

Transition and Integration in Europe:
Implications for agricultural and food markets,
policy, and trade agreements

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Abstract

Several Central and Eastern European countries are on their way to becoming members of the European Union. Agriculture and agricultural policy is an important issue in EU enlargement. This paper reviews the changes that have occurred in the agricultural and food sector of the CEECs and draws implications for the impact of EU enlargement on agri-food markets and policy. First, those countries which have reformed most rapidly and most thoroughly are now doing best and their reform efforts have resulted in significant recovery and efficiency improvements. Second, the impact of Eastern Enlargement will be less dramatic than initially feared, although some uncertainty remains. The possibility that the accession of the CEECs into the CAP will cause a conflict with WTO commitments has been reduced, but cannot be excluded for some specific commodities, depending on the CEEC supply evolution. However, the likelihood of a WTO conflict, and the impact on the CAP, will depend more on the outcome of the negotiations in the WTO Millennium Round than on enlargement. Similarly, the impact of enlargement on the EU budget depends mostly on the (political) decision on the allocation of direct payments to CEEC farmers and/or of the extent of structural funds for CEECs.

Keywords: European integration, Common agricultural policy, WTO, Transition

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1. INTRODUCTION

It is now more than a decade ago that the Berlin Wall fell, which marked the beginning of a vast set of changes throughout the countries of the former Soviet Bloc. Reforms and transition have caused tremendous change. Transition has led to falling incomes in all countries, but recovery has differed strongly among them. Yet, several among the Central and Eastern European countries (CEECs) have, by any historical reference, gone through an amazing process of turning their economies and institutions around in one decade to the extent that they are now, hardly ten years after the start of the changes, almost certainly on their way to becoming members of the European Union (EU) – the so-called “Eastern Enlargement”.

Agriculture and agricultural policy is an important issue in EU enlargement, and vice versa, because of several reasons. First, while trade restrictions between the CEECs and the EU have been mostly removed in other sectors, they remain important in agricultural and food products. Second, agriculture falls within a complex framework of instruments under the Common Agricultural Policy (CAP), veterinary and phytosanitary and commercial policies, which causes specific, and politically sensitive, accession issues (e.g. budget, WTO). Third, in the two largest CEECs, Poland and Romania, agriculture makes up a large share of employment. In fact those two countries combined have almost as many "farmers" and half the agricultural area as

the EU-15. Furthermore agriculture in those countries is characterised by low productivity and hidden unemployment, indicating potentially serious social and economic problems with accession.

In general, agriculture is a politically sensitive issue in international negotiations. It will not be different in the case of Eastern Enlargement. In fact, the prospect creates expectations, but also concerns with policy makers and farmers in East and West. Low prices and labour costs in the CEECs causes serious concerns in the EU-15, not only because of future competition from the CEEC farms, but also because of its potential impact on the CAP. Adoption of high CAP prices in CEECs with enlargement is argued to induce substantial increases in production, to jeopardize the EU commitments in the WTO, and to increase dramatically the budgetary burden of the CAP. In this paper I will argue, among other things, that several factors suggest that the impact of Eastern Enlargement on the EU-15 will be less dramatic than initially feared, although some uncertainty remains.

Before going into the impact of EU enlargement on agri-food markets and on agricultural policy, I first review the changes that have occurred in the agricultural and food sector of the CEECs. I will approach the issue from a broad perspective since this helps put things into context and allows more accurate conclusions to be drawn. First, while an analysis of the general transition and reforms are beyond the scope of this paper, it is important to include to some extent the general economy and reforms because they have importantly affected agricultural transition. Second, while Russia and Ukraine are not on the list for enlargement, it is useful to compare their transition processes with those of the CEECs because this allows important lessons to be learned.

2. SOME BASIC INDICATORS

The CEEC-10 have a population of slightly over 100 million people, more than a quarter of the EU-15 population, while their GDP only represents 5 per cent of the EU-15 GDP. The CEECs are a heterogeneous group with respect to the role of agriculture and food in their economies. The most important agricultural countries, in terms of agricultural area and in terms of the farm population are Poland and Romania. Combined they have almost as many farmers (7.3 million) as the EU-15 and more than three times as many as the other CEECs combined (see Table 1).²

Agricultural production accounts for around 7.6 per cent of GDP and 16.7 per cent of employment in the CEECs on average. In Poland and Romania the share of employment is around 19 per cent and 40 per cent respectively, while the share in GDP is considerably less: around 4 per cent and 15.5 per cent, respectively. Food expenditures account for less than 30 per cent of total household expenditures in the more advanced CEECs, but are as high as 55 per cent in Romania, almost three times the average of the EU-15 (22 per cent).

The CEECs are net importers of agri-food products on aggregate and only Hungary and Bulgaria are net exporters of agri-food products. The CEEC-10 agricultural output accounts for 4 per cent of world production of grains, 7 per cent for milk, and 3 per cent for sugar. For milk, the EU-15 and the CEEC-10 combined therefore produce over a third of the world output.

² There are problems with statistics on agricultural labour, in particular for Poland. Many people registered as "employed in agriculture" are working part-time in other sectors or receive welfare payments. For example, according to estimates of the Polish Institute of Rural Development and Agriculture, 60 per cent of inhabitants of rural areas are "connected to a farm", but for only 20 per cent of them farming is their main occupation, and for only 10 per cent their only source of income.

3. DECLINE AND GROWTH DURING TRANSITION

All CEECs have gone through an initial output decline, both in agriculture and in the general economy. However, as figure 1 illustrates, after the initial decline output evolutions diverge strongly. In agriculture the output fall bottomed out in the mid 1990s in many CEECs, and started recovering in some, while agricultural output has continued to fall in Russia and Ukraine.

a. Initial Effects

The initial decline is primarily caused by institutional disruptions, or “creative destruction”. The socialist system left a badly distorted system of input, output, and trade. The reorganisation of this system, and the institutional changes associated with it, caused major disruptions and thereby declines in investment and output. While a variety of models have been developed to explain the mechanism – e.g. some have focused on information problems (Blanchard and Kremer, 1997), others on search costs (Roland and Verdier, 1999) and yet others on contract enforcement problems (Gow and Swinnen, 1998) – all agree that the organisational disruptions negatively affected output and investment during transition. Or, as Kornai (2000, p.4) put it more simply: *"Correcting this structure called for creative destruction. Because destruction is rapid, whereas creation proceeds more slowly, the two processes led to a deep recession"*.

In agriculture, the negative output effect of institutional disruption is reinforced by declining terms of trade caused by price and trade liberalisations and subsidy cuts. In most CEECs, macro-economic reforms coincided with price liberalisation and subsidy cuts in the early years of transition. Reduced domestic demand with falling incomes and subsidy cuts was reinforced by falling foreign demand

with the collapse of the CMEA trading system, the planned inter-country trading regime that guided international trade of most CEECs and FSU countries. The latter led to trade disruptions in many countries, especially in those where CMEA trade integration was strongest (Hartell and Swinnen, 1998; Trzeciak-Duval, 1999).

