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1. Introduction

The prospect of the integration of the agriculture of Central and Eastern Europe in the unified European economy is one of economic promise and political challenge. This paper explores the integration of the agricultural and food processing sectors in Central and Eastern Europe and the Former Soviet Union (FSU) with those in Western Europe. This process of integration will have significant effects on the pattern of production and trade in agricultural and food products. As in other sectors the process is likely to be stimulated by the development of cross-border linkages among firms which lead to a network of production relationships throughout the region. Such linkages have been shown to have a major influence on the path of development in Asia and appear to be emerging as a factor in Europe. Though producer networks have not sprung up in farming, a good deal of interaction at the processing and food manufacturing level is taking place, giving rise to important linkages which will shape policy and influence development.

The agricultural sector is likely to play a complex but significant part in the development of an integrated European Economy. The countries of Central and Eastern Europe are at an earlier stage in the process of transforming and modernizing their agricultural sectors than the highly productive (if overly protected) enterprises common to Western Europe. The nature and the pace of this transformation in the CEC will have major impacts on agricultural and labor markets and on the ease of removal of trade barriers within the enlarged Union. But the issue is complicated by the strains of the transition of the CEC economies away from central planning. The collapse of the industrial base in many of these countries at the start of this transition led to an increasing importance of the agricultural sector. Thus the performance of this sector is proving crucial in easing the transition path to a modern industrial economy in many of these countries.

Agriculture is also a key to the politics of enlargement in the existing EU. Agriculture will remain a constraint on the pace and conditions of accession of the ten countries of Central and Eastern Europe (CEC-10) that have Association Agreements with the EU, though it is unlikely that agricultural issues will block such accession. Much political capital will have to be expended to convince farmers in the European Union that the door should be opened to agricultural produce from the East. Those in any case skeptical about the wisdom of a radical enlargement of the Union will be easily persuaded by fears of high budget outlays and the strain on current sectoral programs. This might lead to a decision to postpone the full incorporation of the CEC-10 in the Union, by attempting to keep two or more separate agricultural markets. Agricultural issues could also hamper the overtures to and limit the scope of trade agreements with countries further east, and in particular with Russia and the Ukraine.
Such a pessimistic outcome is not however inevitable. For instance a further bold step in the process of reform of the Common Agricultural Policy (CAP) could dramatically ease the burdens of enlargement, both by ensuring that the incomes of farmers in current member states are not sharply cut and by removing a part of the budgetary obligation to farmers in the newly acceding countries. Depending upon such policy decisions made in the next few years, the process of assimilation of the eastern part of Europe into an integrated agricultural market need not be too traumatic.

To put in perspective the difficulties of integrating Central Europe's agriculture into the EU it may be useful to consider the size of agriculture in Central Europe in comparison with the EU (Tangermann 1996). First, the agricultural sector is much more important to the economies of the CEC-10 than is the case in Western Europe. In the CEC-10, agriculture contributes 7.8 per cent to total GDP, more than three times as much as in the EU-15 (see Figure 1). Agriculture employs 26.7 per cent of all labor, nearly five times the percentage in the EU. The share of agricultural land in total land area in the CEC-10 is well above that in the EU. The share of food in total household expenditure in the CEC-10 (36 per cent) is more than fifty per cent above that in the EU. All this confirms that agriculture is much more important as an economic activity in the CEC than in the EU. The greater significance of agriculture in the economy means that the CEC governments will pay close attention to agricultural issues when it comes time to consider the implications of accession to the EU, and for the CEC the nature of agricultural policies pursued is more important than it is for most countries in the EU-15. This does not mean, however, that CEC governments are necessarily more interested in higher levels of agricultural protection than governments of West European countries. After all, as food has a much higher share in total expenditure of CEC consumers, food prices are significantly more of a political issue than they are in Western Europe.

As a consequence of the large size of agriculture in Central Europe, the weight of agriculture in the overall economy of the EU will grow significantly when it comes to Eastern enlargement. Based on recent (1993) data for Central Europe, accession by the CEC-10 would expand the size of agriculture in the European Union very considerably. Agricultural employment would grow by more than one hundred per cent; agricultural and arable area as well as cereals production would expand by around 50 per cent; and livestock production would grow by around one fifth (see Figure 2). On the other hand, enlargement to include the CEC-10 would add no more than three per cent to the size of the overall economy of the EU (measured by GDP at current prices).[1] As a result, the economic conditions under which agricultural policies will have to be pursued in an enlarged Union will be much different from what they are in the current Union. In particular, agricultural policies which transfer income from the rest of the economy to agriculture will tend to be more expensive as a result of the
larger size of agriculture in an enlarged Union relative to the rest of the economy. At the same time, the political weight of agricultural interests in society may gain significantly as a result of Eastern enlargement.

One factor which will become important in the assimilation of CEC-10 agriculture into the framework of the EU is the degree to which the sector can compete in a unified European market. CEC agriculture has proved to be relatively robust during the transition process, and the sector may in fact have a comparative advantage in several countries in Central Europe. During the transition process, agricultural output has declined significantly in the CEC. However, in other sectors of the CEC economies production has suffered as well. As a result, relative to industrial output the volume of agricultural production has increased in most countries in Central Europe. Agriculture in Central Europe has, in spite of all the difficulties it is facing during the transition process, shown a degree of remarkable robustness in comparison with other sectors. If this robustness persists then agriculture in Central Europe may have a promising future, and may exploit the potential to become an internationally competitive sector.

This resilience suggests a more positive role that agriculture can play as an element in the process of integration, as a modern, competitive sector closely integrated with the post-farm processing activities and providing quality goods for consumers. This can, however, only be achieved through the spread of investment, the opening up of market opportunities and the transmission of technology from more to less developed areas. In this way the integration of CEC agriculture need not be a disruptive or negative development. The extent to which this more positive role is encouraged and exploited will in large part determine the nature of the development of rural economies in the CEC and the FSU. Together with the agricultural input supply, processing and marketing industries, the farming sector will continue to provide jobs for a large part of the rural population. The question is whether these jobs will be in a sector which is attractive to investment and to the adoption of new technology. The sector can therefore be viewed as a potential actor in the process as well as a drag on the pace of integration. In short, the agricultural sector should be seen as part of the solution as well as part of the problem.

The way in which agriculture will become integrated within a broader Europe is likely to be different from the process in manufacturing sectors. Transborder institutions are largely absent from primary agriculture. Farming is clearly not the province of multinational corporations (MNC). Such MNCs as exist are concerned with the supply sector (chemicals, fuel, fertilizer and feed), the processing activities (sugar and dairy) and the marketing and distribution (grain handling and selling). Nor is production agriculture likely to become a sector dominated by large indigenous corporations. Even in the more advanced US agricultural sector
the median size of business is still modest by manufacturing standards. Unlike the automobile sector, complex webs of component suppliers are not likely to emerge. Farmers do buy from other farmers, particularly animal feeds and live animals. Also, food processors purchase their raw materials from farmers, sometimes under medium-term contracts. But only a few goods, such as highly processed foods, are "assembled" from internationally traded components. Unlike the electronics industry, information networking and skill spillovers do not seem so crucial to the development of the sector - though a rudimentary version of these processes has always existed in rural areas. The path of integration lies more through the development of the food industry, which will draw agriculture along with it into a European and an international marketplace.

