.

[26] To see the impact of this limit remember that, as table 1 shows, the AC-10 GDP is 4.8% of that of the EU-15. Therefore, 4% of the AC-10 GDP is the same as 0.19% of the EU-15 GDP, i.e., structural transfers may account, at the most, for 0.19% of the EU-15 GDP.

[27] Obviously, if inflation is over 1% a reduction of real expenditure on agriculture will take place.

Thus, according to some estimations[28], the net cost of the enlargement in 2013 (Romania and Bulgaria included) might reach 0.3% of the EU-15 GDP (at 1999 income and price levels, 68 euro per capita). This amount is six times higher than the present one but it is not an unsustainable quantity as regards to budget and, certainly it can be financed without problem within the maximum limits agreed in Berlin (1.27% of GNP).

In short, the cost of the enlargement has shown, shows and will preumably show an upward trend. However, up to the present time, the cost has been low for the EU-15 (an annual 0.02% of GDP equivalent to 4.2 euro per capita in pre-accession, and 0.05% of GDP equivalent to 11.4 euro per capita in the period 2004-2006), and in the long term the cost, though higher, may not be unsustainably high (a maximum 0.3% of GDP in 2013, equivalent to 63.8 euro per capita).

[28] See Mayhew (2003) or Weise (2002).

5. Distributive Implications of the EU Enlargement

The distributive implications of the EU enlargement in the period 2004-2006 are quite evident since, given that the financial perspectives agreed in Berlin in 1999 have been respected, none of the EU-15 has seen a reduction in the transfers received (or that would receive without enlargement) from the community budget as a result of the enlargement. Thus, it may be assumed that the cost of the enlargement has been paid by the EU-15 by means of additional budgetary contributions (to those the countries would have made if the enlargement had not taken place) instead of through lower budgetary benefits to present member States. Under this premise, the cost for each country is equivalent to its contribution to the budget that, for this expenditure, is equivalent to each country's participation in the GNP reduced in the share of the balance of the new countries that is returned in the UK correction[29].

As an illustration, table 6 shows the share of the enlargement cost that each country will sustain in the period 2004-2006. In this period, for example, Spain will sustain a total cost of over 1000 million euro (in euro for 1999), equivalent to slightly over 25 euro per capita. The UK rebate (and the resulting share of this cost between EU countries) translates into a non-progressive per capita contribution, so poorer countries (like Spain) pay more than richer countries (like United Kingdom)[30].

Table 6

Distribution by countries of the cost of the enlargement in the period 2004-2006 (in euro for 1999)

	Wealth Index[1]	Marginal rate[2]	Total (millions of euro)	As % of GNP	Per capita (euro)
Luxembourg	208	0,003	33	0,178	77
Denmark	142	0,022	290	0,185	54
Sweden	119	0,029	388	0,177	44
Austria	115	0,024	322	0,167	40
Germany	114	0,247	3.263	0,169	40
Belgium	112	0,034	442	0,186	43
United Kingdom	109	0,112	1.483	0,110	25
The Netherlands	109	0,047	624	0,174	39
Finland	107	0,017	222	0,194	43
Ireland	106	0,012	154	0,187	41
France	105	0,189	2.495	0,190	41
Italy	90	0,153	2.026	0,187	35
Spain	67	0,079	1.043	0,191	26
Greece	54	0,017	220	0,189	21
Portugal	51	0,015	193	0,184	19
TOTAL	100	1	13.200	0,169	35

[1] GNP per capita index in 1999.
[2] Equal to % of the GNP plus/minus the adjustment for the rebate to the United Kingdom (UK correction).
Source: own estimations based on data from EUROSTAT.

Beyond 2007 the enlargement may bring about expenditure reductions for the EU-15 (in relation to what they would have received without the enlargement). Thus, for example, some countries may reduce their contribution to structural or agricultural funds. If this is so, part of the cost of the enlargement is being paid by means of expenditure reductions (instead of through additional contributions to the budget), and the countries that otherwise would have benefit from this expenditure are those sustaining the cost of the enlargement by way of lower transfers from

[29]After the accession, the *UK correction* (the rebate of 66% of the UK's deficit defined as the difference between costs and contributions) is not applied to the share of expenditure that the new members received already in pre-accession. Thus, the devolution involves expenditures that do not benefit the United Kingdom. For more details see European Council (2000)
[30]For a detailed analysis on the fairness of the financing system see Zubiri (2002).

the EU budget. Therefore, before moving on to analyse the distributive implications of the enlargement beyond 2006, we should start by checking if, in order to comply with the budgetary ceilings adopted, the expenditure policies will have to be reduced in the future.

5.1. The EU Budget in the Period 2007-2013

Starting from 2007, the EU budget is subject to several restrictions that have been mentioned in other sections. First of all, there are two general restrictions:

a) Annual revenues (and hence the appropriations for payments) are limited to a maximum of 1.27% of GNP (1.24% in % of the GNI[31]).
b) The maximum appropriations for commitments will be 1.335% of GDP (1.31% of GNI).

