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DISCUSSION PAPER

Institute of Agricultural Development in Central and Eastern Europe

AGRICULTURAL TRADE POLICIES AND TRADE RELATIONS IN TRANSITION ECONOMIES

ANGELA BERGSCHMIDT AND MONIKA HARTMANN

DISCUSSION PAPER NO. 12
1998



Magdeburger Straße 1, D-06112 Halle (Saale), Germany
Phone: +49-345-500 81 11
Fax: +49-345-512 65 99
E-mail: iamo@iamo.uni-halle.de
Internet: <http://www.landw.uni-halle.de/iamo/iamo.htm>

Prof. Dr. Monika Hartmann is Head of Department for Agricultural Markets, Marketing and World Agricultural Trade of the Institute of Agricultural Development in Central and Eastern Europe (IAMO). Angela Bergschmidt is a research fellow in the same department. Her research mainly focuses on trade agreements and regional integration.

Mailing address: Institute of Agricultural Development in Central and Eastern Europe (IAMO)
Magdeburger Straße 1
D-06112 Halle/Saale
Germany

Phone: +49-345-500 8120 / 28

Fax: +49-345-512 65 99

E-mail: hartmann@iamo.uni-halle.de

bergschmidt@iamo.uni-halle.de

Internet: <http://www.landw.uni-halle.de/iamo/iamo.htm>

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The series *Discussion Papers* is edited by:

Prof. Dr. Klaus Froberg (IAMO)

Prof. Dr. Monika Hartmann (IAMO)

Prof. Dr. Dr. h.c. Peter Tillack (IAMO)

ABSTRACT

The economic changes during transition involved a shift away from the planned foreign trade organization within the council for mutual economic assistance. Following a phase of far-reaching trade policy liberalization, the agricultural sector in the Central and Eastern European countries (CEEC) has in the last years again been increasingly regulated. At the same time as the CEECs are striving for accession to the European Union, regional free trade agreements (FTA) and membership in the World Trade Organization (WTO) have gained importance.

The analysis shows that an effective reduction of agricultural protectionism as a result of WTO obligations can only be expected from a small number of CEECs. The effects induced through changes in international agricultural commodity markets in the CEECs depend particularly on the trade status and the trade structure in the agricultural sector, as well as on internal macro- and agricultural economic distortions. An appraisal of regional FTAs such as the Central European Free Trade Agreement and the Baltic Free Trade Agreement has to take into consideration the "Vinerian" effects of trade creation and trade diversion, as well as non-traditional effects, such as an increase in credibility of political decisions, and the strengthening of the bargaining power of the countries involved. The Europe Agreements and the aim of accession to the EU are of crucial importance to the CEECs. In the framework of an empirical analysis it is shown that the countries which have not been invited to the first round of accession negotiations might be adversely affected by the first east enlargement of the EU.

ZUSAMMENFASSUNG

Die wirtschaftlichen Veränderungen während der Transformationsphase beinhalten eine Abkehr von der planwirtschaftlichen Organisation des Außenhandels innerhalb des Rates für Gegenseitige Wirtschaftshilfe. Nach einer Phase weitgehender Liberalisierung von Handelspolitiken in den Ländern Mittel- und Osteuropas wurde in den letzten Jahren wieder verstärkt regulierend in den Agrarsektor eingegriffen. Gleichzeitig gewinnen neben dem angestrebten Beitritt in die Europäische Union regionale Freihandelsabkommen sowie die Mitgliedschaft in der Welthandelsorganisation (WTO) zunehmend an Bedeutung.

Die Analyse zeigt, daß eine effektive Reduzierung der Agrarprotektion aufgrund der eingegangenen WTO-Verpflichtungen nur von wenigen mittel- und osteuropäischen Ländern (MOEL) zu erwarten ist. Die über die internationalen Agrarmärkte induzierten Effekte in den MOEL hängen insbesondere von dem Handelsstatus und der Handelsstruktur im Agrarsektor sowie den internen agrar- und makroökonomischen Verzerrungen ab. Eine Bewertung regionaler Handelsabkommen wie des Central European Free Trade Agreement und des Baltic Free Trade Agreement muß neben den traditionellen Effekten, wie dem der Handelsschaffung und der Handelsumlenkung, auch die nicht-traditionellen Effekte, wie die durch die Abkommen induzierte Erhöhung der Glaubwürdigkeit politischer Entscheidungen und der Stärkung der Verhandlungsmacht dieser Länder mit einbeziehen. Die mit der EU abgeschlossenen Europa-Abkommen als auch der angestrebte Beitritt zur EU ist von herausragender Bedeutung für die MOEL. Im Rahmen einer empirischen Analyse wird aber auch gezeigt, daß die Länder, die zunächst nicht eingeladen werden, der EU beizutreten, negativ von der ersten Erweiterungsrunde betroffen sind.

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LIST OF ABBREVIATIONS

AMS	Aggregate Measures of Support
BFTA	Baltic Free Trade Agreement
CEAs	Central and Eastern European Associates
CEFTA	Central European Free Trade Agreement
CMEA	Council for Mutual Economic Assistance
CN	Combined Nomenclature
EU	European Union
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
MFN	Most Favoured Nations
NewMCs	New Member Countries
OECD	Organization for Economic Co-operation and Development
RXA	Relative Revealed Export Advantage Indicator
UR	Uruguay Round
WTO	World Trade Organization

1 INTRODUCTION

The breakup of the Council for Mutual Economic Assistance (CMEA) has induced a rapid and substantial reorientation of trade towards the West. In general, a reintegration of the East European Countries into the international market is taking place. This is reflected in considerable changes in the transition countries' trade policies, but also in the fact that most of these countries have become or have applied to become members of the World Trade Organization (WTO). In addition, a number of new trade agreements have been signed in the last six years, with the European Union (EU) and other Western Countries, and also among East European Countries. Among the most important agreements are the Europe Agreements, as examples of the former, and the Central European Free Trade Agreement (CEFTA) and the Baltic Free Trade Agreement (BFTA), as examples of the latter.

The EU Council of Ministers has recently confirmed the proposal of the EU Commission to start negotiations for an accession with the Czech Republic, Estonia, Hungary, Poland and Slovenia. The first eastern enlargement of the EU would have pronounced trade effects on the EU-15, the New Member Countries (NewMCs), and third countries, especially those Central and Eastern European Associates (CEAs) who will not be invited to join the EU in this first round.

Given this background, the aim of the paper is to provide an overview and a first evaluation of the economic consequences of some of the most important developments in the CEAs' national and multinational trade policies (section 2) and trade relations (section 3) during the last years. The possible future trade impact of the first accession on those five associated countries that will remain outside the EU will be analyzed in section 4. The findings are summarized in the final section.

2 AGRICULTURAL TRADE POLICIES

2.1 Trade Policies at the National Level

Trade policies in agriculture and the food market differ somewhat between the various CEAs. It would go beyond the scope of this paper to provide a detailed account of the policies each individual country has pursued. At this point only a summary of some common trends can be presented, although this bears the risk of oversimplification¹. The main trade measures applied in CEAs agriculture are presented in Table 1.