In combination these changes had two major impacts on agricultural and food prices. First, all prices rose dramatically. For example, food prices rose by over 500 per cent between 1988 and 1990 in Poland. Second, not only did nominal prices change dramatically, also relative prices changed. Input prices increased much more than output prices in agriculture in almost all CEECs, as reflected in the strong declines in terms of trade for agriculture in Figure 2. The impact of this terms of trade effect was significant. Macours and Swinnen (2000) estimate, based on data from eight CEECs, that this factor caused 40-50 per cent of the decline of crop output over the 1989-1995 period.

b. Reforms and Medium Term Effects

While the output developments between 1989 and 1992 are quite similar, the trends clearly diverge afterwards. The reason behind these diverging patterns is differences in reform policies of the governments, or in other words: in order to have “creation” follow “destruction” one needs to implement basic reforms.

An essential element for sustainable growth is macro-economic stabilisation, including the reform of fiscal and monetary institutions. Rapid overall liberalisation and sustained macroeconomic stabilisation have laid the basis for gradual institutional change in the more advanced transition countries, while stabilisation has been jeopardised by the persistence of soft budget constraints in the less advanced countries (EBRD, 1999).

While such reforms require a fundamental redefinition of the role of the state, it does not imply a withering away of the state. However, in Russia the state has not taken on a different role, but merely withered away in many important aspects. There, the state has been unable to fulfil some key roles for the development of a market economy, such as establishing the rule of law, collecting taxes, and establishing the basic conditions for macro-economic stability (Schleifer, 1997). For example, estimates put the share of transactions which are carried out as barter (mutual non-payment) or with money substitutes at 75-85 per cent in Russia (Bruszt, 2000).

By the end of the 1990s one could distinguish three groups in terms of reform progress. The first group includes Central European countries such as Hungary, Poland, and the Czech Republic which had advanced most. The second group included Romania and Bulgaria, although the latter has made major progress in the last few years. Russia and Ukraine were in the slowest reforming group.

At the outset of transition, there was a large debate on the optimal sequencing of policies, often called the "Big-Bang" versus "gradualism" debate. The gradualist often referred to China as an example of a successful reform strategy, which combined an initial reform of property rights with a gradual liberalisation process and thus created growth without the negative effects of disruptions. Others argued that the initial conditions and the economic structure of China were so different from CEECs that little could be learned from China and that the best policy in those countries was to liberalise and reform everything at once: the so-called "Big-Bang" option.

Several studies comparing economic performance of transition strategies in the non-Asian economies conclude that, taking into account differences in initial conditions and external factors such as regional conflicts, those countries which have reformed earliest and most radically are now doing best (e.g. de Melo and Gelb, 1996; Fischer et

al, 1996; Wyplosz, 2000). Figure 3 illustrates the strong positive correlation between GDP growth between 1989 and 1998 and the reform progress, measured by the "liberalization indices" which are calculated by Martha de Melo and her colleagues at the World Bank, that has been made during that period.

4. REFORMS AND AGRICULTURE

These general reforms have strongly affected the climate in which the agricultural transition has taken place. For example, the inflow of foreign investment and the associated inflow of technology, know-how and capital infusion in the agri-food chain have been most important in CEECs where the progress of the general reforms, the macro-economic situation, and the prospect of EU accession have created an environment more conducive to foreign investments.

Macro-economic stabilisation and general reform progress have not only improved access to foreign capital, technology and know-how, but also access to domestic credit and capital sources for the farms. Credit markets have worked notoriously imperfectly in CEECs and FSU with disruptions due to privatisation and overall restructuring causing major problems for farms, not only for investment purposes but even for working capital. These resulted in reductions in output; and the success of the recovery in some CEECs is at least partially due to improvements in the general economic climate which improved the working capital situation for the farms.

Another general reform with important impacts on agriculture is *privatisation* of companies involved in supplying inputs (fertiliser, pesticides, etc.) and credits (banks) to farms as well as food processing and distribution companies. The privatisation procedures have differed significantly between countries. In a review of the successes and failures of privatisation, Kornai (2000) concludes that privatisation

strategies directed at selling of state companies, preferably to majority ownership structures, such as in Hungary, has been more successful than privatisation strategies based on some form of free distribution of property rights in state-owned companies among the country's citizens e.g. through vouchers. The latter has mostly led to insider privatisation in which managers have been able to collect a large share of the assets, as for example in the Czech Republic and more extremely in Russia, while the previous has stimulated the emergence of many small enterprises and the inflow of capital, as for example in Hungary. This has certainly had a major positive impact on the performance of the entire agri-food sector in Hungary, also because much of the capital inflow came from foreign companies' investments.

Key reforms specific to agriculture were land reform and farm restructuring. There is by now a large literature on these issues (e.g. Csaki and Lerman, 2000; Lerman, 1999; Swinnen, 1999). Here I will just summarise some key aspects of the reforms.

First, the nature of the land rights allocated in *land reforms* is more important than who gets them. In CEECs many argued that the process of land restitution to former owners would have devastating consequences by separating ownership from those using the land. In retrospect, land restitution did indeed cause major disruptions, but despite their complexity and implementation problems, they resulted in stronger and better defined land property rights than land reforms in Russia and Ukraine where land was distributed as paper shares or certificates to agricultural workers. Individuals cannot identify the piece of land that belongs to any given share, causing weak land rights and undermining restructuring in Russia and Ukraine.

It appears that the transaction costs involved in land exchanges after clearly defined land rights are given to individual owners are, however substantial, still

considerably less than those in accessing land when land rights are incomplete or not defined clearly. The first process at least has satisfied a basic condition for land exchange to develop, although often a lot remains to be done, in contrast to the second process where not even the basic conditions are fulfilled, notwithstanding that formally the land is given to those presumably most likely to use it.

Second, *enterprise restructuring* and its effects yield a more complex picture than expected *ex ante*. Some expected that collective and state farms would collapse and fall apart when government controls would be removed. Others argued that individual farming would not emerge because farm workers in CEECs had no experience in running a farm business themselves. Empirical evidence shows a large variation in developments (Table 2). In some countries a complete shift to individual farming has taken place, while in others the opposite has happened. The variation reflects differences in incentives and costs of restructuring, caused by policies and structural conditions. For example, the break-up of the former collective farms has been strongest in countries (a) where these farms were least efficient and most labour intensive, which reduced the costs of production fragmentation and increased the gains of improved labour governance, and (b) where government policies reduced constraints for individuals to start up their own farms (Mathijs and Swinnen, 1998).