Together with these restrictions, there are two additional limits to specific expenditures:

c) The agricultural expenditure (excluded rural development expenditure), may increase a maximum of 1% annually starting from 2006. The interpretation of this is that expenditure should remain constant in real terms.
d) As regards to structural expenditure (cohesion fund plus structural funds) it is not sure that the 0.45% limit of GDP agreed in Berlin is going to be kept. In fact, the Commission believes that 0.45% is the minimum limit for the structural policies to make sense[33]. However, some countries estimate that it is enough, and even excessive. For example, during its presidency of the EU (2002), Spain stated that the 0.45% limit of structural funds was enough. Therefore, this limit will be the starting point in the designing of the financial perspectives for the period 2007-2013.
   Finally, in view of the enlargement, a limit was adopted to the transfers that each country may receive from the EU as structural operations:
e) Structural transfers to a country cannot exceed 4% of its GDP.

a) Expenditure on Structural Operations

Expenditure on structural operations may be approximated easily due to the limit (4% of GDP) to transfers the new countries receive. To begin with, it should be pointed out that in 2002 the GDP of the AC-10 plus Romania and Bulgaria (AC-12)[35], accounted for 5.2% of the EU-27 GDP.

Then, if they received the higher ceiling of structural policies, the expenditure would account for 0.21% of the community GDP. If, as in Mayhew (2003), we assume that the AC-12 GDP grows in the future to 4% whereas that of the EU-15 only grows at 2%, then expenditure on structural policies in the AC-12 during the period 2007-2013 would grow moderately from 0.22% (of the EU-27 GDP) in 2007 to 0.25% in 2013. Therefore, over the period 2007-2013 about 0.2% *would be left* for structural funds of the EU-15.

To put this figure in the proper perspective, it should be noted that, for example, as shown in table 7, according to the financial perspectives in force, structural expenditure (as % of GDP)

[31] When the GNI is used with the new estimations, this limit is equivalent to 1.24% of the gross national income (GNI). See COM (2001) 801 final.
[32] Agricultural expenditure (excluded rural development) is what in the EU budget is called *Heading 1a.*
[33] COM (2001) 24 final.
[34] COM (2003) 34 final.
[35] In principle, these two countries will join the EU in 2007, so they should be taken into account in the estimations.

has a decreasing trend in the period 2000-2006[36]. In the last year of the perspectives, 2006, structural policies account for, approximately, 0.3% of the EU-27 GDP (0.32% of the EU-15 GDP).

Table 7

Structural funds of the EU-15 in the financial perspectives 2000-2006

	Euros of 1999	As % of GDP	
		EU15	EU27
2000	32.045	0,39	0,37
2001	31.455	0,37	0,36
2002	30.865	0,36	0,35
2003	30.285	0,35	0,33
2004 [1]	29.595	0,34	0,32
2005 [1]	29.595	0,33	0,31
2006 [1]	29.170	0,32	0,30

[1] Assuming a 2% growth for the EU-15 and 3% for the AC-12.
Source: Own estimation.

This trend to reduce structural expenditure will presumably continue in the future, even without the enlargement, because the growth of regions and countries that presently receive structural resources (both structural funds and cohesion funds) will make it necessary less resources (inasmuch as some regions will exceed the 75% EU average, others will get closer and so forth). Thus, for example, as shown in table 8, the German Institute for Economic Research (DIW) estimates that, even without the enlargement, structural funds in the EU-15 will decrease by 30% between 2007 and 2013. According to the DIW estimations, a EU-15 without enlargement and with the same cohesion policies as the present ones, would spend in 2013 in structural actions 0.19% of the EU-27 GDP (or 0.21% of the EU-15 GDP).

Therefore, if the estimations of the DIW were correct, 0.45% of GDP would be almost the exact figure necessary to keep funds of 4% of their GDP for the new member countries (AC-12) and similar levels of funds to those there would have been in the case the enlargement had not taken place for the EU-15. Any reduction of the maximum ceiling below 0.45% of the GDP would give rise to a decrease in the cohesion level between the present EU-15. In any case, it should be noted that a larger growth in the AC-12 or a lower one in the EU-15 would make the 0.45% of GDP to fall short. Thus, it would be wise to increase the ceiling of appropriations for payments above 0.45% so as to provide enough room for manoeuvring.

So far we have analysed the cost of ensuring, after the enlargement, that the less favoured countries within the EU-15 are treated the same way as they were before the enlargement. If, on the other hand, the aim in the future were, not to keep the quantities of structural resources transferred to the EU-15, but keeping the criteria for fund allocation[37], then the amount of structural resources needed would be much lower, insomuch as many of the regions within the EU-15 (and even countries) would be excluded from the structural aids as a result of the so-called *statistical effect*[38]. As shown in table 8, according to the DIW estimations, as a result of the statistical effects the structural resources of the EU-15 would be initially reduced (in absolute terms) to more than half (in 2007) and in the long term (2013) to slightly over one quarter. This, obviously, would reduce the cost of keeping the structural funds. Thus, in 2013, for example, in order to keep the structural policies only 0.25% of GDP would be needed, of which 80% (0.2% of GDP) would go to the AC-12.

[36] See that real GDP growth makes the allocation of structural funds to diminish (as % of GDP).
[37] I.e., that those regions whose GDP per capita (in PPP) is below 75% of the EU-27 are considered objective 1 regions, that countries whose per capita GDP is below 90% of the EU average receive cohesion funds, and so forth.
[38] See section 5.3.

Table 8

Structural expenditure with and without enlargement

	2007			2013		
	Million of euros [1]	% GDP		Million of euros [1]	% GDP	
		EU15	EU27		EU15	EU27
A) Without Enlargement						
EU15	27.395	0,30	0,29	21.384	0,21	0,19
B) With Enlargement						
EU15	15.535	0,17	0,16	5.898	0,06	0,05
AC12	11.668	0,13	0,12	22.100	0,22	0,20
EU27	27.033	0,30	0,28	27.998	0,27	0,25

[1] Of 1999

Source: Estimation based on Weise (2002).