At the beginning of the transition process, most CEAs liberalized their agricultural price and trade policies to a large extent. This also includes the abolishment of state monopolies on foreign trade in those CEAs where such institutions were still prevalent. In the meantime, policy interventions on agricultural and food markets have again gained in importance². Agricultural trade intervention in the CEAs ranges from discriminating against the agricultural sector, as is the case on some product markets in Bulgaria and Romania, to considerably protecting agriculture, as happens in Poland and Slovenia. This very much reflects the fact that the political importance of food prices, and thus a more consumer-oriented policy approach, increases as the average level of income decreases (EU COMMISSION 1997a, p. 16).

However, there are not only pronounced differences in the way the CEAs influence their agricultural product markets, but also many common features. Thus the CEAs have generally introduced measures to stabilize their domestic markets and to reduce imports. The latter has been achieved mainly by raising import tariffs, an instrument that has been especially popular because of its ability to raise funds for the public budget (EU COMMISSION 1997a, p. 15). In addition, export subsidies are also used on some markets for some products. Of all policy interventions in the agricultural sector in Hungary, export subsidies have created the highest budgetary burden. In 1995, Hungary exceeded the maximum level of export subsidies allowed under the General Agreement on Tariffs and Trade (GATT) by more than 100 %³.

Especially on the grain markets, some countries have pursued a policy of export restrictions. Export taxes, export quotas, and in some cases also export bans have been implemented not only in Bulgaria and Romania, but also in Lithuania and the Czech Republic⁴. The main aim of these measures was to prevent food shortages for domestic consumers.

As the exposition has so far shown, trade interventions in agricultural markets are prevalent in all CEAs except Estonia. The distribution effects of the policies depend on the direction of policy intervention. From a welfare point of view it is not only the kind of trade policy that matters, but also its stability. Especially the beginning

¹ A more detailed description can be found in EU COMMISSION (1997a), OECD (1996b) and OECD (1997).

² The Common Agricultural Policy system seems to have inspired policy design in many CEAs.

³ Hungary's commitment to keep its GATT obligations has led to a reduction in market price support in 1996, while the country has increased subsidies for inputs and credits at the same time (OECD 1996a and 1997).

⁴ In the Czech Republic no export licenses were issued at the end of 1995 to prevent exports.

of the transition process was marked by ad hoc interventions, mainly aimed at solving short-term problems. Although in most countries governmental policies have gained in stability, this does not hold for all CEAs; e.g. in Bulgaria trade measures which had been approved and implemented have been changed several times in the course of one year (EU COMMISSION 1997a, p. 117). This has induced severe risks for the economic agents, thereby hampering the development of the agricultural and food sector. The lack of information on policy changes has often further aggravated the negative implications of these ad hoc policy measures. Thus it should be stressed that not only the type of trade policy applied, but also its stability and predictability are crucial for the development of the agricultural and food sector in the CEAs (OECD 1997, p. 151; FROHBERG and HARTMANN 1998, forthcoming).

2.2 Multinational Trade Policies - GATT/WTO

Integration into the global trading system has become an important feature of trade policies in the transition economies. The Czech Republic, Hungary, Poland, Slovenia, Romania⁵ and the Slovak Republic, all signatories to the GATT, participated in the Uruguay Round (UR) negotiations and acceded to the WTO by accepting the related commitments. Bulgaria completed negotiations in 1996, while the Baltic states are currently at different stages of negotiation for accession⁶.

2.2.1 Provisions and Implementation of the GATT/WTO

The Agreement on Agriculture of the UR and the product-specific commitments laid down in country-specific schedules give the juridical background to the rules on agricultural trade. The provisions, which are briefly described in Annex 1, can be grouped into three main areas: market access, domestic support and export subsidies.

Market Access: market access provisions in the WTO comprise tariffication procedures and minimum access commitments⁷. The reference period for the binding of tariffs was generally set to be 1986-88, a period which was clearly not suitable for the countries of Central and Eastern Europe. They therefore chose to make use of the so-called "national offers" which propose the possibility of setting tariffs freely, and to present them to the GATT signatories at the UR (TWESTEN 1997). On the basis of their tariff bindings, the CEAs can be grouped into four categories of protection potential: relatively low (Czech and Slovak Republics), average (Hungary and Slovenia), high (Bulgaria and Poland) and very high (Romania). While Bulgaria and Poland generally targeted their bindings at EU level, most countries stayed considerably below it. Because of its developing country status, Romania was able to negotiate very high tariffs with a weighted average (ad valorem equivalent) of 161.5 % (OECD 1997).

The tariffication procedure resulted in a general increase in tariff protection in the aftermath of the negotiations. Among all CEAs, the highest increase was observed in Romania, where tariff protection increased from 25 % weighted average to 60 % (OECD 1997). Tariffs nevertheless remained below the bindings in most of the CEAs. Presently Hungary, the Czech Republic and the Slovak Republic are operating at the limit of their WTO commitments, while most other countries still have some potential to increase protection (e.g. TWESTEN 1997).

Domestic Support: regarding the Aggregate Measures of Support (AMS), the CEAs have to follow the general rules, which provide for a binding of the AMS at the nominal average prices of the base period (1986-88) and a 20 % reduction until 2001. Some countries seem to have been confused by the procedures laid down for the calculation of the AMS ceiling. In the case of the Czech Republic, "green box" measures were included, while existing market support measures were left out. Poland and Hungary included market support measures, but Poland deducted its negative market support (in some cases administrative prices were below world market prices) - a procedure not foreseen in the Agreement on Agriculture. While Poland expressed its AMS in US dollars, Bulgaria and Slovenia used the ECU. The Czech and Slovak Republics and Hungary expressed their AMS in local currencies. In the case of high inflation the Agreement on Agriculture gives the option of re-negotiating the AMS. Romania does not have an explicit AMS, having been allowed to spend 10 % of the value of agricultural output on non-exempt support measures. Compared to the EU, which has a base AMS of 57 % of its output value, most CEAs have rather low bindings; with 52 %, Poland is one exception.

The implementation of the AMS is difficult to assess, as most countries have not yet declared their 1995 domestic support measures to the WTO. While the OECD (1997, p. 152) has come to the conclusion that the AMS "does not appear to be a binding policy constraint", TWESTEN (1997) concludes in his study on the

⁵ Romania is the only country among the CEAs which has developing country status (OECD 1996b).

⁶ As is the case for other post-Uruguay Round applicants, the Baltic states are being asked to accept stricter disciplines than those negotiated with the old GATT signatories. Estonia is facing especially difficult negotiations, as it has been asked to bind tariffs for some products at zero (OECD 1997).

⁷ In the case of minimum market access commitments in the form of tariff quotas, the CEAs have to follow the same rules as the other WTO members.

Visegrad countries that Hungary, the Czech and the Slovak Republics have already reached their AMS ceilings, whereas Poland still has considerable room for maneuver.

Export Subsidies: all CEAs that have WTO commitments, with the exception of Slovenia, have included export subsidies in their schedules (OECD 1997). Again, confusion or a lack of information about the regulatory framework has led to a number of irregularities in the process of laying down the commitments. In some cases, products were allocated to several product groups, offering the possibility of achieving a higher overall binding. The Czech Republic for example placed milk powder in a separate product group, as well as including it in the category of "milk products" (TWESTEN 1997). On the other hand, Hungary did not declare export subsidies for some products for which export subsidies had been paid in the base period, and "overlooked" the export subsidies in trade with the CMEA countries. Most countries expressed their budgetary outlays with respect to exports in local currencies, only Poland (US\$) and Bulgaria (ECU) chose foreign currencies. The consequence of the local currency choice is much more serious in this case compared to the AMS, because WTO rules do not provide for an option to re-negotiate export subsidy commitments should they be eroded by excessive inflation.