The trajectory of the path toward a European market is clearly of great relevance for the agricultural and food processing sectors. It is also endogenous to the policy process. Resource availability in agriculture are as much created by the actions of private and public agents as determined by an initial endowment. The provision of market infrastructure, from transportation to quality control and grading systems, has a particularly pronounced impact on the comparative advantage of particular regions. The reorganization of agriculture in the CEC and the FSU will be driven by the economic and political strategies of these public and private actors. Put another way, whether agriculture is viewed as a laggard sector with little growth potential or as a potential source of growth and competitive exports will help determine whether the sector is taxed or encouraged by public policy. Private firms will pick up on this and be influenced in their investment decisions by the treatment of the sector by policymakers. This combination of public and private decisions will therefore help determine the path of development for the sector.

The chapter begins with a brief discussion of the process of transition of the agriculture and food sectors of the countries of CEC and the FSU, and the role of these sectors in the overall transition process. This leads to an examination of the competitive and complementary relationships which are likely to emerge between east and west, and the determinants of the strength of these relationships in the agricultural and food sectors. The paper then describes the development of agricultural trade between these countries and the European Union in the past few years, and analyses the treatment of agricultural trade within the Association Agreements that govern the commercial relations between the EU and the prospective members. The argument then shifts to the role of foreign direct investment (FDI) in the agricultural and food sectors of the CEC and FSU, and on the significance of this investment for the development of their economies. This is followed by a discussion of firm strategy and the reasons for particular types of linkages and institutional arrangements. The paper then returns to the issue of public policy in agriculture and addresses the question as to whether the CAP is likely to change to facilitate the integration of agriculture
or whether the market will remain divided as a way of postponing pressures on EU farmers. A final section places the European story in the context of global developments in agriculture and the food industry.

2. Agriculture and the Food Industry in the Transition Process in the CEC and the FSU

Before the political and economic transformation began in Eastern Europe towards the end of the 1980s, agriculture and the food industry in the region exhibited the typical features of the traditional centrally planned socialist system, though with notable differences among countries. In agriculture the former private farms had been either forced into collectives, or to a lesser extent — and sometimes in a second round of socialization — expropriated and amalgamated into state owned farms. Relatively large production units had been created in this way, compared with the typical much smaller family owned and operated farms in Western countries. In addition to the ideology of collective ownership, another driving force behind this process was the attempt to "modernize" agriculture by moving away from traditional rural structures. In many cases, production of crops and livestock products were separated into different farm units, in an attempt to emulate "industrial" production structures in the agricultural sector. These collectivized or socialized large farms were managed in accordance with centrally administered production plans. The major exception to this general picture of the region was agriculture in Poland, where about three quarters of the land remained in the hands of individuals as privately owned and operated farms, generally of a very small size.

In the food industry, the process of socialization resulted in essentially the same structures which had been imposed on other industrial sectors of the centrally planned economies of Eastern Europe. There is little question as to how inefficient the resulting structures in agriculture and the food industry were in Eastern Europe. As a result, of those inefficiencies and the policies to compensate, agriculture and the food industry became major obstacles to overall macroeconomic stability and growth in the communist countries of Eastern Europe. When the process of transition began in 1989, macro-economic concerns became a primary force in the agricultural policy. The removal of state subsidies (de-subsidization) was one of the central elements of agricultural and food policy reform. Other major elements of reform in the Eastern European agro-food sector after 1989, more directed towards micro-economic effects, were de-collectivization and, along with equivalent transformations in other sectors of the economy, privatization, de-monopolization, price liberalization and the opening-up of foreign trade. The joint effect of these elements of agricultural policy reforms was to make life significantly more difficult for both agricultural
producers and food consumers. As the large subsidies which used to be paid to the food industry were eliminated, prices received by farmers declined and food prices paid by consumers increased. The elimination of subsidies on inputs used in agriculture forced farms to pay higher prices. Price liberalization allowed such price changes to occur on markets. At the same time the very open trade regimes which most countries in Eastern Europe established as transition began reinforced these price adjustments. Consequently, the sectoral terms of trade for agriculture (producer prices relative to input prices) deteriorated noticeably, while consumers had to bear the burden of significantly higher food prices. One immediate effect of these price changes was a steep decline in agricultural output and a drop in food consumption in all countries of Eastern Europe.

Since 1989, there have also been changes in farm management where collectives were broken up, or where members of the transformed collectives no longer trusted the managers from the old times. On close inspection, however, it seems that the actual structure of farms has so far changed much less than one might have expected given the fundamental legal reforms which have taken place. In addition to the structural problems which still persist, much of the equipment of the food industry is seriously outdated and inefficient, and even though lower labor costs than in Western countries suggest that less capital intensive production methods are appropriate there is a noticeable lack of the capital needed to bring production technologies up to date. Low quality standards of food produced in these enterprises are one of the problems resulting from that situation, but this is also related to a lack of managerial experience with more modern production technologies. At the same time marketing skills are also lacking in many parts of the sector: against a history of "markets" where consumers were used to queuing for what was available it is no surprise that there is a lack of experience in marketing. In short, the whole institutional framework needed for a modern food industry is still at the infant stage, and institutions such as wholesale markets, commodity exchanges and futures markets, price information, quality standards and controls, grading systems, export marketing agencies, and transportation facilities still need some time to be fully developed.\(^6\)

Though significant improvements are being made in all these aspects, the food industry is probably that element in the whole agro-food sector of Eastern Europe where the gap in competitiveness vis-à-vis Western countries is still most pronounced. Since for most of their production farms depend on sales to the food industry, profitability of agriculture is also hampered by these deficiencies in the downstream sector. In particular, inefficiency (in both a technical and a product quality sense) and lack of competition in the food industry mean that margins between consumer prices (or international market prices) of processed foods on the one hand and prices paid to farms on the other hand are larger.
than need be, with the result that prices paid to farmers are depressed and profitability of agricultural raw production is reduced.

3. Competition and Complementarity between East and West in Food and Agriculture

Agriculture in the East is presently seen predominantly as a rival to that in the West, either for markets or for the EU funds that supplement market earnings. However, in the longer term this is likely to be dominated by a more complementary relationship among the agriculture of East and West. This process of complementarity will be led by firms seeking profitable opportunities in internal and external markets. The rivalry will be stressed by firms subject to increased competition and will thus be of concern to governments seeking to protect the agricultural status quo. How soon the "long run" complementarity is recognized and accepted as beneficial will have a major impact on the problems of accession. If short term competition for saturated markets and Union funds is allowed to dictate the relationship between east and west then the sector will be a laggard in integration. If the complementarities emerge relatively early in the process the political tensions may be eased. There is evidence that the complementarities are already beginning to be exploited to the long run benefit of both Eastern and Western economies.