In short, keeping structural aids to the EU-15 at the same levels as they are at present and ensuring AC-12 funds equivalent to the maximum agreed (4% of their GDP) would cost about 0.45% of the EU-27 GDP. However a wise approach would be to increase a little that limit.

On the other hand, keeping the current rules of structural operations (not the level of transferred funds) would eliminate substantially the resources received by the EU-15 (due in large measure to the statistical effect) and would limit the need of structural resources to slightly less than 0.3% of GDP.

b) Expenditure on Farm Subsidies

The CAP is the EU's most significant field of expenditure and, presumably, the most unjustifiable from an economic viewpoint. Actually, the CAP is just, in large measure, an economic instrument that has enabled to achieve balances and political supports to the EU development. Thus, because of its little justification, there is general agreement in the academic world that any reduction in the CAP is an improvement from the economic standpoint. In fact, the CAP is so inefficient that in its design previous to the reform of 2003 was classified as highly distorting by the WTO (World Trade Organisation) and a permanent source of conflicts between the WTO and the EU.

The CAP has two pillars or basic components. On the one hand the rural development aid[39] (2nd pillar) and, on the other, the rest of expenditure (1st pillar), composed of a wide range of direct subsidies (including price maintenance). As table 3 shows, the second type of expenditure is much more significant at present and accounts for 85% of the total. It was agreed at the Brussels Summit of 2002 that this second type of expenditure (the total expenditure of the CAP with the exception of rural development measures) could only be increased from 2006 by 1% annually[40]. If inflation is also equal to 1% (something that is obviously far from being sure), this is equivalent to a freeze in agricultural expenditure (excluding the rural part) in real terms.

In any case, in order to avoid conflicts with the WTO, reduce the level of distortion brought on by the CAP[41] and ensure that the expenditure ceilings agreed in Brussels are observed (especially after the enlargement), a CAP reform took place in June 2003 that had an impact not as much on the level of expenditure foreseen (already limited by the Brussels agreement) but on the form of subsidies as well as on expenditure control mechanisms. The reform basically[42]:

[39] This includes measures aimed at improving the quality of farms and products, encouraging the adoption of environmental measures, fomenting supplementary activities to create employment, and so forth.

[40] This was the result in a complex negotiation process where France (in favour) and Germany (against) led contrasting ideas.

[41] Many subsidies were linked to production which led to inefficient output.

[42] For details on the reform see COM (2003) 23 final.

a) Changes direct subsidies linked to production for single payments[43]. These single payments are conditioned to the compliance of some requirements regarding management efficiency (linked to environmental friendliness, quality of food and livestock and so forth). The separation of payments from production is called *decoupling.* The process of checking efficient management is called *cross compliance.*
b) In order to avoid benefiting those with the largest holdings, the reform introduces a system of reduction in the quantity paid in relation to the farm size. In practice, however, the reduction depends on the amount allocated and it is applied to all those farmers who receive over 5,000 euro from the EU. The reduction of income in relation to the amount received is called *modulation*. The reduction of transfers based on farm size begins in 2006 at 1% (modulation) and increases gradually until 2013 reaching 12.5% (for farms that receive between 5,000 and 50,000 euro) and 19% (for agricultural holdings receiving over 50,000 euro). The fact that the part of the subsidy that is reduced increases with time is termed *degression.*
c) The part of the CAP aimed at rural development (2nd pillar) is strengthened with funds coming from the modulation insomuch as each year 1% goes to rural development (6% altogether in the period 2006-2012).
d) Market intervention measures are reviewed (floor prices and other forms of market intervention)

However, the effects of this reform have a greater impact on the way the CAP is instrumented than on the level of the CAP. Table 9 summarises the results of the reform and compares them to the limits laid down in Brussels.

Table 9

Expenditure on agriculture in the EU

(excluding rural development), 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
A. EU-25 Brussels ceiling [1]	42.979	44.474	45.306	45.759	46.217	46.679	47.146	47.617	48.093	48.574
B. EU-25 Expenditure after reform [1]	41.681	43.642	44.395	45.156	46.123	47.568	48.159	48.805	49.451	50.099
B.1. Belonging to EU-15	41.320	41.339	41.746	42.183	42.802	43.569	43.513	43.513	43.513	43.513
B.2. Belonging to AC-12	361	2.303	2.649	2.973	3.321	3.999	4.646	5.292	5.938	6.586
C. (A-B) difference [1]	1.298	832	911	603	94	–889	–1.013	–1.188	–1.358	–1.525
D. Modulation / Regression [1]				228	751	2.030	2.420	2.810	3.200	3.343
Of which for rural development				228	475	741	988	1.234	1.481	1.481
E. Expenditure in % of GDP [2] (B-D)										
E.1. 0% inflation	0,42	0,43	0,43	0,42	0,42	0,41	0,40	0,40	0,39	0,39
E.2. 1% inflation	0,42	0,42	0,42	0,41	0,40	0,39	0,38	0,38	0,37	0,36
E.3. 2% inflation	0,41	0,41	0,40	0,39	0,38	0,37	0,36	0,35	0,34	0,33
E.4. 3% inflation	0,39	0,39	0,38	0,37	0,35	0,33	0,32	0,31	0,29	0,28

[1] Millions of euro.
[2] A real growth is expected for the EU-15 and a 4% growth for the AC-10.
Source: Estimation from COM (2003) 13 final and Statistics in focus (2003a).