Among the CEAs that are members of the WTO, so far only Hungary has experienced serious constraints from its export subsidy commitments. In 1995 its aggregated budget constraint was exceeded by 114 % (TWESTEN 1997) and the case was put to the WTO arbitration committee. The settlement agreed upon provided for a new base year (1995), but maintained the final level to which the subsidies will have to be reduced by the year 2002 as laid down in the schedule.

Consequences of the integration of the CEAs into the world trading system arise not only directly from obligations of the Central European WTO members as described above. The effect of the UR Agreement on international markets also has repercussions on the trade environment for the CEAs. The possible gains and losses of these effects will be discussed in the following section.

2.2.2 Effects of the GATT/WTO on the CEAs

The agricultural provisions of the UR are expected to lead to a slight reduction in agricultural protection, very probably causing a rise in the level and the stability of world market prices for most although not necessarily for all agricultural products.⁸ This price rise is primarily owed to the obligation to reduce subsidized exports⁹. It will be further advanced by liberalization in other areas, generating worldwide gains in real income. Estimates using computable general equilibrium models to establish the world income effects of the UR agreements predict GDP increases ranging from US\$ 60 to 477 billion¹⁰. Depending on the income elasticity of demand for agricultural products, this will produce a stronger increase in international agricultural prices. The world market price rise will favor those countries previously unable to compete in the escalating subsidization due to financial constraints, but who are now able to compete on the basis of comparative advantages (INOTAI and KISS, 1996). Leaving aside domestic policies, the agricultural net exporters in the CEAs are the potential winners of this agreement. Both real income and net export receipts will increase as a result of the changes in world market prices. CEAs that are originally importers, but which become net exporters in view of the rise in world market prices and the resulting technical advances, may also achieve welfare gains; beyond this they will experience a clear improvement in their foreign exchange balance. On the other hand, countries that continue to be net importers may suffer losses on two fronts; in addition to a fall in real income, they will suffer a deterioration in their foreign exchange balances if the absolute value of the import demand elasticity in the agricultural markets is less than unity. Since the restructuring process has not yet been completed in most CEAs, it remains to be seen which countries will in the long run be able to compete with respect to agriculture. The picture is further complicated by the existence of domestic agricultural policies and macroeconomic distortions in CEAs. Even net importers (exporters) among the CEAs may be among the winners (losers) of the Uruguay Agreement if they discriminate against (protect) their agricultural sector by providing import subsidies (export subsidies). Especially if the relatively high, and in some cases still not fully utilized, tariff bindings encourage the CEAs to increase their own protection, this will certainly be detrimental from a welfare point of view.

Furthermore, the EU and other industrial countries have concluded a series of agreements with the CEAs (see section 4.1) under which they have granted trade concessions. As the UR agreement will tend to result in a lowering of protection and a rise in world market prices, this will lead to an erosion of preferences for favored

⁸ For a more differentiated analysis of the effect on agricultural world market prices see e.g. HARTMANN, 1995.

⁹ The effects of the tariffification process are not clear. INOTAI and KISS (1996) predict that the transformation of non-tariff measures into tariffs induces high initial Most Favored Nation (MFN) tariffs in all WTO member states. Even though these bound rates have to be reduced by an unweighted average of 36 %, effective tariff rates will in some cases be higher in the year 2000 than they were in 1994.

¹⁰ For a detailed assessment see SCHOTT, 1994.

nations. Neglecting this aspect will therefore lead to an overestimation (underestimation) of the possible welfare gains (losses) of the UR in the CEAs. In the case of the EU Association Agreements, some compensation measures have been decided on (see also section 4.1).

In addition, attention must be paid to the price stability aspect when analyzing the effects of the agreement on the CEAs. This effect is the result of the tariffication, which no longer permits countries to completely isolate their domestic markets from the world market by means of variable import levies, export subsidies or import quotas¹¹. The expected modest reduction in price instability on the world agricultural market will reduce uncertainty for importing and exporting nations alike, thereby raising the efficiency of resource allocation (HARTMANN 1995). Even more important in this respect are the WTO commitments of the CEAs themselves if they do represent a serious constraint on ad hoc protective measures. More stable agricultural world markets and national prices could therefore generate considerable welfare gains in CEAs.

For the CEAs, quantitative estimates of potential gains through their WTO membership or the conclusion of the UR have not yet been undertaken. Nevertheless, in total the liberalization of agricultural trade is estimated to lead to an increase in world GDP of US\$ 53 billion, of which 14.3 billion are expected to be realized in the developing and transition economies (YÜKSEL 1996, p. 54).

3 TREATIES AND AGREEMENTS AMONG THE CEAS

After a period of disintegration in the former socialist bloc, efforts have been made to find new forms of integration since the beginning of 1992. In addition to a large number of bilateral trade agreements (see also Table 2)¹², two major plurilateral trade agreements were signed in the CEAs, namely the CEFTA and the BFTA.

3.1 Main Characteristics of BFTA and CEFTA

The CEFTA was founded by the Czech Republic, Hungary, Poland and the Slovak Republic and came into force in March 1993. Slovenia joined in January 1996 and Romania in July 1997. The countries interested in future membership are Bulgaria, that hopes to join in 1998, Lithuania, Latvia, Croatia, Macedonia and the Ukraine. Preconditions for joining the CEFTA are membership in the WTO, Association Agreements with the EU as well as bilateral free trade agreements with all member countries of CEFTA (EAST EUROPE 4/97, 9/97; CLEMENT 1997, p.38).

BALDWIN's Domino Theory (BALDWIN 1994) comes to mind as a relevant framework for attempting to explain the increasing interest of transition countries in becoming members of CEFTA. According to BALDWIN, the establishment of a free trade agreement might induce in third countries the fear of losing export markets to member countries as a result of such an agreement. This results in pressure on non-member countries to join the FTA. When they do eventually join, thereby expanding the FTA, this increases pressure on those countries that are still left out (VALDÉS 1997, p. 4). In general, the adverse consequences for a non-member country, and thus the importance of the domino effect, depend on the relevance of FTA members for the specific country and on the kind of policies implemented by the trading blocks. Thus e.g. Bulgaria's interest in joining CEFTA might very well be due to the fact that in 1996 about 25 % of its exports go to the CEAs (see Table 4). Remaining outside the CEFTA might lead to a loss in export markets.

The CEFTA is a symmetrical treaty, with all participating countries committing themselves to simultaneously reducing customs tariffs and trade barriers on the products listed in the agreement. The focus is on industrial products, while trade in agricultural commodities is covered in separate protocols (OECD 1996).

The original protocols on agricultural trade covered only one quarter of the CEFTA countries' trade in agricultural products, and the tariff and quota concessions were modest. Trade in most agricultural and food products continued to be governed by bilateral agreements. Some additional but equally moderate tariff reductions were made in 1994 (OECD 1996, p. 14).