This rivalry/complementarity relationship depends upon a combination of trade and investment decisions. Both trade and investment have an internal and an external dimension and investment can be in turn be from private or public funds. Trade factors have been given most attention in the past, with the implicit assumption that agriculture in the CEC will have to seek out export markets in the West to be able to thrive. Hence the main threat to enlargement is seen as coming from the political opposition to such competition and the pace of integration in the sector is assumed as being determined by the speed at which trade barriers come down. The access to markets within the EU will indeed go far to determine the trade environment in which agriculture in the East will have to survive. But these agricultural sectors may also derive income from exports outside the EU, competing in third markets. In this respect these countries share with those in Asia, Latin America and Africa the task of penetrating high trade barriers in developed markets which often exclude the primary products. The recent strong growth of trade in "high value added" agricultural and food goods opens up the possibility of markets in these products for CEC exporters. These sales are highly dependent upon quality control and meeting international standards. Will the harmonization or mutual recognition of standards and health regulations proceed fast enough to allow for the full development of trade complementarities? Slightly less demanding are the markets in other CEC and
FSU countries. Here the pace of exports will be determined by the rate of growth in these economies and in their continued openness to international commerce.

At present it looks as if intra-EU trade liberalization is a relatively slow horse which could be outpaced by other forces. Other sources of stimulus for the agricultural sector of the CEC will be needed. If agriculture in the East is to develop it will need investment funds. These funds will have to come from domestic savings, from public agencies or from private foreign direct investment. The extent to which such funds are forthcoming will in part be determined by the relationship between the agricultural sectors in East and West. But the opening up of the internal market for agricultural products may also be enough to generate significant development, and there is evidence that foreign capital is entering some of the countries in Central Europe to supply the domestic market. Some degree of domestic market development may in any case be a prerequisite for any significant investment, and this precondition is still not in place in the countries of the FSU.

Financial capital is still seriously limiting in the region as a whole. Moreover, it would be unrealistic to think of all the countries of the CEC and the FSU as being equally attractive to foreign investment. Those that are most likely to enter the Union in the first tier, presumably between the year 2000 and 2002, are more able to attract the attention of overseas investors. Nor can one think of the agricultural and food processing sector as being homogeneous. Some products are more highly processed than others, and these are probably more likely candidates for inward investment. Figure 3 attempts to provide a framework within which to examine the significance of FDI and trade flows. As one would expect the most activity in the highly processed agricultural goods has been in the states most likely to gain early admission. Private investment has been attracted not just because these countries are likely to gain full access to the EU more quickly and become eligible for EU funds, but also because they are the most advanced of the economies in transition. At the other extreme, the production of homogeneous raw materials in the countries of the FSU is unlikely to be a magnet for foreign funds, and will be dependent on local funding. Access to the EU market for these products is unlikely to be free in the next few years. The following sections are intended to flesh out this picture with respect to both the country situation and the type of agricultural product.

4. Agricultural Trade Developments in Central and Eastern Europe

Both the structure of trade institutions and the conditions for market access have changed rapidly for the Central and Eastern Europe food and agricultural sectors in recent years. Under the old regime of central planning, foreign trade of the countries in Eastern Europe was centrally planned as well. For purposes of
external trade the world was split in two separate blocs. Trade with other centrally planned countries in the Soviet-ruled empire was conducted under the auspices of COMECON. For all of the countries in Eastern Europe this accounted for the largest part of their foreign trade. For agricultural products and food in particular, a large part of the exports from the countries in Central Europe went to other COMECON members, above all the Soviet Union.

The major changes in agricultural trade relations with the EU which were to come about as a result of the reforms were foreshadowed by a sudden large upward jump in the EU share of total agricultural and food exports from Central Europe as soon as the transformation process started. In the case of Bulgaria, for example, the EU share in total agricultural exports jumped from five per cent in the first half of the 1980s to around one quarter in 1989-91. This growing intensity of Central Europe's trade with the EU as reforms began was in part a result of the special trading arrangements between the countries in Central Europe and the EU, to be discussed below. However, it also reflected the breakdown of the COMECON soon after the reform process began. Trade among the former COMECON members suddenly had to be conducted at true world market prices, and paid for in convertible currencies. Moreover, with the steep economic decline in all former COMECON countries, above all the former Soviet Union, import demand dwindled. As a result, the countries in Eastern Europe lost large parts of their former export markets among their Eastern neighbors, for both agricultural and other products. Against this background it was no surprise that their trade was redirected towards Western countries.

When the process of transition began in Central Europe, the EU was quick to respond by revising its trade regime vis-à-vis the countries concerned. As a first step, in 1990 the EU began to lift its previous quantitative restrictions against imports. The second step, following soon afterwards, was to provide some limited preferential market access by including countries from Central Europe in the EU's Generalized System of Preferences (GSP) originally extended only to developing countries. As far as agricultural products were concerned the GSP covered mainly tropical products which were of no interest to Central Europe. In order to assist these countries better, the EU also included some types of pork and poultry meat in its GSP, with a 50 per cent levy reduction on limited quantities. A further step taken by the EU was the conclusion of trade and cooperation agreements with the countries in Central and Eastern Europe, which however did not have much economic effect.

The most important phase in EU trade relations with Central Europe so far, however, was reached when, beginning in 1992, Association Agreements (called "Europe Agreements") were concluded, as a first direct step towards eventual membership of the countries in Central Europe in the EU, as explicitly stated in the preambles of these Agreements. The Association Agreements contain
elaborate trade preferences, including agricultural products.\textsuperscript{(9)} The EU now has Association Agreements with ten countries in Central Europe (the CEC).\textsuperscript{(10)}

The trade provisions under the Association Agreements are, in principle and in GATT terms, supposed to establish free trade arrangements between the CEC and the EU. They are mutual but asymmetric, in the sense that both sides eliminate trade barriers, though the CEC have more time to do so. For most industrial products, trade will eventually be completely free. In agriculture, however, neither the CEC nor in particular the EU had the courage to open markets up completely. Indeed, the overall negotiations were close to breaking down on a number of occasions when some EU member states felt that too much access to EU agricultural markets might be provided for the CEC. In the end, the trade preferences in agriculture and food granted by the EU were rather limited, and disappointing for the CEC. On the other hand it must also be said that there is no other group of third countries to which the EU has granted such far reaching trade preferences in agriculture, including reductions of the (then still existing) variable levies on a wide array of core CAP products.

Agricultural trade preferences granted to the CEC under the Association Agreements, equivalent in nature for all CEC, come in several different forms. However, with the exception of very few products, all preferences are strictly limited to maximum quantities. Both tariff/levy reductions and quotas are defined at a rather disaggregate product level. For each of the CEC some 250 to 400 individual products are listed. Quotas set in the negotiations are generally based on actual exports to the EU (including the former GDR) in a past reference period. Products not exported to the EU in the past, such as cereals, many dairy products, sugar and many sugar products, are not included in the preferential arrangements. In effect this means that products where the CEC pre-reform could not export to the EU, because EU import barriers were prohibitive or for any other reason, do not benefit from preferential treatment. Products where market conditions have changed, either in the CEC or in the EU, after the reforms and where the countries in Central Europe now have a comparative advantage and therefore could profitably export to the EU, have often not been granted preferential access to EU markets.

In spite of trade preferences granted under the Europe Agreements, agricultural and food trade between the EU and the CEC has in recent years developed in a different way, and one that has caused some concern on both sides. Agricultural and food exports from the EU to the CEC have increased significantly, while exports of these products from the CEC to the EU have been much less dynamic, and in many cases even decreased. These developments have come as a surprise to some observers. The growth in EU exports to the CEC, it was felt,
was in apparent contradiction to the falling domestic demand for food in the CEC. The lack of growth in CEC agricultural and food exports to the EU was disappointing to those who had expected that the trade preferences which the EU had granted would result in a dynamic expansion of CEC agricultural and food exports to the West of Europe. Will trading relations in agriculture and food between Western and Central Europe in future increasingly be a one way road, with the EU supplying deficit markets in Central Europe? Or is this in part a result of export subsidies granted by the EU, which the countries in Central Europe cannot match nor protect themselves against through trade barriers? What is the role of processed foods, as opposed to agricultural raw materials in that trade?