Third, studies show that the difference in efficiency between farms within a country are large and that improvements in management hence can lead to significant overall productivity increases. However, policy is important. Where farms were forced to restructure and budgets were hardened, productivity increased strongly and the gap between different organisations diminished while elsewhere efficiency actually may have declined during transition (Mathijs and Swinnen, 2001; Sedik et al., 1999).

5. RECOVERY THROUGH PRODUCTIVITY INCREASES

While the initial decline in agriculture is affected by institutional disruptions and terms of trade effects, the recovery in the second half of the 1990s is driven by productivity increases where the necessary reforms have been implemented. In those CEECs which have implemented the necessary reforms, productivity increases have emerged in the second half of the 1990s. For example, Figure 4 illustrates that yields have increased dramatically in the CEEC agri-food sectors since 1993. This increase in yields has driven output recovery.

An essential ingredient in this productivity increase and recovery is the development of *institutions for contract enforcement and access to capital*. An important source of increased productivity in CEEC agriculture is the emergence of new institutions for information, product exchange and contract enforcement. Pre-transition systems were strongly vertically integrated. The central planner provided the information and enforced contracts involving exchanges between the various agents in the chain. The removal of the central planning and control system, in the absence of new institutions to enforce contracts and to distribute information and finance caused serious disruptions throughout the economy.

New enforcement institutions have come in a variety of forms. Frequently, the most successful ones have depended on private enforcement mechanisms within the framework of specially designed contracts or institutional arrangements. Contracts between private agents act as substitutes for missing or imperfect public enforcement institutions (McMillan, 1997; Gow and Swinnen, 2001).

Successful institutions have offered enough flexibility to allow producers, suppliers, and buyers to adjust to the continuously changing environment during

transition. For example, while land lease contracts initially often took the form of short (one-season) informal contracts, gradually they have evolved into more formal and longer-term contracts, reflecting reduced uncertainty and improved understanding of the market environment by both the owner of the land and the tenant. Leasing, not only of land, but also of equipment is another example of an institutional innovation adapted to transition as it mitigates farms' collateral problems in financing new equipment.

Vertical integration, especially with foreign direct investment, has played an important role in the re-emergence of the institutions of exchange (Gow and Swinnen, 1998). Vertical integration in various forms has improved access to capital, inputs, and technology for farms. Beyond supply of capital, agribusiness firms, in search for guaranteed and high quality raw materials (or product markets), have offered farms a number of arrangements to encourage greater production and marketing and to overcome constraints that have limited economic activity since the onset of transition. For example, food processors have negotiated contracts with banks and input suppliers to provide farms with inputs that enable them to deliver high quality products to their company. Similar, input supply firms have been involved with assisting farms to find guaranteed outlets for their products in order to stimulate farms' demand for the company's products. Foreign companies have played a leading role in this development.

While processors have contracted with a variety of farms, both large and small, – often because of necessity to obtain sufficient supplies – they are assisting small farms in upgrading their equipment and in optimising the scale of their operation. For example, dairy companies assist their small suppliers in improving milk quality, through advise and investment support, and in upgrading their equipment and cattle stock, through leasing and credit assistance. As a result, Dries and Swinnen (2001)

found that in a case study of six dairy companies in northern Poland, the share of supplying farms with on-farm cooling tanks increased from 5 per cent in 1996 to 33 per cent in 2001.

6. EU ENLARGEMENT, TRADE, WTO, AND THE CAP

Accession to the EU will dismantle remaining barriers to trade, which will intensify trade relations between the EU-15 and the CEECs. The integration of the CEECs into the CAP will admit the CEECs to trade protection and subsidies under the CAP and is likely to cause an increase in agricultural production, and in net exports of food and agricultural products in CEECs. This causes concerns because of its potential conflict with the WTO agreements and with budgetary constraints. We will discuss the budgetary effects later. First, consider the WTO argument. The likelihood of a conflict depends on the WTO commitments of the EU-15 and the CEECs, on how the integration process affects these commitments, and on the supply and demand effects of integration.

a. Enlargement and WTO

To understand how enlargement will interact with the WTO commitments, one needs to understand how the WTO commitments of the EU-15 and those of the CEECs will be merged after accession. There are no comprehensive WTO rules on how to do this. In GATT terms, accession of the CEECs to the EU is the enlargement of a customs union. There are GATT rules for such cases, laid down in GATT Article XXIV. Essentially these rules apply to tariffs. However, as these rules date back to the times before the URAA, they do not relate to the new types of commitments established under the URAA (Tangermann, 2000).

Regarding *tariffs*, the EU and the CEECs will have to satisfy the other members of the WTO that enlargement does not result in a situation in which the overall level of agricultural protection and support in the enlarged EU violates the aggregate commitments that both had before enlargement. Tariff bindings in the CEECs in many cases are significantly below those bound and applied in the EU so that negotiations will have to be held in the WTO on how to compensate other countries for the increase in tariffs on their agricultural and food exports to the CEECs.

How to treat commitments on agricultural export subsidies and domestic support is not regulated in these GATT provisions. However, there is the precedent of the EU Northern enlargement in 1995 (Burrell, 2000). As far as domestic support commitments are concerned, what happened was that those of the EU-12 and those of the new members states were simply added. It is likely that the same procedure will be adopted in the case of Eastern Enlargement.

Concerning *domestic support*, Buckwell and Tangermann (1999) evaluated the effects of the accession of five CEECs (Poland, Estonia, Czech Republic, Hungary, and Slovenia). They conclude that it appears unlikely that the aggregated domestic support commitments of the EU-15 and these five accession countries would provide for sufficient room to cover an extension of all CAP payments to the new member states if the blue box was no longer available at that time. However, in this case it seems that the DPs would need to be reformed in any case (see further).

The most constraining WTO commitment is the one on *export subsidies*, and more particularly the constraint on the volume of subsidised exports. First, both the EU and the CEECs will find it difficult to respect the existing commitments in some product

sectors.³ Second, with an extension of the CAP surpluses of a number of products in the CEECs may rise, in spite of price reductions in the EU. Increased surplus production in CEECs following enlargement will also imply more subsidised exports (Tangermann, 2000).

Let us take a closer look at the expected supply effects in CEECs. Since the beginning of transition, agri-food trade between EU and CEEC has increased dramatically, and net exports of the EU strongly increased. While EU agri-food imports from CEECs have doubled, EU exports to CEECs have increased almost tenfold (Figure 5). As a result the net trade balance for the EU has improved from around negative €1 billion in 1990 to a positive €2 billion in 1998.

The nature of agri-food trade has changed as well. While trade has increased in most categories, exports of processed products from the EU to CEECs have increased considerably more than exports of primary products. Imports of the EU from CEECs have increased more or less the same across different categories.⁴

³ The EU exceeded its basic export subsidy allocation for nine out of a total of twenty product groups in 1999/2000, including a 60 per cent excess for coarse grains (WTO Secretariat). This could only be done by using the 'carry-forward' provision in the URAA which allows to use 'unused' export subsidies from previous years.