In 1995 the four founding member countries signed an agreement on the reduction of agricultural duties by about 50 % on average, with effect from January 1996¹³, agreeing to completely eliminate them by January 1998. Under this agreement, agricultural commodities have been classified into three groups:

- products not generally produced in the CEFTA, for which duties will be totally eliminated;

¹¹ However, the potential stabilization effect of tariffication will be greatly restricted by the possible levying of additional duties under safeguard clauses.

¹² The most important one is the customs union between the Czech and Slovak Republics created on January 1st, 1993 (OECD 1996b).

¹³ Slovenia, which joined in January 1996, was granted an adaptation and negotiation period until July 1996, prior to which the existing bilateral agreements remained in force. However, even after July 1996 Slovenia failed to meet its commitments concerning the protocol on the reduction of import tariffs for farm goods (EAST EUROPE 4/97).

- products for which a uniform duty of 14 % will on average be applied;
- sensitive products, for which member countries will sign bilateral agreements on duties and quotas.

While the first group accounts for 14% of the total value of mutual trade, the second and third encompass 31 % and 55 % respectively (OECD 1996, p. 14; Internet, HUNGARIAN ECONOMY 1995: www.iqsoft.hu/economy/page95_4/cefta.html). The original objective, to introduce free trade for all agricultural products as early as 1998 has been abandoned by all CEFTA countries. An agreement was reached at the summit meeting of the CEFTA Joint Committee in September 1997 to move to full liberalization of trade in agricultural products by January 2000 (EAST EUROPE 9/97).

As already mentioned above, a second plurilateral trade arrangement has been established in the CEAs. This is the Baltic Free Trade Agreement, which was signed by the Baltic countries Estonia, Latvia and Lithuania in 1993 and took effect in April 1994. Initially, it dealt exclusively with trade in industrial products and was formulated with the long-term aim of forming a customs union. After long and difficult negotiations, the agreement on trade in agricultural products came into force in January 1997. It is unique in that it provides for a complete liberalization of the trade in domestically produced agricultural and food products in the Baltics.

As the border policies of the participating countries do not necessarily have to be harmonized, regionally traded products must comply with rules of origin similar to those of the EU. These rules generally require a considerable part of the value to have originated in a member country. The BFTA also provides for a safeguard clause, a standard instrument in trade agreements allowing member states to introduce temporary domestic market protection measures.

3.2 Theoretical Background to Regional Integration

The CEAs' efforts to reintegrate raise the question what effects these free trade agreements might induce. Theoretical analysis of the welfare effects of FTAs has been undertaken from different perspectives: with a focus on an individual member country, concentrating on the members of an FTA as a group, from the viewpoint of the rest of the world, or considering the whole world. Besides, recent research studies have differentiated between "traditional" and "non-traditional" (external) effects of trade agreements (FERNÁNDEZ 1997); the former include trade creation and trade diversion, competition and investment effects, while the latter concentrate on credibility, bargaining power and induced liberalization effects.

The "traditional" Vinerian customs union theory reveals two effects that emerge as a result of establishing an FTA: the trade creation and the trade diversion effects. The former is due to a replacement of high-cost domestic production by more efficiently produced imports from partner countries, which leads to an increase in welfare. The latter is the result of substituting imports from member countries for those of non-member countries, thus reducing welfare from a global welfare point of view (LANGHAMMER and HIEMENZ 1990, p. 4).

Trade creation is very likely to dominate trade diversion if:

- the FTA is successful in completely removing intra-regional barriers to trade;
- the FTA forms a large market;
- each country's goods are in high demand in the partner country/countries¹⁴;
- the pre-FTA tariff is very high (possibly prohibitive).

If most of these conditions hold, world welfare and the welfare of the FTA are also likely to improve (SCHIFF 1996). Besides the more static effects of trade creation and trade diversion, the dynamic effects of FTAs are significant as well. In this respect, trade creation and overall welfare in the world and the FTA will be fostered more if the enlarged market increasingly induces:

- an improvement of the efficiency of domestic firms resulting from increased competition;
- a realization of economies of scale and thus an increase in comparative advantage. (see DE MELO et al. 1992, p. 31; LANG and STANGE 1994, p. 148).

Moreover, the dynamic effects represent an incentive for investment including foreign direct investments (FDIs). Among other things FDIs might be also encouraged due to the "non-traditional" or external effects of the inter-regional agreements, which are increasingly acknowledged as being of crucial importance in the decision to create or become a member of an FTA (FERNÁNDEZ 1997, p. 7). These "non-traditional" gains from FTA membership are due to:

- the prevention of time inconsistency in policies¹⁵; e.g. a country that pursues time inconsistent policies either runs the risk of being excluded from the agreement, or faces sanctions from the other members;

¹⁴ For rich countries, this is more likely when they are similar with respect to e.g. consumer preferences and production structures, since differentiated products are in greater demand, and similarity offers gains from intra-industry specialization. By contrast, in poor countries, complementarity is generally greater the less similar the countries are, since inter-industry trade dominates (DE MELO and PANAGARIYA 1992, pp. 3-4).

- the signaling effect of joining an FTA; e.g. a country signals to national and foreign investors that it can be competitive in a common market;
- the insurance effect of an FTA against undesirable and possible future events, such as a trade war with its neighbors, or the frequent application of safeguard measures¹⁶;
- the increase in bargaining power and the creation of a coordination device; e.g. the negotiating power of a "union" is clearly greater than that of a single country;
- the coordination function of an FTA for general trade liberalization; e.g. free trade areas can play an important role in overall trade liberalization (JOSLING 1993).

3.3 Potential Effects of BFTA and CEFTA

Given these theoretical considerations, it seems worthwhile investigating what kind of agricultural trade effects can be observed in or expected from the plurilateral arrangements between the CEAs. Since, a more extensive liberalization of agricultural trade in the CEFTA has only been in force since January 1996, and the agricultural agreement in the BFTA only since January 1997, the trade and welfare effects cannot yet be analyzed on a quantitative basis. Thus the following exposition will have to be confined to a qualitative analysis.

A positive impetus to the intensification of agricultural trade and the increase in welfare in the BFTA compared to the CEFTA is that the former group has liberalized its agricultural trade through a complete removal of intra-regional barriers, while the success in removing agricultural trade barriers has so far only been partial in the CEFTA. Nevertheless, potential growth in intra-regional trade can be expected to be far more pronounced in the CEFTA than in the BFTA. There are several reasons for this. Firstly, CEFTA encompasses a much larger market. While the three Baltic countries together have less than eight million consumers, the population of the CEFTA amounts to almost 90 million and is thus more than ten times larger. Secondly, to a much greater extent than the CEFTA members, the individual Baltic countries seem to have similar production structures and thus similar comparative advantages¹⁷. As a consequence, export structures are competitive rather than complementary, which is a further problem for the expansion of intra-regional trade¹⁸. This holds especially since the Baltic states are characterized by a low income level. Poor countries' trade, however, is generally dominated by inter-industry trade, and the existence of a competitive advantage in the same areas seems to present particular difficulties. With Poland, Romania and Slovenia, the CEFTA encompasses countries which have a "high" pre-FTA tariff, while the Baltics have comparably low protection. Thus the trade- and welfare-enhancing effects induced by a high pre-FTA tariff are also very likely to be greater in the CEFTA than in the BFTA.