In order to throw some light on these questions, recent trade data are analyzed below. The analysis is confined to EU agricultural and food trade with those six CEC with whom the EU has now had Association Agreements for some time (Bulgaria, the Czech Republic, Hungary, Poland, Romania, and the Slovak Republic, CEC-6). As trade developments since 1988 are analyzed, trade with the Czech and Slovak Republics is treated as an aggregate (because separate data for trade with each of these two countries do not exist for the early years of the period covered here).

Since the process of transition in Central and Eastern Europe began, net exports of agricultural and food products from the CEC-6 as a group to the EU (balance of CEC-6 exports and CEC-6 imports in trade with the EU) have turned into a deficit (see Figure 4). Before transition, i.e. in the years 1988 and 1989, all the individual countries still had a positive balance of agricultural and food trade with the EU (though that positive balance was small for Bulgaria, the Czech and Slovak Republics, and Romania). The balance has turned into the negative relatively soon for Romania and the Czech and Slovak Republics. By 1993, however, it was negative for all CEC-6 except Hungary, and this remained to be the case in 1994. However, due to some improvement for Poland, Bulgaria and Romania in their agricultural trade balance with the EU there was a slight overall improvement for the six CEC-6 as a group in 1994. The major trend behind this deterioration in the CEC-6 agricultural trade balance with the EU was the growth in EU exports to the CEC-6. CEC-6 agricultural and food exports to the EU were much less dynamic than trade in the other direction.

In order to gain a better impression of the nature of trends in EU agricultural and food exports to the CEC, products were grouped according to two criteria. First, three groups were defined regarding the level of processing which the commodities concerned have undergone before export (roughly corresponding to the categories in Figure 3). In forming these categories, treatment of different products under the Common Agricultural Policy of the EU (CAP) could be used as one criterion. Basic products in CAP market regimes, but also other unprocessed commodities, were classified as "raw materials". Examples of these products are
live animals, cereals, and cocoa beans. Other products covered in Annex II of the Treaty of Rome, and other products of a similar character, were classified as "lightly processed products". Examples are meat, butter, flour, and cocoa powder. Non-Annex II products were classified as "highly processed products". Examples are confectionery, pasta, ice cream, and chocolate.

Second, two product categories were defined according to the extent to which the EU subsidizes exports. Products where export subsidies are either not granted at all or are insignificant relative to the product value were classified as "products without export subsidies". Examples are fish, flowers, manioc, coffee and oilseeds and their products. All other products were classified as "products with export subsidies". The grouping according to both processing and export subsidization was done at the four digit CN level, and data were analyzed at that level.

Table 1 presents overall trends in EU exports to the CEC-6 between 1988-90 and 1994 for the resulting product categories, expressed as the percentage growth of EU exports to the CEC-6 during this period. Overall, EU agricultural and food products exported to the group of the CEC-6 have grown by 149 per cent during this period. As far as individual CEC are concerned, trends in EU exports were rather different. EU exports of all agricultural and food products to Poland have grown by only 94 per cent, while exports to the Czech and Slovak Republics on aggregate have increased by 350 per cent between 1988-90 and 1994.

Growth of EU exports was rather different for the individual product categories, with a clear tendency towards higher growth the higher the level of processing of the products concerned. EU exports of agricultural raw materials to the six CEC on aggregate have grown by only 91 per cent, i.e. by less than two thirds of the overall growth rate of all agricultural and food exports to the CEC-6. EU exports of lightly processed products have grown, during the period considered, by 147 per cent, while exports of highly processed products to the CEC-6 have exhibited a growth of 273 per cent. This trend was visible also in EU trade with most individual CEC. For example, EU exports of highly processed foods to the Czech and Slovak Republics have grown by more than 500 per cent from 1988-90 to 1994. On the other hand, in EU trade with Poland, EU exports of lightly processed foods have exhibited a somewhat more rapid growth than exports of highly processed foods.

As far as the impact of export subsidization by the EU is concerned, EU exports to the six CEC as a group of products benefiting not at all (or only to a minimal extent) from export subsidies have grown at above average rates, by 194 per cent, while EU exports of products with export subsidies have grown less than on average, by only 124 per cent during the period covered. This counter-intuitive result was mainly due to EU exports to Poland, the largest recipient of EU
agricultural and food exports among the CEC-6. EU exports to Poland of products not benefiting from export subsidies have grown nearly four times as strongly as EU exports to Poland of products receiving export subsidies. On the other hand, in trade with Hungary and the Czech and Slovak Republics, EU exports of subsidized products have grown considerably more rapidly than EU exports of products not receiving export subsidies.

The main conclusions from this analysis can be summed up as follows. The rapid growth of EU agricultural and food exports to the CEC-6, which has contributed to the downturn in CEC net agricultural and food exports to the EU, has not occurred simultaneously in all product categories. In EU agricultural and food exports to the CEC-6, products receiving export subsidies have a somewhat higher share than products whose exports are not subsidized. However, over the whole of the 1988-90 to 1994 period, EU exports of products without subsidies have grown more than exports of subsidized products. The "core" group of CAP products, i.e. raw materials with export subsidies, has only a relatively small share in both current value and past growth of EU exports to the CEC-6. Processed foods have contributed strongly to the dynamic growth of EU exports to the CEC-6. This trend probably reflects the expanding demand of CEC consumers for modern processed foods, production of which has so far grown only slowly in the CEC.

The results seem to indicate that the immediate concern about the flood of CEC exports to the EU, with the attendant problems for policy, has not been reflected in actual trade flows. Pressure on existing EU markets has not been widespread. Instead, the CEC have increased their imports from the EU. But this trade expansion has not been due solely to the use of export subsidies by the EU, despite the disruption that these can cause. Trade rivalries have therefore not yet flared up to the extent of diverting political decisions on accession. This bodes well for the development of complementary production relationships. These are strongly suggested by the increased trade in processed agricultural goods within the region. These trade trends are consistent with the observed investment flows discussed in the next section.

5. Foreign Investment in the CEC and FSU Agriculture and Food Processing Sector

The significance of investment in the development of the agricultural and food processing sector of the CEC and FSU cannot be overstated. Trade with the EU could expand further as trade barriers are reduced, but as discussed in the previous section, the trade expansion is as likely to be in the other direction. The role of investment is to allow the development of competitive industries in the
East which can then find a market either at home, in the EU, or in third countries. This section of the paper discusses the general investment situation in the CEC and the specific role of investment in the agricultural and food processing sectors.

The countries of the CEC and the FSU contain a population of almost 350 million people and have a Gross Domestic Product of $788 billion. Income levels are not high by western standards, but the region includes a number of "middle income" countries, in particular in Central Europe. The attraction of investors in this region reflects the substantial potential income gains if the future development can mirror that of Western Europe in the 1950s and 1960s.