[43] This means that whereas the amount received by a farmer before depended on output (and that, as a result, he could decide what and how much to produce in terms of the subsidy), now there will be a single payment that will depend on past subsidies (2000-2002) but not on the quantity and the nature of the production. The system should come into force in 2005, though the countries may delay it until 2007. Besides, the countries may decide what part of the payments continue linked to production.
[44] The specific form of the mechanism has to be agreed upon.

As shown in table 9, the reform in itself only reduces expenditure marginally until 2007, from that year on it increases it gradually. Thus, for example, in 2013 the reform (B) will increase agricultural expenditure by 1,525 million euro (C) in excess of the amount foreseen in Brussels (A). The mechanism that enables to re-establish the limits is moderation / regression (D) which from 2007 generates increasing resources. Thus, in 2013 it yields 3,343 million euro that allow to compensate for the excess on the limit. As we said, part of the resources generated by modulation / degression are aimed at rural development, enabling an increase in the allocation for rural development operations over the said period of 6,628 mullion euro.

The limits to the CAP are in absolute money terms. This means that both the real value and the relation to GDP of agricultural expenditure are in the hands of both inflation and the real growth of GDP. The line termed E analyses the relation between GDP and agricultural expenditure under the assumption of a real growth of 2% for the EU-15 and 4% for the AC-10.As to the inflation rate, several options are taken into consideration, ranging from absolute stability (0% inflation) or a 3% inflation.

In all instances expenditure (as percentage of GDP) is decreasing simply because the economy's real growth reduces the value (in percentage of GDP) of agricultural credits. With a 2% inflation, agricultural expenditure would decrease from slightly over 0.40% in 2004 to less than 0.35% in 2013. With higher inflation, expenditure is further reduced. Thus, with only an additional point of inflation expenditure would be less than 30% in 2013. Conversely, lower inflation increases expenditure. It is difficult to grasp the economic logic that takes presumably reasonable people to agree that when inflation is high (over 1%) the farmers lose, but when it is low (for example 0.5%) they win.

In any case, it should be noted that the figures in table 9 refer only to agricultural expenditure without rural development. In principle, there are no restrictions a priori on this second pillar and though it has played a minor role in the past (less than 15% of agricultural expenditure), its relative significance will surely increase in the future. Thus, the reduction in expenditure will be less than what is reflected in table 9. Obviously, these changes in the structure of expenditure may end up not being neutral from a distributive viewpoint, and benefit countries like Germany, Austria, Sweden and Finland, which are at present the ones devoting more attention to rural development[45].

c) Total Expenditure

The previous sections make evident that the EU expenditure after the enlargement is under control. On the one hand, the cost of structural operations is controlled effectively by means of the limit adopted for transfers a country may receive (4% of its GDP). Indeed, this creates some paradoxes (initially, the richer the new countries the larger the amount of funds for poverty, they will receive less per capita than residents in wealthier regions, and so forth), but limits expenditure in structural operations for these countries at about 0.25% of the EU-27 GDP. On the other, expenditure in present EU-15 depends on the goal pursued and may range between 0.2% of the EU-27 GDP (when the idea is to keep the same structural funds for the EU-15 as at present) and 0.05% (when eligibility rules are kept and an statistical effect takes place).

In the case of agriculture the nominal amount of expenditure has been set (except rural development expenditure). This brings forth the result, lacking in economic sense, that the higher the inflation, the larger the farmers' losses. This is but another inconsistency to add to the CAP's own existence. In any case, with a moderate inflation (2%) agricultural expenditure (except rural development) of the EU-25 would be around 0.35% of the GDP.

[45] See, for example, Jones (2003).

Therefore, under the assumption that the EU will take structural operations to the reference level of 0.45% (which will enable to keep approximately the structural resources of the EU-15 on the same terms as without enlargement) and that inflation will be moderate, The EU's most significant costs might account for about 0.8% of the EU's GDP. Given that the limit of resources is set at 1.27% of the GDP, there would be a 0.47% margin of GDP for the EU's remaining expenditure, which in principle seems wide enough[46]. However, the reality is that the EU budget is in general substantially lower than the 1.27% limit. Thus, for example, in the last few years it has been around 1% of the EU's GDP, and it has even experienced a decreasing trend[47]. This entails that, although the enlargement can be financed within the budgetary limits in force, to do it keeping the present levels of benefits would involve an increase in the levels of expenditure that the EU is carrying out in practice. Obviously, the easiest way to cut this expenditure is through the reduction of the EU-15 structural funds, arguing that in the new EU-15 there are countries with more need for resources. This is the potential risk for countries that, like Spain, Portugal and Greece, are currently receiving substantial structural funds[48].

5.2. Distribution of the Cost of the Enlargement

The enlargement has a cost for the EU-15 that may be paid through an increase in contributions (in relations to those that would be made without the enlargement), a reduction of expenditures that benefit the EU-15, or a combination of both. In former enlargements, when the new members were net beneficiaries of the budget, the cost was financed with larger contributions. On this occasion, even though the budget is going to increase, it is quite likely that a reduction in current expenditure to the benefit of the EU-15 take place.

In the case of the CAP, the aims and financing for the period 2007-2013 have been established already and the only room for manoeuvre lies in the funds allocated for rural development. As for structural operations, things are quite less clear and a serious discussion on the future of structural funds is going to take place when the financial perspectives are drawn up. In this debate several positions are already put forward. On the one hand, there are those who state that structural funds should focus on the most needy regions (applying, for example, the criterion of the 75% of the EU-25 average to determine the potential beneficiaries) giving, if need be, transitional funds to present EU-15 regions that would no longer be included in objective 1. On the other, there are those who advocate the maintenance of structural funds to the EU-15 or, at least, that the requirement to qualify as objective 1 region is raised to 80% of the GDP. Obviously, the question of how much it must be spent in structural operations in the future underlies this discussion, in particular if the reference level of expenditure of 0.45% of GDP has to be exceeded or reduced.