⁴ The Grubel-Lloyd index, measuring intra-industry trade, increased from around 20 per cent in 1988-89 to around 40 per cent in the second half of the 1990s, with the EU predominantly and increasingly the exporter of high quality food products while the CEECs export mainly lower quality and less processed products. The importance of intra-industry trade is considerably less in the Baltic countries than in the other CEECs (van Berkum, 1999).

b. Quality

Behind the EU-CEEC agri-food trade development are, besides EU export subsidies, quality differences and the competitiveness of the EU food marketing, processing, and retailing industry, the more developed institutional framework. Quality, hygiene and health requirements, are extremely important for agricultural and food products. Recent food crises (for example dioxine and BSE) have reinforced the importance of these characteristics, and in this perspective the growing trade deficit of the CEECs versus the EU-15 is less surprising. Exports from the EU-15 to CEECs may therefore further increase when CEEC import constraints are removed with accession.

The imposition of higher standards on CEEC products comes both from government regulations and private sector demands. Government regulations are related to the adaptation of the EU regulatory framework as a prerequisite for accession. An important part of the agricultural *acquis communautaire* (the set of rules and regulations of the EU that the CEECs have to implement) focuses on health and hygiene requirements for food and agricultural products.

In several cases quality demands by private processing and distribution companies, concerned about consumer and export demands, are higher than government regulations, in particular those exporting to the EU market and those with foreign investment. The share of total FDI going to the agro-food sector is around 15 per cent on average. Within the agro-industry, most FDI has been directed into the sugar and confectionery, the tobacco and the soft drink sub-sectors. Alcoholic beverages and milk and dairy production also attracted substantial FDI. However, meat processing, for example, has received relatively little investment from foreign firms (OECD, 1999).

The impact of FDI, EU standards, and government regulations on quality standards is quite dramatic in some cases. For example, Figure 6 illustrates how extra

class (highest quality class according to EU standards) milk has increased from 35 per cent of total deliveries in 1996 to 80 per cent in 2001, on average, for six dairy companies (both domestic and foreign owned) studied by Dries and Swinnen (2001).

Higher standards will have two (opposite) effects on exports from the CEECs to the EU-15. Transaction costs for the trade of CEECs agricultural and food will reduce and quality standards will increase, which will improve access to the EU-15 market. However, the implementation of the standards will require significant investments which not all CEECs producers and processors will be able to make. Hence the production which satisfies these requirements will be less than the current output.

c. Prices

In comparison to the immense reduction of trade barriers since 1989 future changes are moderate. For example, recent market and policy changes have reduced the price and output effect of CAP integration. Specifically, the price gap between EU and CEECs in agricultural products has diminished since the earlier 1990s, because of four reasons. First, reforms of the CAP (1992 MacSharry Reform and Agenda 2000) have reduced support prices for some of the most protected commodities. Second, increases in agricultural support in CEECs since the mid 1990s, partly because of CAP-imitation in anticipation of accession, but also because of domestic political pressure from CEEC farmers. Figure 7 illustrates how agricultural protection indicators in CEECs were by 1999 almost half those of the EU. Moreover, for some highly protected commodities, such as milk, support is close to the EU level in some CEECs. Third, the appreciation of real exchange rates in CEECs has further reduced the nominal price gap between EU and CEECs. Fourth, improvements in product

quality have induced higher CEEC prices through quality premia. In combination, these developments have reduced the price gap between CEECs and EU, and hence the trade effects of enlargement. For example, Figure 8 illustrates how the average price gap for wheat has been reduced significantly over the past decade. Wheat prices in some CEECs are now even higher than in the EU.

Significant price increases with the accession should only be expected for beef, sugar, milk (and processed derivatives, butter and milk-powder), and coarse grains (barley, maize, rye). However, the only of the so-called heavy CAP intervention commodities where significant increases in EU-15 imports may emerge as a result is coarse grains. The average quality of beef in the CEECs is considerably below EU standards, and quality adjustments will offset production effects with price increases. Both sugar and milk production are constrained by CAP production quota at the national level. Implementation of the CAP therefore implies national quota for sugar and milk for all CEECs - and hence no output increase with accession. No doubt, the implementation and allocation of quota in CEECs will be very complex because of the absence of obvious reference periods, and because of tremendous administration problems. Many have argued that, even leaving aside the distortions of the policy, this in itself is a sufficient reason for removing the quotas. Yet, while discussion of both the milk and sugar policy is ongoing, it is difficult to imagine that the reforms will be sufficiently radical and quickly implemented in order to remove the quota systems before accession of several CEECs. If the quota survive, the only trade effect in sugar and milk is from the demand side in CEECs: with higher prices for these products, consumption will decline and hence net imports decline (or net exports increase), but this effect should be mitigated by consumer income increases. Finally, imports for fruits and vegetables may also increase because current imports from CEECs are

restricted by trade barriers, as quality differences are relatively small in fruits and vegetables and CEECs benefit from low labour costs in labour intensive production activities.

d. Productivity

Simulations indicate that, taking into account the combined effect of these factors, the impact of introducing the CAP in CEECs on agricultural price and supply in CEECs is considerably smaller than initially expected (Münch, 2000). It now appears that future developments of production in the CEECs, and the likelihood of a conflict with WTO constraints after accession, will largely be dominated by trends/changes in productivity, rather than by the introduction of the CAP.

At this moment, agricultural productivity in CEECs is considerably lower than in the EU-15. As shown above CEEC agricultural productivity has started growing since the mid 1990s, and is expected to increase further with enlargement both because of the economic conditions that will have been fulfilled and because of the improved access to capital, technology, etc. which results from enlargement. However there is no consensus about the extent to which these productivity increases will emerge in the next decade.

Productivity increases since the mid 1990s are considerable in countries such as Hungary with much foreign investment in the food industry. The latter has resulted in better access to inputs, capital, and technology for the farms contracting with these companies, and to positive spillover effects to other sectors. However productivity increases seem to be lagging in the two large countries, Poland and Romania. Both are largely characterised by unfavourable production structures. The majority of Polish and Romanian land is used by (very) small-scale family farms. Empirical evidence

indicates that these small-scale family farms have not been conducive to rapid restructuring and productivity growth over the past years. They are characterised by hidden unemployment, low skills, difficult access to inputs and inefficient scales. Given the large share of total CEEC land and labour employed by these farms, this will be an important additional constraint on future productivity and output growth for the CEECs.