Because in Central and Eastern Europe the return on capital in agricultural production has traditionally been rather small, this sector has rarely been a magnet for foreign direct investment, and will probably continue to fail to attract foreign capital in the new era. In addition, in many European countries, foreign ownership of land is illegal, although there are ways around such legislative hurdles. But even the attempts by governments to stimulate agriculture do not seem to generate private investment.

The more optimistic side of the picture is that foreign direct investment in the food processing sector has been strong. Although FDI has not been drawn to agricultural production, there has been some investment in the more highly processed foods sector which does not contain a high raw material content. It would seem that investors prefer the rather more stable conditions of markets for consumer-ready foods to those for raw materials for processing. This shows up in the commodity sectors favored by FDI. Of a total number of 130 foreign investment projects reported in Agra-Europe (Eastern Europe) in the period 1990 to June 1996, amounting to $3.4 billion, 21 were in the confectionery subsector (totaling $845 million) and 20 in soft drinks ($397 million). Thus in nearly one-third of the cases the main connection to farm products was through the use of sugar (or corn syrup) as a sweetener. The impact on the farm sector is unlikely to be very significant from such investments, although the attraction of developing a domestic sugar industry to the countries of CEC should not be minimized. Other sectors which appear to be popular among investors are dairy (12 projects involving $296 million), fruits and vegetables (11 projects and $259 million) and beer (10 projects and $280 million). The linkage with the farm sector is much more direct in these cases, as raw material supplies make up a larger share of the costs and are likely to be supplied locally. In such circumstances the foreign investment can be reckoned to contribute significantly to farm income as well as to the development of marketing habits such as the provision of good quality supplies on a regular basis.
For commodities where the prospect of higher support under the CAP is a factor, the investment may be anticipating membership. The investment in sugar in the countries of the Central European Free Trade Area (CEFTA) may be an example of this. In some cases the investment may be attracted by current levels of protection in the CEFTA countries, though this is generally quite low at the moment. What is striking is the virtual lack of any investment in the grains, dairy and livestock sectors of any of the countries outside CEFTA, Russia and the Ukraine. These sectors are clearly not headed for a rapid integration with the EU on the basis of shared markets and investment led technology.

Although agriculture in Central and Eastern Europe and the Former Soviet Union is likely to remain critically short of investment funds for some time to come, the food industry has nevertheless been able to attract substantial investment in certain areas. The results of this brief look at the distribution of FDI confirm the broad relationship between the degree of processing of the product and the country situation vis-à-vis the EU suggested earlier. The highest level of inter-firm financial and marketing links, and hence the development of trade complementarity, has begun to develop in the front-line states which will accede to the Union before the others and become integrated more quickly in the Western markets. Western investment has the objective either of supplying the local or regional market in the CEC or of producing goods to export further east.

The part of the sector least able to attract outside private investment has been the production of homogeneous raw materials in the countries of the FSU. These products are both readily available on the world market and tend to be in surplus in the EU. These markets are also saturated in the FSU, with high per capita consumption levels stemming from historically subsidized food prices. Moreover, without reasonably well-functioning distribution systems, a manufacturer is unlikely to be effective in penetrating the FSU and Balkan markets. The problem is less acute in the CEFTA countries, where western-style marketing institutions such as supermarkets are making rapid inroads. The key parameters governing investment are thus access into EU markets and the degree of market differentiation in the product. For those with the prospect of accession within the next few years, investments are already being made, in particular in those parts of the sector which produce differentiable products for the middle class consumer taste.

It is clear, however, that the investment in these three countries does not in general constitute an attempt to produce agricultural and food products at a lower cost for re-export back to the European Union. Some sales to the EU from the CEC will no doubt be stimulated by foreign direct investment. But the majority of instances of FDI seem to be designed to sell to the domestic CEC market or to be geared to selling to the east. This is most apparent in Poland, where the close links with the Ukraine, the Baltic Republics and Russia have
given it a role in the export of a number of foodstuffs. Capital moves east to Poland and goods move further east to Russia. The interest in the domestic market is in part an attempt to satisfy the demand for "western" foods in the period after the economies were opened up. In part it reflects some prospect of consumer growth, and the emergence of a middle class with selective tastes in foodstuffs.

The second lesson is that the benefit to the farm sector may be indirect, if none the less significant. In terms of the complementarity of agriculture in east and west it is clear that the farm sector is not yet at the stage where companies are able and willing to invest too close to the farm gate. The first stage processing of agricultural goods is not at present very profitable in the countries under discussion. In some cases this is a result of out-of-date technology, and hence a potential target for foreign know-how. In other cases it is more likely that it is a reflection of the incomplete transition of the economy to a market regime. This suggests that the benefits to the farm sector will depend upon the ability of that sector to develop new institutional forms of marketing. One would expect a growth of contracting and other forms of direct marketing which make the link between producer price, quality and reliability of supply. Those sectors that do not adjust may fall behind in an environment where governments are much less likely to guarantee farmers an unlimited market for their produce.

6. Integrating Central and Eastern Europe's Agriculture into Western Markets

In the process of integrating Central and Eastern Europe's agriculture more closely into Western markets, the major event will be accession of the countries from Central Europe to the EU. Trading conditions between acceding countries and Western Europe, as well as with the rest of the world, will change fundamentally once the Single Market is extended to the East. Foreign direct investment of Western companies in Central Europe will occur under completely different conditions. Technology transfer between West and East is likely to prove much easier within the enlarged Union. Institutional and legal design in Central Europe will be even more strongly influenced by the examples set by the countries in Western Europe, and by the Union. Agricultural and food policies in Central Europe will no longer be pursued on a national basis. Policy pressures will not however all be on one side. In Western Europe the environment for policy making in food and agriculture will change fundamentally. Indeed, many of these developments are beginning to take place already, in preparation of Eastern enlargement of the Union.

One thrust of the argument of this paper is that Central and Eastern Europe may well have a comparative advantage in agriculture. This idea has some support
from other authors. Hamilton and Winters (1992) point to the fact that countries in Central and Eastern Europe were in the past large agricultural exporters, in spite of the notorious inefficiency of their agriculture under central planning. Anderson (1992, 1995) looks at the resource endowment of Central and Eastern Europe (and the Former Soviet Union) and finds that the relatively small endowment per worker of capital other than natural resources suggests that the region has a comparative advantage in primary products rather than in manufactured goods. With future improvements in productivity and policy changes during the reform process, he argues, there is the possibility that the comparative advantage of agriculture in the region may further increase. Based on the Chinese experience he concludes that in the medium term there is the potential for large, rapid growth of farm output and for agriculture becoming an important engine for growth in the countries concerned. In the longer run, though, he argues that there is the possibility of some of the non-farm sectors growing more rapidly than agriculture. Tyers (1993), citing a large number of empirical studies, draws attention to the very substantial scope for productivity improvement in agriculture of Central and Eastern Europe (and the Former Soviet Union).

An important factor of relevance to the integration of agriculture is that the level of support provided to farmers in Central Europe is significantly below that in the EU. Even though there has, in recent years, been an increase in agricultural support and protection in Central Europe, the level of support provided, as measured by producer subsidy equivalents (PSE, expressed in per cent of producer returns), is still significantly below that provided under the CAP in the EU-15 (see Figure 5). In particular, agricultural producer prices in Central Europe are still significantly below those in the EU, and in some cases even below those on world markets (see Figure 6).