[46] In the last few years, structural operations plus farm expenditure account for nearly 75% of total expenditure in the EU. If this relation continued the rest of the budget would require about 0.25% of the GDP.

[47] In 1996 the budget settlement was 1.2% of the EU GDP; between 1997 and 1999 it was 1.1%; subsequently, 1.0% in 2000 and 0.9% in 2001 [see EU (2002)].

[48] Ireland also receives substantial funds but may see them reduced significantly even without the enlargement as a result of its economic growth, which has even place the country above the EU average (table 6).

Keeping the limit of 75% of GDP means to apply a relative concept of poverty that excludes from structural operations regions whose absolute economic situation or even relative (to the EU-15) has not changed (statistical effect). This, in addition to making a substantial share of the cost of the enlargement fall on the EU-15 poorest countries, may also slow down economic development in these regions. Besides, keeping funds for current recipients of structural aids is financially practicable because the limit of 4% of GDP applied to countries so comparatively poor as the AC-10 does not use an excessive quantity of resources. Indeed, it would mean that some EU-15 countries receive more structural resources per capita than residents in the AC-10, that are much poorer. However, this would be the result not of the design of structural operations, but of the 4% limit of GDP. In fact, due to this limit, also the richer candidate countries receive more per capita resources.

In any case, in order to analyse the implications of the reform of structural operations we should start off by checking the statistical effect.

5.3. Structural Operations and the Statistical Effect

The basic criterion (though not the only one) for a region (structural funds) or a country (cohesion fund) to receive structural resources is its relative position as regards to the average. Therefore, a relative notion of poverty is applied. With the accession of new poorer countries the average is reduced and, as a result, if the same relative definition of poverty continues to be used, the old countries will become relatively less poor (so they would receive less funds) or relatively rich (so they wouldn't receive any funds). This has been called the statistical effect: without a change in their present situation, some countries that were considered poor begin to be treated as rich.

Tables 10 to 12 approximate the statistical effect and establish which countries and regions would lose their structural funds if the enlargement took place today. In the case of Spain, the first think to happen would be that it would exceed the 90% average income of the EU-25, not to mention the EU-27 (table 11), so it would no longer comply with the requirement that entitles it to benefit from the cohesion fund. Furthermore, table 10 makes evident that, with the first enlargement of ten members, only two autonomous communities (Asturias and Murcia) together with Ceuta and Melilla would no longer be considered as objective 1 regions. This means that 2.3 million people would lose the structural funds (16.4% of the population currently receiving them). This may seem a small amount, at least in comparison to Germany (10 million people lose their funds, nearly 85% of the people living in this type of regions) or the United Kingdom (4.6 million people accounting for 90.2% of current beneficiaries). However, this is not so for several reasons. Firstly, because Spain would also lose the cohesion fund. Secondly, because when the revision of the structural funds is applied, in 2007, Galicia and Castilla-La Mancha may join the regions that are no longer included in objective 1[49]. This would surely take place in 2007 if the enlargement included two more countries. Thus, it is likely that with the enlargement to 10 countries, and surely with that to 12, only Andalucia and Extremadura continue receiving structural funds (as objective 1 regions), since they would be the only autonomous communities that complying with the per capita income requirement. Thirdly, the enlargement makes all regions to lose, not only those that are excluded from objective 1, inasmuch as even those that continue receiving funds will receive less, for they will be closer to the 75% of the EU average.

[49]This is because after taking into account the ten new members, they are very close to 75% of the EU-25 average.

Table 10

Regions that would lose their condition as objective 1, with the enlargement[1]

Country	Region	Resident population in these regions		
		Total	% of the country's	% of current residents objective 1 regions
Germany	Branderburg Mecklenburg-Western Pomerania Dresden Halle Magdeburg Thuringia	10.625	12,9	83
Austria	Burgenland	278	3,4	100
Finland	Itä-Suomi	684	13,2	100
Spain	Principado de Asturias Región de Murcia Ceuta y Melilla	2.318	5,8	16,4
Italy	Basilicat	604	1,0	3,4
Portugal	Madeira	245	2,4	3,6
Belgium	Hainaut Namur	1.724	16,8	100
United Kingdom	Merseyside West Wales South Yorkshire	4.601	7,7	90,2

[1] Estimations according to the situation in 2000.
Source: Estimation from COM (2003).

Table 11

Per capita GDP of cohesion countries (PPP-adjusted[1]) in relation to the EU average with 15, 25 and 27 members (2000)

	EU15	EU25	EU27
Greece	67,7	74,6	78,3
Spain	82,2	90,6	95,1
Ireland	115,2	126,9	133,2
Portugal	68,0	75,0	78,7

[1] Purchasing power parities.
Source: COM (2003) and own estimation.