Furthermore, while there clearly has been a recovery in yields since 1994, one should not forget that yields in the EU-15 continued to increase significantly as well, hence the gap has not decreased on average. While one should be careful with this comparison, looking at the impact of Southern enlargement (Greece, Portugal, Spain) on productivity and input use also suggest that one should not *necessarily* expect a quick catch-up in productivity to emerge with accession or in the years immediately afterwards.

In conclusion, this analysis suggests that accession is less likely to create a conflict with WTO commitments than initially feared – although several factors, such as the evolution of CEEC productivity, world markets, and exchange rates, remain uncertain. What is also obvious is that a deeper reform of the Common Agricultural Policy under Agenda 2000 would have made a considerable difference here. Still, the likelihood of a WTO conflict, and the impact on the CAP, will depend more on the outcome of the negotiations in the WTO Millennium Round than on enlargement. If, as a result of a new WTO agreement, either the EU needs to change the implementation or the extent of CAP payments, or if exports subsidies need to be significantly reduced, the CAP will need to be reformed significantly, irrespective of enlargement.

e. The budget

A similar logic also applies to the impact on the EU budget. The likelihood that enlargement will cause an increase in export subsidies which will conflict with the EU budgetary guidelines has been significantly reduced. A much more important budgetary factor will be the (political) decision on the allocation of direct payments to CEEC farmers and/or of the extent of structural funds for CEECs.

The decision whether or not to grant direct payments⁵ to CEEC farmers once they accede to the EU on the same basis as the current EU-15 farmers is one of the most controversial issues in the accession negotiations. CEECs argue that their farmers should be treated the same as other farmers once they join the EU. Many EU countries argue that since there is no price decline with accession for the CEECs, there is no need for compensation through direct payments, as was the historical base for their introduction in the EU-15. Economists argue that, more importantly, the structural needs and the rural situation of the CEECs is such that structural aid would be much more appropriate than area or headage payments for farmers.

Including the direct payments, and taking into account their increase as a consequence of the Agenda 2000 reforms, the estimated annual budgetary costs of extending the current CAP to the CEEC-10 are estimated to be between €9 and 15 billion, once the agricultural economies of the CEECs are fully integrated and have overcome their current structural handicaps (Ahner, 2000). The major part of this amount would be direct payments. The actual amount for the period up to 2006 (i.e. as long as the current financial framework runs) is considerably less since not all CEECs

⁵ So-called “direct payments” or “compensation payments” are subsidies per hectare or per animal, most of which have initially been introduced as compensation for declining support prices with CAP reforms in 1992 and 2000.

will enter before 2006 and because one expects a phasing in period for some of the expenditure. Even then, there is likely to be significant pressure to reduce the budgetary burden, although statements by the EU budget commissioner indicates the EU Commission's willingness to search for creative solutions to accommodate enlargement in the EU budget, if needed. This pressure will likely translate in demands to reduce the payments going to EU farmers, either by introducing a maximum amount per recipient, by partly financing them from the national budgets, or by reducing their amount over time (in Brussels-speak these three options are referred to as “modulation”, “co-financing”, and “degressivity” of the payments).

7. CONCLUDING COMMENTS

A decade after the fall of the Berlin Wall several Central and Eastern European countries are on their way to becoming members of the European Union. Those countries which have reformed most rapidly and most thoroughly are now doing best and their reform efforts have resulted in significant recovery and efficiency improvements both in the agri-food system and more generally in the economy.

Agriculture and agricultural policy is an important issue in EU enlargement, and vice versa, both for internal and international reasons. The possibility that the accession of the CEECs into the CAP will cause a conflict with WTO commitments has been significantly reduced, but cannot be excluded for some specific commodities, depending on the CEEC supply evolution. However, the likelihood of a WTO conflict, and the impact on the CAP, will depend more on the outcome of the negotiations in the WTO Millennium Round than on enlargement. Similarly, the impact of enlargement on the EU budget depends mostly on the (political) decision on the allocation of direct payments to CEEC farmers and/or of the extent of structural funds for CEECs.

All this said, it can still be expected that agriculture will be a particularly difficult negotiation chapter. If anything, the history of agricultural negotiations in international agreements and previous enlargements does not provide much room for optimism. Because agriculture is a sector in relative decline in the EU-15, trade concessions and market openings which provide CEEC farms growing access to the EU-15 market causes major concerns for EU-15 farmers already under pressure by growing supply through continuous productivity increases and facing inelastic demand for their products – the so-called "farm problem". Hence it can be expected that they will use all political means available to ensure as good an outcome as possible from the political negotiations. On the other side, since many people in CEECs are (partially) affected by agriculture the pressure on the CEEC negotiators will be strong not to give in and to obtain the best conditions possible for the CEEC farmers from the accession negotiations.

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Table 1: Some Basic Indicators on the Agri-food Sector in Europe, 1998-1999

	Agr. Output (1999)		Agr. Employment (1998)		Agr. Land (1999)	Share of World Output (1998/99)		
	Billion EURO	% GNP	Million	% total	Million ha	Grains (%)	Milk (%)	Sugar (%)
EU-15	208.8	2.5	8.2	5.7	138.1	11	29	15
CEEC-10	17.7	7.6	9.5	16.7	59.1	4	7	3
as % EU-15	7.5		120		42			
POLAND	4.9	3.9	2.9	19.1	18.2	3	8	1
ROMANIA	4.4	15.5	4.3	40.0	14.7	3	5	2

Source: European Commission, USDA, OECD

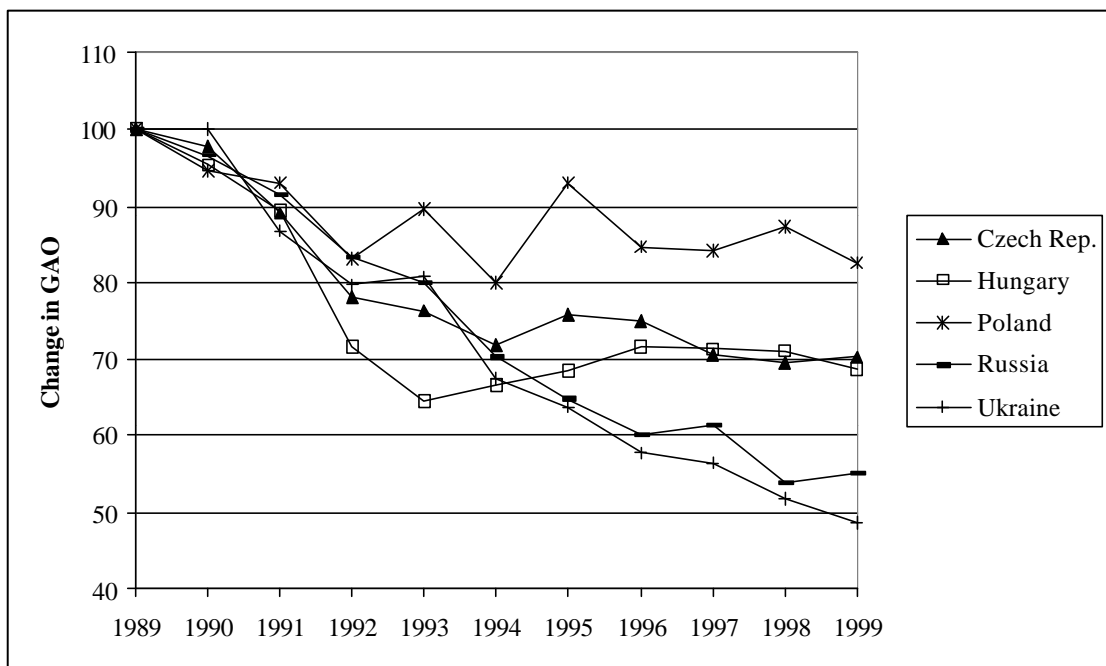
Table 2: Farm Individualization Index (FII), 1998