Improved efficiency due to increased competition and the realization of economies of scale are often said to increase trade and improve welfare inside and outside the FTA. There are conflicting opinions about the latter in the case of small FTAs: while KOPSIDIS (1997) argues that economies of scale cannot be expected in the Baltic countries due to the small size of the BFTA, FERNÁNDEZ (1997) supports the thesis that small countries draw relatively greater benefit from expanded markets in terms of increased competition and economies of scale, because they start at a lower base. The latter can be the case if a decrease of the average cost curve already exists at relatively lower levels of production. Thus the answer seems to depend very much on the characteristics of the subsectors considered.

In general the realization of economies of scale is of much higher relevance in the agricultural downstream and upstream sectors than in agriculture itself. With respect to most subsectors of the food industry, the assumption of a more continuous decrease in average costs seems to be plausible. Thus there are good reasons to assume that most subsectors of the food industry in the BFTA countries will also benefit, due to the better utilization of economies of scale.

The FTAs of the CEAs have often been considered as a "front garden" to the EU (CLEMENT 1997, p. 39); this also implies that the effects discussed so far might not be the CEAs' only reasons for creating or becoming

¹⁵ Policies that are time inconsistent will be reversed in the future due to predictable developments over time. In contrast, time consistent policies will be sustained as circumstances change over time, although they may not be optimal at the point in time at which they are pursued.

¹⁶ Article XIX, GATT (1947) provides for a regulative framework which allows countries to introduce protective measures if "any product is imported in such quantities and under such conditions as to cause (...) serious injury to domestic producers".

¹⁷ See also KAZLAUSKIENE and MEYERS (1997, p. 7) and KOPSIDIS (1997, p. 12).

¹⁸ In 1996 intra-regional exports (imports) in the BFTA accounted for around 14 % (6%) of total exports (imports). In the case of agricultural products, about 12 % (6%) of all agricultural exports (imports) were traded between the Baltic countries in 1994, i.e. before the creation of a free trade area for agricultural products (KAZLAUSKIENE and MEYERS 1997).

members of an FTA. Assuming that an important reason is seen in the EU membership they aspire to¹⁹, it is necessary to take a closer look at the "non-traditional" or external effects of membership in BFTA or CEFTA with respect to this issue.

For a country like Estonia, which, in the past years, has shown its eagerness to pursue a very liberal trade regime, credibility and time consistency might not be a problem. Romania on the other hand, which has shown a high degree of volatility in its policies, will find it more difficult to convince the EU Commission or potential investors that its recent liberalization and reform commitments are of a permanent nature. When it became a member of the CEFTA, Romania had to lower its tariffs considerably, and this action is expected to be more time consistent than previous declarations of intent because of its incorporation into the framework of this FTA. CEFTA and BFTA membership might make it easier to join an EU integration scheme, since it reveals these countries' integration capability. They have signaled that their agri-food sectors can survive under competition, and that their institutions are capable of dealing with the issues arising in the context of an FTA. The EU has itself been very much in favor of regional integration schemes within the CEAs, and can be expected to use the signals of regional integration as a "preliminary test" for their eventual integration into the Union.

FTAs do add stability to the trading environment by reducing the danger of individual trading partners' ad hoc protective measures. Because it is an effect which works internally, the insurance aspect can be expected to be of higher relevance in the CEFTA with its six signatory parties than in the "small" BFTA.

Although a phrase expressing the mutual support of all CEFTA member countries during the EU integration process was omitted from the final text of the 1997 summit communiqué (EAST EUROPE 9/97), the membership in a Central European FTA could be a tool for the coordination of accession strategies and improve the bargaining power of CEAs. As there is a competition for EU funds, especially between the association countries and the poorer member countries, it is important that the CEAs do not act as rivals. Until now coordination between the CEAs with respect to EU accession has generally been limited, and the FTAs do not seem to be sufficiently utilized as a tool for coordination by their member states. One major impediment in this respect could be the lack of permanent institutions, e.g. a CEFTA secretariat has not been established (CLEMENT 1997, p. 39), while another important drawback might be the existence of at least two groups of countries with different timetables for their potential accession.

There is broad consensus in the literature that, even though an FTA principally allows each member country to pursue its own trade and domestic policies, the impact of these policies is often undermined (see e.g. JOSLING 1993). A general exception are policies which are decoupled, such as direct income support, i.e. measures which have been attributed to the "green box" in the UR negotiations. The reason is, that rules of origin generally set in FTAs are often not successful in preventing the leakage of third country products from the lowest-price country to a high-price country. Even if the rules of origin were enforced, the lower-price countries in an FTA (e.g. Estonia in the BFTA) could export all its production to the higher-price countries (e.g. Latvia in the BFTA) and cover its consumption needs through imports from the world markets (JOSLING 1993). It is therefore essential to harmonize policies in an FTA; this is very likely to lead to a more liberal policy framework, given the GATT/WTO constraints²⁰.

With respect to the "traditional" as well as the "non-traditional" trade and welfare effects of creating or becoming a member of CEFTA or BFTA, a generally positive impact can be expected (see also CLEMENT 1997, pp. 38-43) In a comparison of both FTAs, the CEFTA countries can be expected not only to gain more from trade creation, but also to have more impact than the BFTA with respect to the external effects. This is mainly due to CEFTA's size.

The positive effects could certainly be enhanced if the two FTAs were to merge. Especially the BFTA could gain considerably from such a fusion, particularly if the CEFTA had by then provided for a total liberalization of agricultural trade. First steps in the direction of one large FTA can be seen in the bilateral agreements each of the Baltics has signed with members of the CEFTA. On the other hand, the first eastern enlargement of the EU will cause important changes in the medium to long term structure of both trade agreements. Those countries which have been admitted to the accession negotiations can be expected to reduce their commitment for a continued trade liberalization inside the regional agreement and might eventually 'drop out' of the CEFTA or BFTA.

¹⁹ This is also revealed by the fact that only countries who have signed association agreements with the EU can become members of CEFTA.

²⁰ At this point it should, however, be noted that Slovenia, being the most protectionist member of CEFTA, has so far succeeded in slowing down the internal agricultural liberalization process and might even be able to slow down CEFTA's external liberalization. But given the GATT/WTO constraints, it will not succeed in harmonizing external protection at a higher average level in CEFTA.

4 INTEGRATION OF THE CEAS INTO THE EU

The CEAs' integration efforts have not been limited to agreements with each other. In fact all CEAs have expressed their strong desire to become members of the EU. The conclusion of trade agreements between the EU and the CEAs can be regarded as a first step towards an enlarged Union.

4.1 The Association Agreements

Different forms of trade agreements have been concluded between the CEAs and the EU in the past years: Trade and Economic Cooperation Agreements, Interim Agreements, Agreements on Free Trade and Trade-related Matters and finally, the last step of integration before becoming a member of the EU, the Europe Agreements. The Europe Agreements are in effect for Hungary, Poland, Romania, Bulgaria, the Czech and Slovak Republics and the three Baltic states²¹, while Slovenia is still awaiting ratification by the EU member state parliaments. Slovenia has an Agreement on Free Trade and Trade-related Matters, which is very similar to the Europe Agreements where trade regulations are concerned. This agreement is therefore also referred to as Europe Agreement below.