Integration of Central Europe's agriculture into the EU and the CAP will have significant quantitative implications for the farmers of the EU-15 in some commodities. The most recent, and most widely publicized, estimate of these implications for European agriculture is contained in the Agricultural Strategy Paper issued by EU Commissioner for agriculture Franz Fischler (EU Commission 1995b). In this document the Commission projects future developments on agricultural markets in the CEC-10 and the EU-15, based on the assumption that Central Europe joins the EU in the year 2000 and adjusts its agricultural prices to the CAP (post-MacSharry reform) over a five year period, so that by 2005 the CAP fully applies in Central Europe. The Commission projects that under these conditions the CEC-10 will become, by 2005, net exporters of cereals (7.2 million tons), oilseeds (0.7 million tons), milk (2.6 million tons), beef (0.6 million tons), and poultry (0.2 million tons), but will be net importers of sugar (0.4 million tons) and about self-sufficient in pork. The extra expenditure required to include the CEC-10 in the CAP would, according to the Commission, be around 12 billion
Whatever particular set of projections one takes, there is little doubt that the quantitative implications of extending the current CAP to Central Europe could be dramatic, and a threat to the future of the CAP. In a situation like that, a number of strategic decisions have to be taken, by both the EU and the countries in Central Europe, concerning the inclusion of agriculture in the process of Eastern enlargement. Is it conceivable that the countries of Central Europe could join the EU but leave their agriculture outside the Single Market and the CAP, continuing to pursue, and finance, their agricultural policies on a national basis? One could imagine a "green wall" down between old and new members across which agricultural goods would flow subject to quotas or minimum prices. A proposition like that would appear to be a complete non-starter. Not only would such a "solution" generate all sorts of technical and legal problems. It would make the countries of Central Europe second-class members of the Union. Given the large importance of agriculture to the economies of Central Europe, and their pronounced interest in free access to agricultural markets in Western Europe, it is plainly inconceivable that exclusion of agriculture from the process of Eastern enlargement would ever be politically feasible. Moreover, it would not make any economic sense.

A further issue is the time horizon for accession by Central Europe. Many agricultural policy makers in the EU appear to believe that pressure on the CAP would be less the later Central Europe joins the Union. Yet, agricultural issues will probably play only a minor role when it comes to deciding on the time schedule for Eastern enlargement. To a large extent, timing will depend on foreign policy considerations, on the ability of the Union to revise its institutional structures to fit an even larger number of member states, and on progress the individual countries in Central Europe make in terms of establishing a stable political and economic system and creating the necessary institutional and legal framework. However, at a lower level of decision making, timing may well become a "technical" issue related, among others, to agricultural implications. In particular, there will be the question of whether or not there should be a transition period after accession, very much like in early rounds of EU enlargement. However there are strong arguments against such a transition period, and integration of Central Europe's agriculture and food industry into the borderless Single Market may well happen on the first day of accession, as occurred in the latest round of EU enlargement to include the EFTA countries, in what was called a "big bang" adjustment.

What can then be done to avoid the dramatic quantitative implications for agricultural markets and the EU budget? Most countries of Central Europe, to the extent they are already members of the WTO, have tariff bindings considerably
below those of the EU (Tangermann and Josling, 1994). These countries can not unilaterally raise their levels of price support to match price levels under the CAP in any case. When they join the EU, negotiations will have to be held in the WTO on how to merge their WTO commitments with those of the EU. It is highly unlikely that the trading partners of the EU will allow the Union to absorb the countries of Central Europe while raising their agricultural tariffs to the EU level. On the contrary, Eastern enlargement will probably require the EU to accept further reductions in its agricultural tariffs. In other words, tariff bindings in the WTO will prevent the EU from using the "easy" solution of more and tightened supply controls in order to avoid changes to the CAP, and will make it difficult to apply the current high price supports to the new members.

It is impossible to escape the conclusion that the CAP will have to be further reformed in the context of Eastern enlargement. The two major factors forcing this development will be budgetary considerations and trade implications. As far as budget implications in agriculture for the EU are concerned, the estimate of the EU Commission of an increase of 12 billion ECU in CAP expenditure for the CEC-10, can probably be said to be the lower bound of reasonable estimates. According to the EU Commission (1995b), agricultural policy expenditure for the EU-15 is projected to be around 42 billion ECU (in 1993 prices) in 2005. Hence the Commission's own estimate implies that Eastern enlargement results in an increase by around 28 per cent of agricultural policy expenditure in the Union. Given that the spending on the CAP is well over one-half of total EU budget obligations, a large increase in the agricultural funds would be required at a time when countries will be also seeking increases in regional and structural payments to help ease the adjustments in industries such as textiles and shoes. It is less than certain that governments of countries in Western Europe will be willing to spend that much more on a policy which many of them feel is in urgent need of overhaul, however.

Under the current budget guideline for the CAP, agricultural spending of the Union must not increase, over time, by more than 74 per cent of the growth rate of GDP in the EU (in real terms). That same factor was applied when the EFTA countries joined the EU in 1995. At the time, the budget for the CAP was augmented by 74 per cent of the rate of increase of Union GDP as a result of enlargement. If the same procedure were adopted on Eastern enlargement, the budget for the CAP would grow only minimally. At the moment the CEC-10 have a little more than three per cent of GDP in the EU-15. Assume that GDP in Central Europe grows much faster than in the EU-15 and that at the time when Eastern enlargement is accomplished the CEC-10 have seven per cent of GDP of the EU-15. Under the current budget mechanism, CAP expenditure would then be allowed to increase by a little more than five per cent on Eastern enlargement. This is less than one fifth of the increase required according to the Commission's estimate. One can well argue that this is a too technical view of
the process, and that focusing on the agricultural budget cost of Eastern enlargement is not helpful, in view of the political significance of Eastern enlargement and considering the many benefits it will provide to the existing member states. However, it is less than certain that governments of countries in Western Europe will be willing to spend that much more on a policy which many of them feel is in urgent need of overhaul anyhow.

As far as trade implications of extending the CAP to Central Europe are concerned, available estimates also differ widely. However, in this regard even a wide margin of error does little to change the policy conclusions fundamentally. The major aspect to be considered in this regard is the existence of WTO commitments regarding subsidized exports. Even if CEC-10 net exports after accession to the CAP were to remain considerably below the relatively cautious projections by the EU Commission they would for many products still be far above the (aggregate) WTO commitments of the countries concerned. Consider the case of cereals. Poland, the Czech Republic, Slovakia, and Slovenia have zero commitments for subsidized cereals exports. Hungary can export 1.141 million tons of wheat and 0.164 million tons of corn with subsidies in the year 2000. Romania has a commitment not to exceed 0.290 million tons of subsidized grain exports in the year 2004 (GATT, 1994). Thus, on aggregate the CEC which are already members of the WTO can export a maximum of about 1.6 million tons of cereals with export subsidies around the year 2000. In the mini-round of agricultural negotiations in the WTO, this amount is likely to be further reduced. As in the case of tariffs, the trading partners of the EU will want to make sure that the aggregate commitments of all member states are not relaxed on Eastern enlargement. Thus enlargement will not augment EU commitments on subsidized cereals exports by more than 1.6 million tons. However, even the EU Commission projects that net exports of cereals from the CEC-10 will be above 7 million tons in 2005, and nearly 11 million tons in 2010 (EU Commission, 1995b). The margin of error in these projections would have to be very wide for inconsistency with the WTO commitments not to be a problem.