	FII		FII
Albania	95.0	Czech Republic	25.0
Armenia	89.2	Kazakhstan	23.7
Latvia	86.5	Ukraine	11.9
Lithuania	85.7	Russia	11.1
Romania	75.6	Uzbekistan	9.5
Hungary	47.6	Turkmenistan	6.1
Bulgaria	46.5	Slovakia	6.1
Georgia	36.4	Belarus	5.7
Kyrgyzstan	34.4	Tajikistan	5.2

^a The FII is calculated by dividing the difference between the share of individual farms in total agricultural land in 1998 (IND98) and in 1989 (IND89) by 100 minus the share of individual farms in total agricultural land in 1989: $FII = (IND98 - IND89) / (100 - IND89) * 100$.

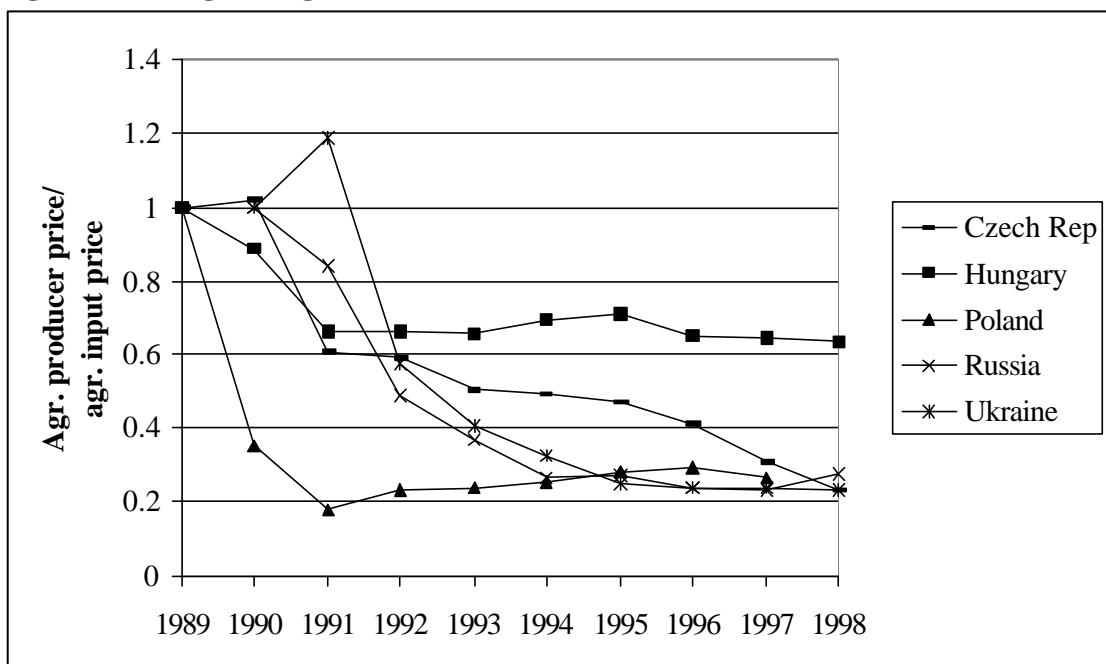
Source: Mathijs and Swinnen (1998), Csaki and Nash (1998) and national statistics