The Europe Agreements cover five main areas: political dialogue, economic cooperation, financial assistance, adoption of EU legislation and trade liberalization. Trade and cooperation provisions in the Europe Agreements call for MFN treatment and a gradual elimination of quantitative restrictions over a 10-year period. Agriculture and other sensitive sectors such as textiles are covered by separate protocols.

The protocols for agriculture are similar for all CEAs. For exports from the EU to the CEAs, tariffs are lowered either once by 10 % when the Agreement comes into effect, or gradually, by one percent each year. For exports from CEAs to the EU, there are different regulations which depend on the commodity traded:

- without quantitative restriction and without tariffs (i.e. horses for slaughter, fat livers of geese, horse radish);
- without quantitative restrictions, but with ad hoc reduced tariffs (including a wide range of fruit and berries);
- fixed quotas with consecutively lowered tariffs and levies (i.e. cheese, tomatoes, garlic);
- annually extended quotas with ad hoc reduced tariffs and levies by 50-60 % (i.e. milk powder, butter, live pigs, pig meat, poultry);
- annually extended quotas with tariffs and levies successively reduced by 20 %, 40 %, 60 % (i.e. onions, cabbage, salad, frozen vegetables, apple juice)
- groups of countries (i.e. Poland, the Czech Republic, Slovak Republic and Hungary) share a common quota for cattle which can be activated if the EU imports less cattle than the amount fixed in the Agreement. In this case levies for the specific quantity are reduced by 75 %.

The Europe Agreements were structured in an asymmetrical way to promote CEA exports to the EU. Up to now, however, they have not fulfilled the CEAs' expectations. While the EU's agricultural exports to these countries rose substantially in the period 1992 to 1996, the CEAs' exports to the EU only increased slightly, making most of those countries net importers of agri-food products from the EU (see Table 3). In addition, the CEAs fully utilized their EU preference quotas for only a few products throughout 1993, 1994 and 1995. At first glance, one could conclude that, instead of promoting agricultural exports from the CEAs to the EU, the agreements might have had the opposite effect. In addition to structural flaws in the Association Agreements, other external and internal factors might have led to the poor export performance of the CEAs in recent years (see FROHBERG and HARTMANN 1997; OVERBERG and TANGERMANN 1997). Internal factors that have induced this development are:

- restrictions on the production levels of the countries considered, e.g. transition-induced, but also serious droughts in some of these countries in 1992 and 1993;
- lack of quality and insufficient standards (i.e. no Baltic slaughterhouse satisfies the hygiene standards of the EU);
- inefficiencies in the food industry that hamper the competitiveness of the primary sector;
- instability of agricultural policies (see also section 2.1).

The full utilization of the preference quota has also been prevented due to external factors such as:

- the allocation of the quotas to EU importers and not to CEA exporters;
- a lack of information on the allocation of quotas by the EU Commission;
- a lack of familiarity with EU procedures;
- the EU's quarterly administration of preferential quotas²².

²¹ For Estonia, Latvia and Lithuania the ratification procedure has only been completed in January 1998 (Internet information from the EUROPEAN COMMISSION DG 1A: <http://europa.eu.int/comm/dg1a/index.htm>).

²² See also ECONOMIC RESEARCH SERVICE/USDA (1997, p. 25).

In addition, both the agreement reached in the UR of Multilateral Trade Negotiations, and the EU north enlargement have affected, and will continue to affect, the agricultural concessions granted in the Europe Agreements (FROHBERG and HARTMANN 1997). To compensate for the erosion of preferences, amendments were made to the Association Agreements, which take the form of "Additional Protocols" to the initial Agreements. Their effects are listed below.

- The reduction of the applicable duty in percent of the MFN tariff was in many cases extended from 50-60 % to 80 %.
- For most products, the tariff quotas were extended.

In addition, the EU Commission seems to have realized that some changes in quota management are needed to ensure quotas are used more in the future, although a change in the general procedure for issuing licenses will most probably not take place (see FROHBERG and HARTMANN 1997).

4.2 Implications of an EU East Enlargement for the Non-Member CEAs

In December 1997 the EU Council of Ministers confirmed the proposal of the EU Commission to start negotiations for accession with the Czech Republic, Estonia, Hungary, Poland and Slovenia. The EU Commission based its decision primarily on the fulfillment of the following three criteria in the respective countries (EU COMMISSION 1997b):

- democratic legislation and the consideration of minority rights;
- progress in reforms and capability to cope with competition in the EU;
- capability to apply the *aquis communautaire*.

The discussion about an EU east enlargement very often focuses on the effects this might have on the Union. Particularly the fact that an accession of the CEAs to the EU will enlarge the farming sector in the EU has given rise to some concern²³. There has also been some discussion on the possible impact an accession might have on the countries concerned²⁴. However, little attention has so far been paid to the possible repercussions the first east enlargement will have on those CEAs that will not be invited to join the EU in the first round. Table 4 clearly shows that the EU is an important trading partner in agriculture for all countries, accounting for 55 % of the CEAs' agri-food imports and for 38 % of their exports in 1996. As discussed in section 3.2, enlargement of a trading block theoretically gives rise to two effects: trade creation and trade diversion. The latter could have negative repercussions for those countries that will be left outside in the first round of east enlargement. This is likely to occur if the NewMCs export the same type of commodities to the EU-15 as the CEAs remaining outside the Union (NonMCs), and if trade barriers for exports of these products to the EU exist at the time of east enlargement. Where exports are not similar or European import tariffs are close to zero, there is little scope for trade diversion.

The level of protection given in the EU agricultural policy certainly varies considerably for different products. This aspect will be neglected here; the possibility that the first east accession may divert trade away from the NonMCs will be assessed exclusively on the basis of the degree of similarity (in comparative advantage) between exports from each of the NewMCs and each of the NonMCs to the EU. For this purpose two different indices are calculated: the Export Similarity Index of FINGER and KREININ (S_{ij} , see equation (1)) and the Relative Revealed Export Advantage Indicator (RXA, see equation (2))²⁵.

The Export Similarity Index reveals the proportion of exports from a NonMC (i) to the EU that is equal to the exports from a NewMC (j).

$$(1) \quad S_{ij} = \sum_P \text{Min}(M_{i,P}, M_{j,P})$$

with $M_{i,P}$ being the share of product P in total EU imports from country i, and $M_{j,P}$ being the share of product P in total EU imports from country j. The index ranges between 0 and 1. It will take the value of 1, if the structures of exports from countries i and j to the EU are identical; in a case where export patterns are completely dissimilar, it will equal 0. Table 5 presents the results for 1996, as well as for the period 1994 to 1996. This also gives some indication of the stability of the results over the last years.

The figures in Table 5 suggest that all NonMCs are strongly influenced by the first east enlargement. Table 5 reveals especially high figures for the Slovak Republic. Exports from the Slovak Republic to the EU not only have a more than 50 % overlap with exports from the Czech Republic, but also a relatively high degree of similarity with exports from Poland and Hungary. For Bulgaria and Romania the accession of Hungary to the

²³ See e.g. ANDERSON and TYERS (1993); BALDWIN (1994); BRENTON and GROS (1993); LEI (1996); MAFF (1994); MATTHEWS (1994); TANGERMANN (1994); TARDITI (1994).

²⁴ See e.g. BANSE and MÜNCH (1997), FROHBERG et al. (1998, forthcoming).