More fundamentally, though, the same conclusion holds for the EU-15 even in the absence of Eastern enlargement. Take the case of cereals again. The WTO export subsidy commitments for wheat and coarse grains on aggregate for the EU-15 stand at 23.41 million tons for the year 2000, and will probably have to be reduced thereafter. The EU Commission projects net export availability in the EU-15 of 30 million tons in 2000, more than 40 million tons in 2005, and nearly 55 million tons in 2010. Thus, as long as the EU has to subsidize cereal exports it will find it increasingly difficult, if not impossible, to comply with its WTO commitments. The situation is similar (though somewhat less dramatic) for a number of other agricultural products. In other words, even if agricultural production and net export availability in Central Europe were to grow less than projected, combined with likely market trends in the EU-15 the conclusion is
relatively robust that the Union will have major difficulties to comply with its WTO commitments in agriculture - if it does not change the CAP.

What are, then, the options for reforming the CAP? Essentially there is only one strategy which both makes economic sense and can prepare Europe's agricultural and food sector successfully for Eastern enlargement. This strategy would aim at improving the competitiveness of EU agriculture so that it no longer needs government support. That strategy would have three major elements (see Josling and Tangermann, 1995, and Marsh and Tangermann, 1996). First, CAP support prices would be reduced so that export subsidies are no longer necessary. Second, supply management (quotas, set-aside) would be abandoned. Third, compensation payments to farmers, to the extent they are considered necessary by agricultural policy makers, would be completely decoupled from production, and their duration limited.

In our view, A reduction of CAP support prices towards the level of world market prices is the only practical way the need for export subsidies can be eliminated. But, In the CEC, there is now a strong political temptation to provide more protection and support to farmers. One argument used by CEC farmers lobbying for more support is that they should also enjoy the high levels of support which were traditionally granted in the EU under the CAP. If CEC governments were to succumb to these tendencies, they might well find that they end up providing more support to their farmers than the EU does at the time the process of Eastern enlargement begins, as the EU reforms its agricultural policies along the lines indicated above. Governments and farmers in the CEC would then have to undergo the painful process of adjustment back towards lower levels of support and protection on accession to the EU. At the same time, the food industry in Central Europe would lose competitiveness vis-à-vis Western Europe because it would have to purchase its agricultural raw materials at higher prices. However, it appears that most agricultural policy makers in Central Europe have begun to understand that the CAP is a moving target, and that it may well undergo reform before Eastern enlargement takes place. There is, therefore, a good chance that governments in Central Europe will avoid the mistakes made by the CAP in the past, and keep levels of support and protection low until accession to the EU takes place.

Two categories of effects should be distinguished in discussing the differential implications of Eastern enlargement on West European countries. First, as argued above, Eastern enlargement is likely to trigger another round of fundamental CAP reform, and this will affect individual EU member states in different ways. Second, the opening up of trade and investment opportunities implies differential threats and opportunities for private agents in different EU countries.
What is then the significance of these differential impacts of Eastern enlargement in agriculture on individual member states of the EU? Clearly some member states see their agricultural interests more threatened than others. Among the large member states, Germany is the country which is most concerned about the agricultural implications of Eastern enlargement. France is split between fears and hopes. England hopes for CAP reform. The Netherlands and Denmark see new opportunities. The Southern member states face better prospects for their specialty crops, but then are afraid that Eastern enlargement will be a drain on EU structural and regional funds from which they would like to benefit more. Overall, the political balance among member states, as far as decisions on the future of the CAP are concerned, seems to be shifting slowly over time in favor of those member states which argue for more liberal and market oriented policies. This should increase the chances of a further reform before the accession of new members.

7. East-West Agricultural Trade and Investment in Europe in a Global Context

It remains to put the agricultural trade and investment story of east-west integration in Europe into the perspective of the global development of the agriculture and food industries, and more specifically of emerging agricultural cross-border linkages in other parts of the world. The backdrop against which the agricultural sectors of the CEC and the FSU develop may be significantly different from that which has surrounded the development of agriculture in Western Europe. The question can be posed as to whether agriculture in the CEC and the FSU can in effect "leapfrog" the stage of protection by artificially high prices and supported farm incomes to move straight to competitive production. The rules of the WTO and the schedules of tariff and subsidy reduction become a part of the environment in which policy develops. And Europe will be under increasing pressure to include agriculture in the regional pacts which it negotiated with other countries. Thus the global context in many ways determines the path to be taken for the development of European agriculture and agricultural policy. This path leads to a more competitive agricultural sector rather than to a period of high prices under the umbrella of an unreformed CAP.

Current trends offer the possibility for the integration of the eastern agriculture and food systems into those of the west in a way that neither causes politically divisive pressures on markets and farm incomes in the existing EU nor impoverishes the rural areas of the newcomers and those waiting in the wings. The path that the eastern agricultural sector should follow would be one of competitive production for the integrated European market based on cost reductions, quality control and technology adopted (and adapted) from the west. The leading subsectors will continue to enjoy an inflow of foreign investment.
This market orientation path is notably different from that followed by the present EU members, who defined farm prices from the mid-1960s with little regard for market value and little reward for quality. If the path toward a competitive agriculture in the east is possible the contribution to the economy of Europe will be substantial.

8. Conclusions

Two main conclusions emerge from this paper. First, the process of integration of the agricultural and food sectors of the CEC with those of Western Europe has already begun. The process itself is different from that in other sectors. Foreign direct investment and inter-firm linkages will play a more indirect role. Investment in the primary agriculture sector is likely to come from farm households themselves, rather than from abroad, but capital, management and marketing skills are being invested in the processing sector. This will help the farm sector by developing a more consumer-responsive market for farm level output. This flow of investment has already started and is a sign that the private sector has anticipated the notion of an integrated market. Much of the investment is intended to supply the local market and some is aimed at the markets to the east. This investment is developing the comparative advantage of Eastern agriculture rather than producing raw materials that are in oversupply in the West. Contrary to the fears of the farm sector in the current EU this integration need not in itself be deeply disruptive to markets in the west. Only if the CAP offers high guaranteed prices for low quality products will the development of eastern agriculture be directly in conflict with farmers in the West.

Thus the second conclusion is that the reform of the CAP is itself a necessary step to allow the integration to proceed. It is in the medium and long run interest of farmers in the West. Moreover further reform is an inevitable consequence of changes in trade rules at the international level, and desirable in its own right (to make agriculture in the EU internationally competitive) regardless of the CEC accession and the WTO rules. With respect to enlargement, reform is superior as a policy to that of delaying market integration by long transition periods or continued quantitative controls on trade within the expanded Union.

The development of the agricultural trade system is itself important to the EU. One major factor which will determine the future development of the agro-food system in Eastern Europe is access to international markets, together with the intensity of competition with subsidized exports from other countries, both on domestic markets in Eastern Europe and on third country markets. In spite of the significant progress that was made in the Uruguay Round of GATT negotiations, international trade in agricultural and food products remains severely restricted.
and distorted by trade barriers and subsidies. Thus, fundamental economic competitiveness of a country's agro-food sector, which some countries in Eastern Europe may well gain in the years to come, is no guarantee for actual success if other countries' agricultural and trade policies distort competition. The future development of the international trading regime for agriculture in general, and more specifically—for the countries which are candidates for EU accession—the future of the Common Agricultural Policy of the European Union are important factors that will contribute significantly to shaping the development of agriculture and the food industry in Eastern Europe.