Figure 1: Changes in gross agricultural output (GAO) since 1989



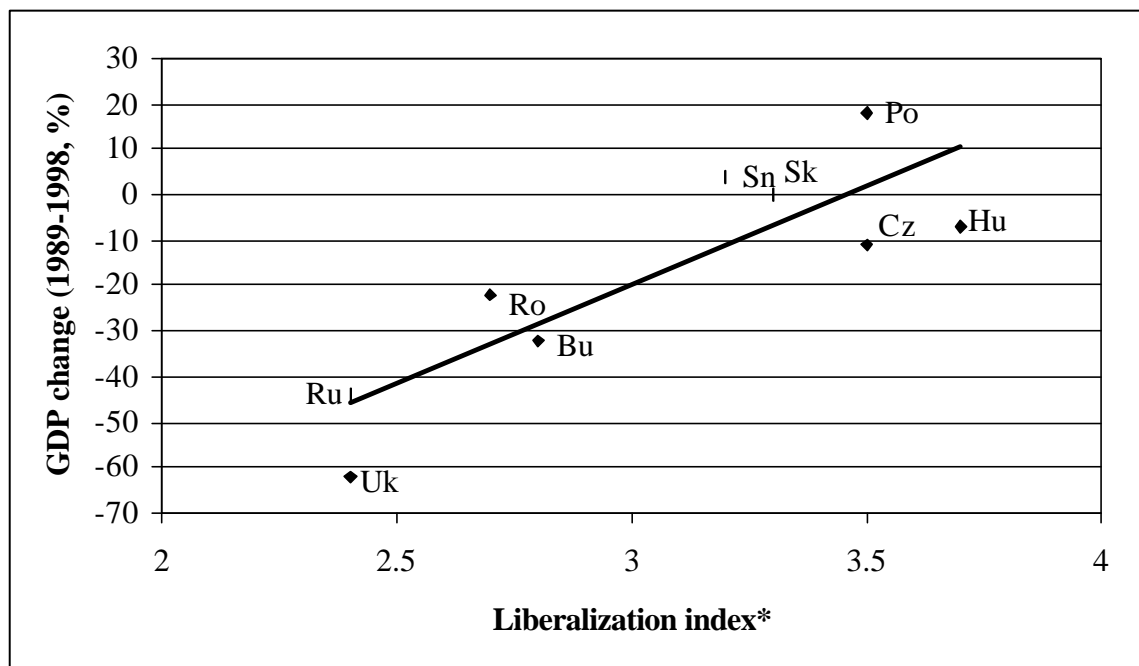
Source: OECD

Figure 2: Changes in agricultural terms of trade since 1989



Source: OECD

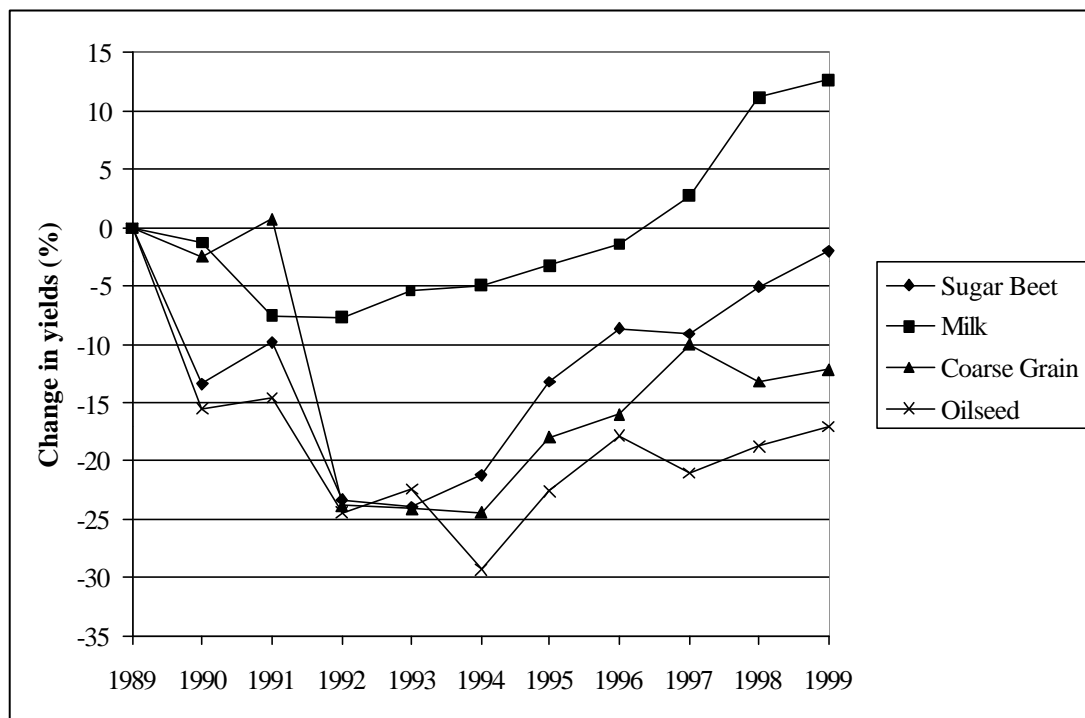
Figure 3: Change in GDP and progress in liberalisation 1989-1998



* The liberalisation index is an aggregate indicator of liberalisation of internal markets (domestic prices and state trading policies), of external markets (foreign trade regime and current account convertibility), and of private sector entry (privatisation of small-scale and large-scale enterprises and banking reform) (de Melo et al., 1996).
Source: own calculations based on data from OECD and World Bank

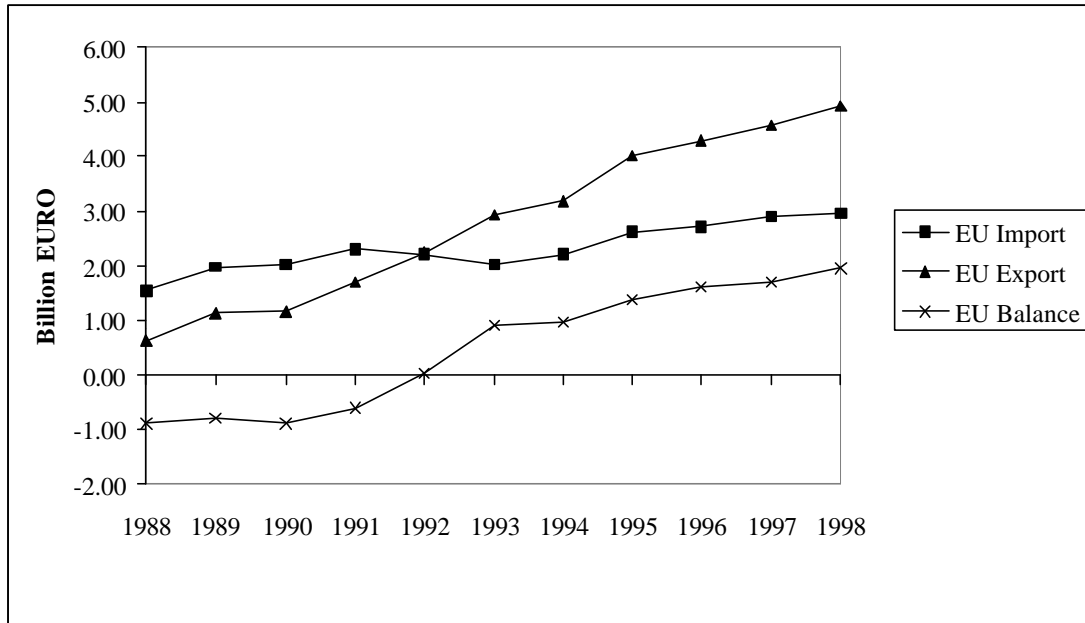
Figure 4: Changes in yields 1989-1999

(Average for Poland, Czech Republic, Slovakia and Hungary)