²⁵ For a discussion and the application of these methods, see also FINGER and KREININ (1979); BRENTON et al. (1997).

EU will pose the biggest problem, since about 40 % of their exports to the EU match with Hungarian exports to the EU. Latvia and Lithuania are most affected by the accession of Estonia and Poland.

To analyze in which product areas the repercussions of an EU east enlargement might be greatest for the NonMCs, the similarity index was also calculated for four different groups of agricultural and food products: raw products, minimally processed products, semi-processed products and highly processed products. To reveal the importance of the four product categories in total agricultural exports of the considered NonMC into the EU, Table 6 summarizes these ratios.

Table 5 reveals especially high s_{ij} values for the NonMCs Romania and the Slovak Republic with the NewMCs Czech Republic, Hungary and Poland in the product category "raw agricultural commodities". Considering that in 1996 about 31 % of Romanian and 21% of Slovak agricultural exports to the EU consisted of raw products, these two countries might be especially affected where this product group is concerned (see Table 6). The high similarity in export structures between Romania and Slovakia on the one hand and Poland and the Czech Republic on the other is due mainly to live bovine animals, which account for 25 % and 37% of total Romanian and Slovak exports of this product group in 1996 respectively. The similarity in the export structures of those two countries and Hungary arises from exports of live sheep and goats.

In the second product group which encompasses minimally processed commodities, the overlap between the export structures is especially pronounced between the Slovak and the Czech Republics, Bulgaria and Hungary, and between Latvia and Estonia. The latter is, however, not due to agricultural products, but can be almost exclusively related to exports of fish.

The high similarity in the export structures of Bulgaria and Hungary for the third product category is due mainly to semi-processed fruit, vegetables and nuts, while the high index figures resulting for the Czech and the Slovak Republics are mainly due to oil cake, dried legume, milk and cream as well as malt exports from these countries to the EU. Complementarity in the structure of exports to the EU also exists between the NonMCs Latvia and Lithuania and the NewMC Estonia. Exports of milk products from all three countries to the EU are the major reason for this. In addition, exports of fish fillet to the EU are important for Latvia and Estonia.

Finally, in the group of highly processed agricultural products, it is mainly the export of fruit juices that leads to the high similarity index between Lithuania and Poland.

The similarity index of FINGER and KREININ has revealed the percentage of overlap in exports to the EU between each individual NonMC and each individual NewMC. However, it was not analyzed whether the respective country had a comparative advantage in the products where this overlap was observed. An alternative way to identify the countries remaining outside the union that are likely to be affected most severely by the new east enlargement is to assess in a first step those products for which the NonMCs and the NewMCs possess a comparative advantage in exports to the EU. This can be measured with the Relative Revealed Export Advantage Indicator:

$$(2) \quad RXA_{ij} = \frac{(X_{ij} / \sum_{l, l \neq j} X_{il})}{(\sum_{k, k \neq i} X_{kj} / \sum_{k, k \neq i} \sum_{l, l \neq j} X_{kl})}$$

In equation (2), X refers to exports to the EU, with the subscripts i and k denoting the product categories, while j and l denote the country categories. The numerator is equal to a country's exports of a specific product category to the EU relative to exports of this product from all other countries to the EU. The denominator reveals the exports of all products but the considered commodity from the respective country to the EU as a percentage of all other countries' exports of all other products to the EU. Counting countries or products twice is thus prevented in this indicator. This is especially important if the country considered is a fairly important agent in the EU market, and/or the commodity/commodity group considered is important in EU imports. The level of this indicator shows the degree of competitiveness. Values for RXA which are above 1 suggest that the country has a comparative advantage in the considered product category, values below 1 point out comparative disadvantages. The RXA was calculated at a 4-digit level of the CN-Code for each of the ten CEAs.

In a second step the share of exports to the EU of each NonMC in which this country and the considered NewMCs have a relative revealed comparative advantage was calculated. It seems reasonable to assume that trade diversion is more likely to occur if a NewMC and a NonMC possess a competitive advantage in exports to the EU market for the same kind of products.

As can be seen in Table 7, an overlap in competitive advantage in 60 % of its trade with the EU could be recorded for each of the NonMCs with at least one of the NewMCs in 1996 and in the period 1994 to 1996. Thus more than 60 % of exports from the NonMCs to the EU may be generally exposed to increased competition from the respective NewMC. The strongest competitor for Bulgaria and Romania is Hungary, and for the Slovak Republic it is the Czech Republic. Thus the ranking of NewMCs whose accession to the EU

might affect Bulgaria, Romania and the Slovak Republic most, is identical with the that according to the similarity index. (see Table 5). However, this does not need to be the case, since the calculation of the two indices differs. While the similarity index calculates the degree of overlap in trade, the second indicator estimates for each product whether an overlap in comparative advantage exists between the respective NonMC and a NewMC, and sums up the percentage of exports from the considered NonMC for which this holds. Thus the respective values in Table 5 may be identical to, lower, or higher than those in Table 7. Table 7 suggests that Latvia and Lithuania might be affected most by the entry of Estonia into the EU, while the similarity index indicated that Poland's entry into the EU will pose the biggest problem for these countries.

Thus, while all NonMCs seem to have cause for concern, the product categories where repercussions are most likely vary, as does the extent to which this applies. Tables 5 and 7 reveal especially high values for the Slovak Republic. This is mainly due to the high similarity between Slovak and Czech exports to the EU (Table 5), and to the high overlap of comparative advantage of Slovak and Czech exports to the EU (Table 7). However, this does not necessarily imply that the Slovak Republic is affected most by the first east enlargement. Indeed, taking into account the importance of the EU as an export market for the respective NonMC (see Table 4), Romania seems to be the country most affected by the first accession, while the results suggest that Latvia is hit the least. The latter is due to the fact that there is not much similarity between exports from Latvia and those from the NewMC, and that Latvia's export share to the EU is also rather small. At this point it should be noted that the analysis so far can only give a first indication with respect to the possible repercussions of the first east enlargement on the NonMCs. Further studies also need to consider the post-accession level of EU protection expected on those markets where a high degree of similarity has been detected between NewMCs and the respective NonMC, since trade divergence will take place on markets with a high level of EU protection.

5 CONCLUSION

This article has examined the consequences of current developments in agricultural trade policies and trade agreements for the CEAs. Its findings are summarized below.

- National agricultural trade policies have been extended in recent years, and increasingly oriented towards higher protectionism in most CEAs, thus resulting in a rise in market distortions in the considered countries.
- As a result of the agricultural reforms under GATT/WTO, agricultural protectionism is expected to be somewhat lowered, and world market price instability to be marginally reduced. While the latter effect will be beneficial for all countries, the assessment of the former effect from the point of view of CEA welfare depends on the agricultural trade position of the respective country, the possible erosion of granted preferences by third countries, and the scale of domestic distortions in the initial situation. However, for the overall welfare impact it is crucial whether the GATT bindings force a CEA to reduce its agricultural protection, or whether they even encourage an increase in protection, thus aggravating welfare losses.
- Integration efforts among the CEAs open up the prospect of more rapid developments for the countries involved. The benefits of the CEFTA seem to outweigh those of the BFTA. The merging of these two free trade areas would probably benefit all participating countries.
- The Association Agreements between the EU and the CEAs are aimed at promoting CEA exports to the EU. Internal factors such as insufficient sanitary and phytosanitary standards in the CEAs, as well as external factors such as structural flaws in the Europe Agreements have led to a deterioration of the trade balance of most CEAs for trade with the EU.
- A first EU enlargement might cause trade diversion effects that will result in welfare losses for those CEAs who are not joining in the first round. These negative repercussions are due to the relatively high share of NonMC exports in total exports to the EU, the considerable similarity between NonMC and NewMC (comparative advantage in) exports to the EU, and the generally high level of EU protection. Romania seems to be affected the most.