Table 12

Per capita GDP (PPP-adjusted[1]) in relation to the EU average with 15, 25 and 27 members (2000)

	EU15	EU25	EU27
Madrid	110,0	121,2	127,2
Navarre	105,3	116,1	121,8
Basque Country	101,5	111,9	117,4
Catalonia	99,5	109,7	115,1
Balearic Islands	98,3	108,4	113,7
Rioja	91,2	100,5	105,5
Aragon	87,9	96,9	101,7
Cantabria	80,3	88,5	92,9
Valencia	79,2	87,3	91,6
Canary Islands	77,5	85,5	89,7
Castile-Leon	75,9	83,7	87,8
Asturias [2]	**70,9**	**78,1**	82,0
Murcia [2]	**68,7**	**75,7**	79,4
Ceuta y Melilla [2]	**68,1**	**75,1**	78,8
Castile-La Mancha	66,8	73,6	77,2
Galicia	64,7	71,3	74,8
Andalusia	61,2	67,4	70,7
Extremadura	53,0	58,4	67,5

[1] Purchasing power parities
[2] They would lose their status as objective 1 regions in EU-25.
Source: COM (2003) and own estimation.

Table 13 quantifies the significance of the statistical effect using DIW estimations. In order to do that the structural resources the EU-15 would receive with and without enlargement are compared, assuming that the allocation rules keep constant. As shown in this table, the country that loses the most in absolute terms as a result of the statistical effect is Spain, which sustains between 25% and 30% of the cost of this effect. This means an annual loss of between 3.5 and 4 thousand million euro (in euro for 1999), which extrapolated to the whole period accounts for over 26 thousand million euro[50]. Italy, France, United Kingdom and Germany are the next countries to sustain heavier losses.

When the analysis is not carried out in absolute terms but in relation to the GDP, the picture is somewhat different since, as should be expected, the countries that lose most are precisely the three cohesion countries[51] (Spain, Portugal and Greece). In all cases the annual loss ranges between 0.7 and 1.4% of GDP.

In conclusion, therefore, the statistical effect entails substantial losses for the EU-15 – between 12.5 and 15 thousand million euro a year. Spain appears as one of the countries that would lose most as a result of this effect, both in absolute and relative terms.

[50] See, however, that table 13 assumes that Romania and Bulgaria will join the EU in 2007 when, at best, they will do it in that year. Thus, the total loss may be somewhat lower.
[51] At present Ireland also receives cohesion funds but due to its rapid growth this won't be so in the future (except for the transition funds it may be entitled to).

Table 13

Losses due to the statistical effect with the enlargement of 12 countries

	Millions of euro[1]		% of GDP[2]	
	2007	2013	2007	2013
Luxembourg	7	6	0,04	0,03
Denmark	69	62	0,04	0,04
Sweden	137	111	0,06	0,05
Austria	143	156	0,07	0,08
Germany	1.780	2.272	0,09	0,11
Belgium	117	106	0,05	0,04
United kingdom	1.019	1.318	0,07	0,10
The Netherlands	263	238	0,07	0,06
Finland	135	89	0,11	0,07
Ireland	48	12	0,05	0,01
France	1.177	1.110	0,09	0,08
Italy	2.222	3.551	0,20	0,32
Spain	3.552	3.996	0,63	0,71
Greece	595	868	0,50	0,74
Portugal	766	1.591	0,71	1,48
TOTAL	12.030	15.486	0,15	0,19

[1] For 1999.
[2] GDP for 1999.
Source: Own estimations from Weiss (2002) and EUROSTAT.

Letting a statistical effect to take place makes no economic sense. To begin with, it is not fair inasmuch as it makes a significant share of the cost of the enlargement fall on the poorest countries. Also, if structural funds are considered useful for the purpose they were established[52] (promoting growth of the poorest regions so their relative income gets closer to the average), then to remove those funds from some EU-15 regions is equivalent to accepting that this regions become poor in relation to regions from the old EU-15. That is, whoever supports the removal of funds to some regions in terms of the statistical effect will be accepting that the fairest cohesion policy is to allow that regions that were previously considered poor become poor in relation to the EU-15. In other words, that to bring the poor (the new AC-10) near the rich and to move the low middle class (the old poor from the EU-15) away from the rich is a sensible cohesion policy that reduces inequality.

Obviously, this is, to say the least, questionable, so for reasons of fairness in the financing of the enlargement as well as for the reasons that justify cohesion, the statistical effect should be avoided and the countries that received structural funds before the enlargement would have to be ensured that they will continue receiving them after the enlargement takes place, in a similar amount.

[52] Though the Commission sustains that they are efficient [COM (2001) 801 final], not all the analysts share this opinion [Boldrin and Canova, F. (2001)].

5.4. A Proposal on Budgetary Reform

The enlargement is going to have a cost equivalent to the net benefits that the new countries receive (participation in the community budget minus contributions to the income budget). The EU-15 sustains this cost by means of: additional contributions, reductions in their revenue sharing, or a combination of both. Obviously, each choice will entail a different distribution of costs.

It might be thought that a suitable combination will be determined by the aims themselves of the EU budget. That is, if the aim of the agricultural policy is, lets say, to keep farm prices or incomes above a specific level, then expenditure must be increased until this aim is achieved in the new countries. Similarly, if the goal of structural funds is to help regions below 75% of the EU average, then this criterion should be kept.

The problem with this approach is that it is not realist. The EU does not determine the size of its budgets in terms of its goals, but the other way around. Furthermore, the goals are often determined not because they are desirable in themselves, but because they are in the interest of some countries or lobbies.

In this context, it seems evident that financing of the enlargement is, as often in the EU, not a question of principles but of financial results. Given this, reducing expenditure in general, or structural funds in particular, of the EU-15, would be a way of financing the enlargement that would make the cost fall basically on the cohesion countries. In fact, those countries that paradoxically use a larger share of their GDP (by means of a reduction in revenues) to finance the enlargement are precisely the EU-15 poorest members. This is basically unfair, so the most reasonable way to proceed would be to distribute the cost of the enlargement in proportion to each country's GDP, i.e., the combination reduction in expenditure (for the EU-15) / increase in revenues should be chosen, so losses for each EU-15 country would be proportional to their GDP.