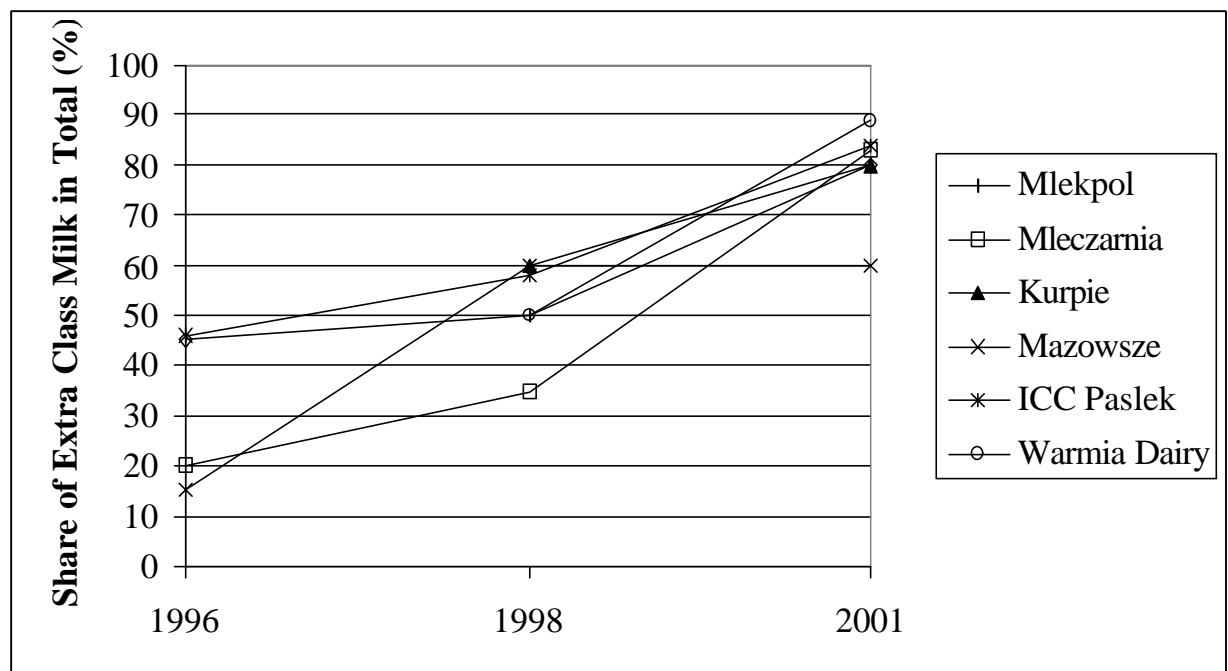
Source: FAO

Figure 5: Trade between CEECs and EU-15 in agricultural and food products (Billion EURO)



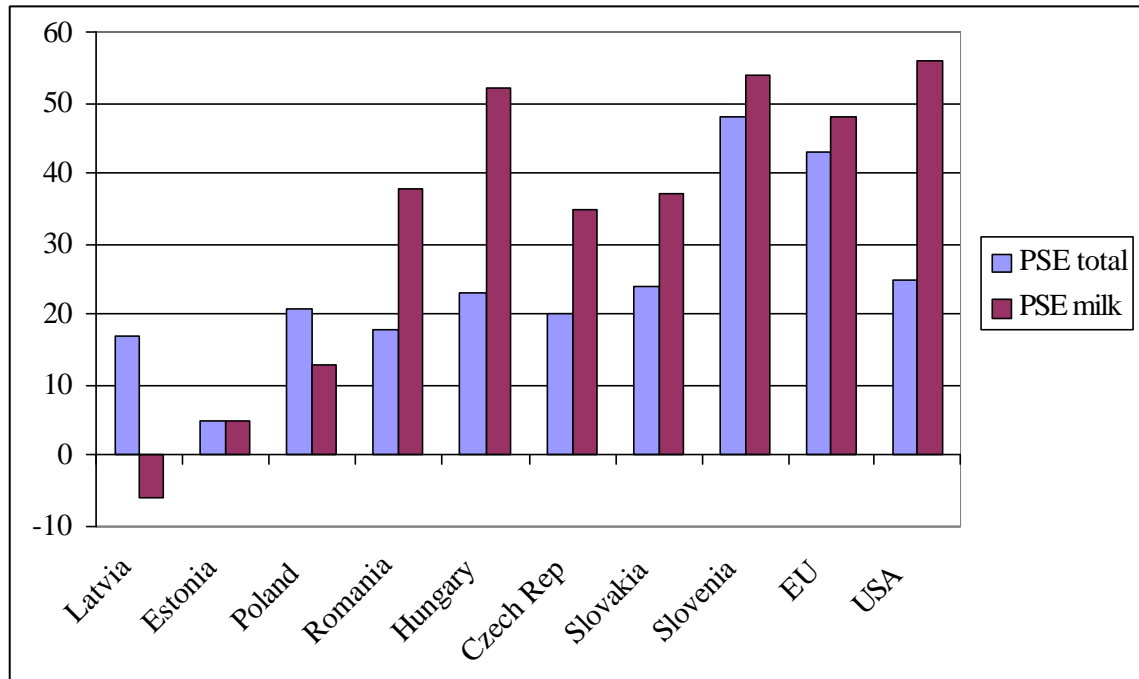
Source: European Commission

Figure 6: Change in the Share of Extra Class Milk Deliveries



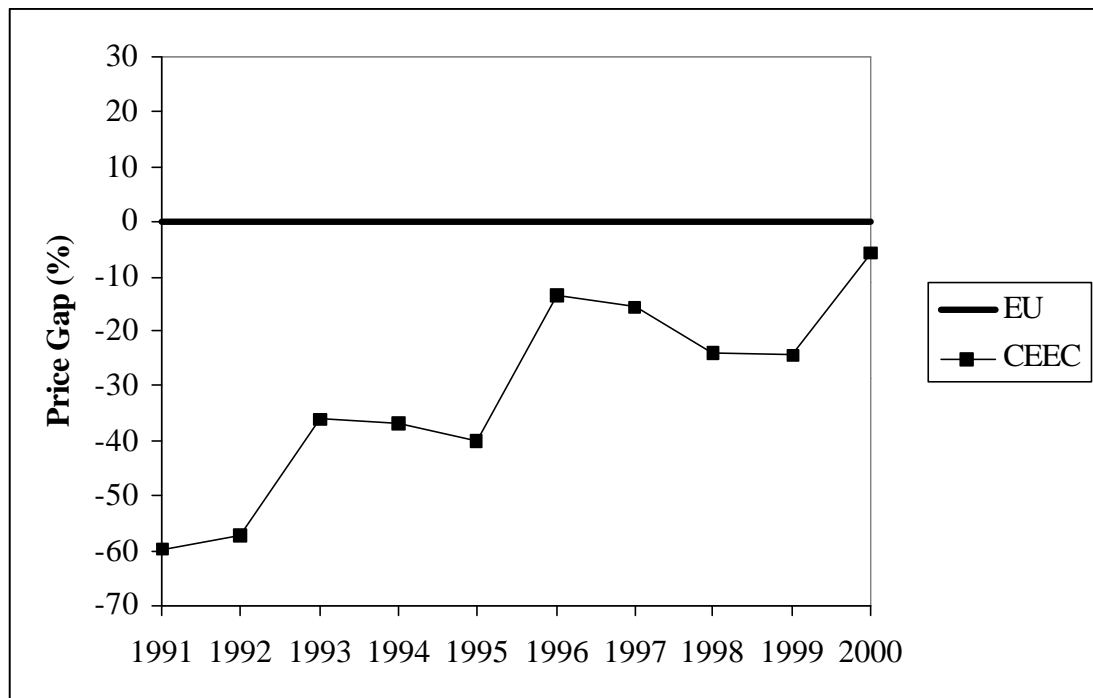
Source: Dries and Swinnen (2001)

Figure 7: Agricultural Protection in CEECs in 1999 (%PSE for total and milk)



Source: OECD (2000, 2001)

Figure 8: The development of CEEC^a-EU price gap for wheat



^a CEEC is the average for Czech Republic, Hungary, Poland, Romania and Slovakia

Source: European Commission