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Tangermann, S., "Implementation of the Uruguay Round Agreement on Agriculture: Issues and Prospects". Forthcoming in *Journal of Agricultural Economics*.


**Endnotes**

1. By the time Eastern enlargement takes place, some of these indicators will have changed. In particular, agricultural employment in Central Europe is likely to shrink, and GDP in Central Europe will probably grow faster than in the EU-15. Nevertheless, Eastern enlargement will cause the size of the agricultural sector in the Union to expand much more than expansion in the overall economy.

2. More recently industrial output has begun to grow faster than agricultural production in some of the CEC.

3. For a more comprehensive introduction into the situation of agriculture and the food industry in Eastern Europe before transformation, see for example Wädekin 1982, Johnson 1993 and various chapters in Braverman, Brooks, Csaki 1993.

4. Though theoretically different in legal status, in practice there was not much difference between collective and state owned farms when it came to management practices and the status of people working on farms, were they hired farm workers or members of the collective.


6. Institutional design is probably the most limiting factor at this stage in the transformation of Eastern Europe, though different countries in the region have progressed in this dimension at different rates. Indeed, the lack of well functioning institutions may exacerbate the scarcity of other critical factors. One of the most constraining factors for the development of agriculture in Eastern Europe is generally seen in its limited access to credit (see, for example, Schrader 1996). In addition to the overall scarcity of capital in the economies of Eastern Europe, there are two specific institutional features which at this time
inhibit the access of farmers to credit. First, rural banks are grossly underdeveloped as under the old regime farms used to receive external funds directly from government agencies. Second, the process of issuing property titles to the new land owners, surveying plots and establishing land registers takes too long, and farmers have difficulties in providing collateral for credits. In other words, institutional deficiencies contribute to the lack of capital in agriculture.

7. For these sources of these figures and more detail on agricultural trade between Central Europe and the EU, see Overberg (1996).

8. Romania had already been included in the EU's GSP since the late 1970s. However, it had remained excluded from many individual tariff preferences under that system. In 1991, all GSP benefits were extended to Romania as well.

9. For a detailed analysis of the agricultural preferences granted under the Association Agreements, see Overberg (1996). See also Tracy et al. (1994) and Tangermann (1993).

10. These ten countries are the four Visegrad countries (Czech Republic, Hungary, Poland and Slovak Republic), two Balkan countries (Bulgaria and Romania), three Baltic countries (Estonia, Latvia and Lithuania), and Slovenia. With the republics of the former Soviet Union the EU still has only co-operation agreements which do not contain any preferential trade provisions.

11. The data used are from EUROSTAT, EEC External Trade, CD ROM version. The analysis updates research on EU agricultural and food exports to the CEC which was originally presented in Tangermann and Josling (1994). At the time of writing, 1995 data are still incomplete, with data for some EU member states and some products still missing. For that reason, 1995 data could not yet be included in the present analysis.

12. Agricultural and food products have been defined, as usual, to be those under CN headings 01 to 24.

13. Agra Europe reports on investment activities in Central and Eastern Europe may not be exactly comprehensive, but are likely to cover a significant share of total foreign direct investment in the food industry of that region.

14. If the current EU sugar regime is still in place when these countries join the EU they should benefit from high prices for sugar grown within the national quota.

15. In some cases this is accompanied by Polish capital being invested in countries such as the Ukraine.
16. For the case of Portugal's accession, see Josling and Tangermann (1987).

17. For comparison with WTO export subsidy commitments, gross imports (around 7 million tons) have to be added and food aid (1.3 million tons) has to be subtracted from these net export figures. Inconsistency with WTO commitments is then even more pronounced.

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**Figures**

- **Figure 1:** The Share of Agriculture in the Overall Economy, CEC-10 and EU-15, 1993

  Source: EU Commission (1995a)

- **Figure 2:** Size of CEC-10 Agriculture Relative to EU-15, 1993
**Figure 3: Framework for Categorizing Trade and Investment Conditions**

<table>
<thead>
<tr>
<th>Category</th>
<th>Central and (front runners)</th>
<th>Eastern Europe (next tier)</th>
<th>FSU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processed Agricultural Goods</strong></td>
<td>(Poland, Hungary, Czech Republic, Slovenia)</td>
<td>(Slovakia, Romania, Bulgaria, Baltics, Serbia, Croatia, Bosnia, Albania)</td>
<td>(Ukraine, Russia, Belarus, Asian Republics)</td>
</tr>
<tr>
<td>(canned and bottled fruits and vegetables, cooked meats, wine, cheese, yogurt, etc.)</td>
<td>MNCs and European companies likely to create linkages. Good access to EU. Private investment dominates.</td>
<td>External public funds from EBRD, WB, EU etc. Reasonable access. Some private investment.</td>
<td>External public funds. Poor access to EU markets. Little private investment interest</td>
</tr>
<tr>
<td><strong>Differentiated Raw Products</strong></td>
<td>Local marketing of products with less international linkages, access reasonable, investment largely internally generated</td>
<td>Little international investment interest, limited access to Western markets</td>
<td>Some public external funding. Poor access to Western markets, limited private investment</td>
</tr>
<tr>
<td>(fresh fruits and vegetables, milk, fresh cheeses, fresh meats, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Homogeneous Raw Products</strong></td>
<td>limited private linkages, access per policy, some land purchases, profit reinvestment</td>
<td>Some public funds; limited access to Western markets</td>
<td>Little external investment, local public funding, poor access to EU market</td>
</tr>
<tr>
<td>(grains and oilseeds, sugar beet, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Figure 4: Net Exports of Agricultural and Food Products from the CEC-6 to the EU**

Source: EUROSTAT, EEC External Trade, var. issues, and own calculations.
CEEC is the aggregate of CEC-6

**Table 1: EU Agricultural and Food Exports to the CEC-6 by Product Group**
*Change in Export Value between 1988-90 and 1994, in Per Cent of 1988-90 Export Value*

<table>
<thead>
<tr>
<th>Product Group</th>
<th>Poland</th>
<th>Hungary</th>
<th>Cz. + Sl. Republics</th>
<th>Total Six Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>23</td>
<td>212</td>
<td>340</td>
<td>91</td>
</tr>
<tr>
<td>Lightly processed products</td>
<td>163</td>
<td>276</td>
<td>294</td>
<td>147</td>
</tr>
<tr>
<td>Highly processed products</td>
<td>110</td>
<td>550</td>
<td>515</td>
<td>273</td>
</tr>
<tr>
<td>Products without export subsidies</td>
<td>191</td>
<td>142</td>
<td>234</td>
<td>194</td>
</tr>
<tr>
<td>Products with export subsidies</td>
<td>50</td>
<td>525</td>
<td>499</td>
<td>124</td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>307</td>
<td>350</td>
<td>149</td>
</tr>
</tbody>
</table>

Source: EUROSTAT, EEC External Trade, various issues, and own calculations.

**Figure 5: Aggregate Producer Subsidy**
Equivalents in Selected Central European Countries and the EU-15


Figure 6: Agricultural Producer Prices in Central Europe and the EU-15, Selected Products, 1994

Source: EU Commission (1995a)