One way to do this, which would be especially reasonable if we want to keep a minimally substantive economic role for the EU, would consist of keeping present benefits to the EU-15[53] and financing the enlargement (the active balance to the new members) through additional contributions proportional to the GDP. As we said before, this would fit perfectly within the expenditure ceilings adopted for the community budget and would be consistent with the criterion that the price of the enlargement is not an increase in income differences between the poorest and richest present EU-15 countries.

In the case of structural funds, the method to keep the present levels received by the EU-15 and, at the same time, to preserve a single model (common to old and new States) of distribution of funds, would consist of increasing the threshold required to be entitled to funds in the same proportion as per capita income is reduced, and ensuring the new thresholds the same revenues as the old ones. Thus, for example, according to data from 2000, 75% of the EU-15 average is equivalent to 82.7% of the EU-25 average. Given that the AC-10 are growing faster than the EU-15, in 2007 the figure may be somewhat lower, but presumably will be around 82%. Therefore, all the regions with a per capita income lower than 82% of the EU-25 average should receive funds, and the funds received with an a% of the EU-15 should be the same as those with an (a/0.914[54])% in the EU-25.

[53] This means that after the enlargement they would receive the same in the absence of enlargement.
[54] 0.914 = 0.75 / 0.82.

As regards to the Cohesion Fund, the present 90% limit of the EU-15 per capita income would become 99.2% of the EU-25 average. An alternative would be, therefore, to set down that countries whose income is below the average are entitled to the cohesion fund. Yet, this could give the impression that some kind of equalitarianism is being sought among the EU members[55]. Therefore, a reasonable alternative could be to provide two different cohesion funds. The first one would be distributed between the AC-10, with a maximum of 4% of the GDP minus the amount of structural funds allocated to these countries. The second one, would be provided and distributed using the same criteria as in the financial perspectives 2002-2006. In particular, the beneficiary countries would be those within the EU-15 with a per capita income lower than 90% of the EU-15 average. Indeed, this would create a dual model with different criteria for the EU-15 and the AC-10. However, the huge gaps in wealth between these two groups of countries together with the need for a fair share as regards to the cost of the enlargement, lead to this duality.

Fairness in the financing of the enlargement also demands a reform in the revenue system. In the present system, the UK correction and its financing entails that the countries marginal costs of expenditure differ from their participation in the GDP[56]. As a result, the UK rebate should be done away with, and the financing system should be reformed in such a way that the contributions of the countries to the EU budget were proportional to their GDP.

[55] However, this alternative would be reasonable within the framework of a global reform as the one proposed in Zubiri (2002), where the countries relative per capita income plays a fundamental role in the distribution of structural resources (structural or cohesion funds).
[56] See Zubiri (2002).

6. Medium Term Reforms

In section 5.4 we have analysed the budget reforms necessary in line with the current budgetary scenario. However, as Zubiri points out (2002), wider reforms of budget goals and instrumentation mechanisms can be considered. In a summary form, the reforms put forward would be:

a) In the case of the CAP, in the short term, as the EU is doing already, price subsidies should be replaced with direct transfers. In the medium term, the CAP should be returned to the countries and thus reduce its significance in the Community budget. Unfortunately, due to political reasons, this seems to be a difficult road.
b) The problem with structural operations is that they serve very different objectives, are instrumented through very different funds, give rise to situations of unacceptable special privileges[57], use non-transparent distribution criteria, and have given place to a very significant bureaucracy. The way of getting rid of these problems would be:

    1. The joining of, at least, ERFD, ESF, the Cohesion Fund and, ideally, EAGGF Guidance, in a single fund aimed at regional solidarity. Alternatively, if, as is suggested in Zubiri (2002), the EU decided to assume a stabilising role, the total resources could be divided into two blocks: one block of regional solidarity and another of stabilisation.
    2. The solidarity block would be automatically distributed among regions with a GNP below the average in inverse proportion to per capita GNP (and direct to population). The stabilisation block would be distributed among countries in inverse proportion to the variation of the unemployment rate.
    3. The requirement that the funds have to be used for development should be kept, though removing the co-payment requirement and modifying the conditionality system. Transfers should be made for the general development of infrastructures and human capital by means of an ex-post mechanism (not, as now, ex-ante) of control of the good use of transferred funds.

As for the EU financing, the current system has substantial arbitrarinesses that should be eliminated. In order to do that, the following steps should be taken:

1. Reducing again to 10% the part that countries keep as tariff collection costs (instead of the 25% used since 2001).
2. Removing gradually the VAT resource and replace it with the GNP resource which, as a last resort, should be, together with the own resources, the only source of financing of the EU. In this process, the UK rebate should also be done away with.

In other developments, from an economic viewpoint, it seems reasonable that the EU have its own fiscal resource highly visible to the taxpayers for, at least, two reasons. First, because in this way its financing would no longer depend on non-co-operative negotiations among countries. Second, because the citizens would be able to assess better the costs and benefits of the EU intervention, which could bring about a rationalisation of expenditure. This own tax, however, should be subject to the EU undertaking expenditure policies that benefit the citizen directly. The unemployment insurance would be an example of this type of policies. Once this prerequisite has been fulfilled, the ideal tax would be the individual income tax, but due to the difficulties to reach a horizontal equity among different residents and countries, the VAT would be a sensible option.

[57] Some regions receiving funds have a considerable income and Ireland, without a reason of wealth justifying it, takes part in the cohesion funds.

7. Conclusions

Firstly, this study has analysed the budgetary cost of the enlargement and its distributive implications. Then, several proposals of reform have been made both for the short term level of budget) and for the medium and long term (item allocation criteria).

As to the cost of the enlargement, it has been noted that the freezing in agricultural expenditure (which is feasible after the reform carried out) together with the 4% limit of the GDP to structural transfers that any country may receive, ensure that, even without a reduction of benefits to current members, the enlargement may be financed without exceeding the legal and reference limits that have been set out, i.e., 1.27% of GDP for revenues (and appropriations for payments), 0.45% of GDP for structural operations and constant real value (with inflation at 1%) of expenditure on agriculture. In spite of these limits, in practice, the EU's real expenditure ranges around 1% of GDP. With this limit, there could be pressures to reduce benefits to present members, especially as regards to structural operations.

However, this reduction would be unfair for two reasons. First, because it would entail that the EU-15 poorest regions contributed with a higher share of their GDP to finance the enlargement. Second, because without any real change, the reduction takes away from the EU's poorest regions / countries funds that in theory help them to get closer to countries that enjoy a better position in the EU-15 (statistical effect). In this way we would be accepting that with the enlargement is reasonable, just and solidary to reduce the differences between the poorest (the new members) and the EU in exchange for an increase in the gap between the present poor (countries benefiting from the cohesion fund) and the rest of the present members. In the case of Spain, the statistical effect will reduce the structural funds in all the regions and even, especially after the accession of Romania and Bulgaria, it may reduce to zero (for being objective 1) the funds of all the autonomous communities except Extremadura and Andalusia. As regards to the cohesion fund, the statistical effect would raise Spain's per capita income above 90% of the EU average and as a result, in theory, would exclude it from the cohesion fund.

In order to lessen these problems, the proposal is that after the enlargement, the members of the EU-15 currently receiving structural funds, continue receiving them in the same quantity (as they would in the absence of enlargement). In the short term, it would suffice to increase the criterion to be beneficiary of structural funds from 75% of the EU's average income to 82%, ensuring that the quantities received are the same as before the enlargement. In the case of the cohesion fund, a separate system for old and new members should be put forward. Here, at least transitorily, the criteria for the allocation of funds would be defined the same as they are now, in relation to the EU-15 average. Finally, it is suggested that even in the short term, a system of proportional contributions to the GNP should be sought. In particular, the UK correction should be done away with.

This document also makes more far-reaching reform proposals, which could be implemented in the long term. These proposals include re-nationalising the CAP, joining all the structural funds in a single fund that may be distributed among countries (with a lower than average income) in terms of per capita income and population, removing the co-financing requirement in structural funds and replacing *ex-ante* controls with *ex-post* controls of results. In the field of financing, we put forward the establishment of a system based on the GNB, the removal of the UK rebate and the reduction of what each country keeps as costs regarding the single tariff collection. It has also been suggested the advisability that in the long term the EU have its own tax, being the VAT a suitable candidate. It has been noted, however, that before this happens, the EU should be assigned some duty that benefits the citizens directly.

References

Boldrin, M and Cánova, F. (2001): <<Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policies>>, *Economic Policy 32,*207-50.

European Council (2000): Council Resolution of 29 September 2000 on Own Resources System (2000/597/EC, Euratom).

COM (2001) 801 final: Adaptation of the ceiling of own resources and of the ceiling for appropriations for commitments following the entry into force of Decision 2000/597/EC, Euratom.

COM (2003) 23 final: Council Regulation. Council Regulation Proposal laying down common rules that apply to direct aid schemes in the framework of common agricultural policy and establishing aid schemes to producers of some crops.

COM (2003) 34 final: Second Progress Report on economic and social Cohesion.

European Commission (2001): Second Report on Economic and Social Cohesion.

Budget Directorate (2003): Financial Framework for Enlargement 2004-2006. Indicative Allocation of Commitment and Payment Appropriations. Copenhagen Package. *(europe.eu.int/comm/budget/furtherinfo/index_en.htm#framework2000).*

EU (2001): *Real Convergence in Candidate Countries – Past Performance and Scenarios in the Pre-accession Economic Programmes,* EU Commission, Brussels.

Jones, J. (2003): CAP reform – modulation and degression (mimeo) (Http://rics.org.uk/downloads/static/cap_modulation_degression.pdf).

Kok, Wim (2003): *Enlarging the European Union: Achievements and Challenges.* Robert Schuman Centre for Advanced Studies. European University Institute.

Mayhew, A. (2003) <<The Financial and Budgetary Impact of Enlargement and Accession. SEI (Sussex European Institute)>>, *Working Paper,* N.º 65.

OECD (2002): *Education at a Glance 2002,* Paris.

Statistics in Focus (2003ª): *Quarterly Accounts,* Theme 2 33/2003.

Statistics in Focus (2003b): *First Results of the Demographic Data Collection for 2002 in Europe,* Theme 3, 20/2003.

European Union (2002): Financial Report 2001.

Weise, CH. (2002): <<How to Finance the Eastern Enlargement of the EU>>, *DIW discussion paper 287.*

Zubiri, I. (2002):<<Las Finanzas Públicas en la Europa de las Naciones: Retos Competenciales, Financieros y Presupuestarios de la Unión Europea>>, *Paper for Discussion, European Academy of Sciences and Art.*