Current developments in CEA agricultural policies and trade agreements carry a number of risks, but they also hold opportunities for the economies in transition. While it is difficult for the CEAs to influence policies outside their borders, the best strategy for these countries is to ensure optimum use of their own resources. This does not only involve a reduction of existing internal trade distortions and ad hoc policy intervention, but also the provision of an adequate framework for economic agents, such as sanitary and phytosanitary standards, as well as of functioning market and price information systems. Closer cooperation among the CEAs might not only help to overcome the small market constraint; it could also help to increase their bargaining power in international trade negotiations and versus the EU, and might ease the integration process into the EU.

REFERENCES

- ANDERSON, K., TYERS, R. (1993): Implications of EC Expansion for European Agricultural Policies, Trade and Welfare, *Discussion Paper No. 829*, CEPR (Centre for Economic Policy Research), London.
- BALDWIN, R.E. (1994): Towards an Integrated Europe, CEPR, London.
- BANSE, M., MÜNCH, W. (1998): Auswirkungen eines EU-Beitritts der Visegrad-Staaten - Eine Partielle und Allgemeine Gleichgewichtsanalyse, in: HEIBENHUBER, A. and VON URFF, W.(eds.): Land- und Ernährungswirtschaft in einer erweiterten EU, *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V.*, Band 34, Münster-Hiltrup.
- BRENTON, P., GROS, D. (1993): The Budgetary Implications of EC Enlargement, *CEPS Working Document No.787*, Brussels.
- BRENTON, P., TOURDYEVA, N., WHALLEY, J. (1997): The Potential Trade Effects of an FTA between the EU and Russia, *Weltwirtschaftliches Archiv*, Vol. 133, No. 2, pp. 205-225.
- CLEMENT, H. (1997): Integration in Osteuropa vor dem Hintergrund der Osterweiterung von NATO und EU, *Osteuropa-Institut München Working Paper, Nr. 208*, München.
- DE MELO, J., PANAGARIYA, A. (1992): The New Regionalism in Trade Policy, Washington, DC.
- DE MELO, J., MONTENEGRO, C., PANAGARIYA, A. (1992): Regional Integration, Old and New, *World Bank Policy Research Working Papers, Trade Policy, WPS 985*, Washington DC.
- EAST EUROPE AGRICULTURE AND FOOD 4/97; 5/97; 7/97; 9/97.
- ECONOMIC RESEARCH SERVICE/USDA (1997): Agricultural Outlook: Agricultural Trade Environment with an Enlarged European Union, Washington D.C.
- EU COMMISSION (1996): Council Regulation (EC) 1926/96 and Council Regulation (EC) 1595/97.
- EU COMMISSION (1997a): The CAP and Enlargement. Agrifood Price Developments in Five Association Countries, Brussels.
- EU COMMISSION (1997b): Agenda 2000: Commission's Opinion on the Associated Countries' Application for Membership, Brussels.
- EUROSTAT (1997): Intra- and Extra- Trade of the European Union, Supplement 2, Luxembourg.
- FERNÁNDEZ R. (1997): Returns to Regionalism: An Evaluation of Nontraditional Gains from Regional Trade Agreements, *World Bank Policy Research Working Paper*, Washington DC.
- FINGER, J.M., KREININ, M.E. (1979): A measure of "export similarity" and its possible uses, *The Economic Journal*, Vol. 89, pp. 905-912.
- FREE TRADE AGREEMENT BETWEEN THE REPUBLIC OF ESTONIA AND THE REPUBLIC OF LATVIA AND THE REPUBLIC OF LITHUANIA ON TRADE IN AGRICULTURAL PRODUCTS (1996).
- FROHBERG, K., HARTMANN (1997): Promoting CEA-Agricultural Exports through Association Agreements with the EU - Why it is not working, *IAMO Discussion Paper No. 1*, Halle/Saale.
- FROHBERG, K., HARTMANN, M. (1998): Die „effektive“ Protektion der Landwirtschaft in den MEL, in: VON URFF, W., HEIBENHUBER, A. (eds.): *Land- und Ernährungswirtschaft in einer erweiterten EU. Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaus*, Volume 34, forthcoming.
- FROHBERG, K., HARTMANN, M., WEINGARTEN, P., WAHL, O., FOCK, A. (1998): Development of CEEC Agriculture under Three Scenarios - Current CEEC Policies, CAP 1995/96, Agenda 2000, in: BROCKMEIER, M., SCHMITZ, P.M.(eds.): *Economic Transition and the Greening of Policies: Modeling New Challenges for Agriculture and Agribusiness in Europe*, Kiel, forthcoming.

- HARTMANN, M. (1995): New Developments in International Agricultural Trade. A Threat or a Chance for LDCs and CEECs? *Intereconomics*, Vol. 30, No. 2, pp. 59-65.
- INOTAI, A., KISS, J. (1996): Central and Eastern Europe's Integration into the World Trading Systems, in: *World Trade after the Uruguay Round*, Development and Peace Foundation, London & New York.
- JOSLING, T. E. (1993): Agriculture in a World of Trading Blocks, *Australian Journal of Agricultural Economics*, Vol. 37, No. 3, pp. 155-179.
- KAZLAUSKIENE, N., MEYERS, W.H. (1997): The Baltic Free Trade Agreement in Agriculture: Issues and Potential Impacts, Center for Agricultural and Rural Development, Iowa State University.
- KOPSIDIS, M. (1997): Regionale Integration und Entwicklung der baltischen Landwirtschaft, in: VON URFF, W., HEIBENHUBER, A. (eds.): *Land- und Ernährungswirtschaft in einer erweiterten EU. Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaus*, Volume 34, forthcoming.
- LANG, F. P., STANGE, A.M. (1994): Integrationstheorie: Eine kritische Übersicht, *Jahrbuch für Sozialwissenschaft*, Vol. 45, pp. 141-170.
- LANGHAMMER, R.J., HIEMENZ, U. (1990): Regional Integration in Developing Countries. Opportunities, Obstacles and Options, *Kieler Studien*, Institut für Weltwirtschaft an der Universität Kiel, Tübingen.
- LEI (ed.) (1996): Accession of the four Visegrad Countries to the EU: Costs for the Agricultural Budget, *Working Paper No. 545*, The Hague.
- MAFF (1994): Agricultural Budgetary Implications of Accession by the Countries of Central and Eastern Europe, London.
- MATTHEWS, A.: The disappearing budget constraint on EU agricultural policy, *Food Policy*, (forthcoming).
- OECD (1996a): Indicators of Tariff & Non-tariff Trade Barriers, Paris.
- OECD/CCET (1996b): Trade Policies and the Transition Process, Paris.
- OECD (1997): Agricultural Policies in Transition Economies, Monitoring and Evaluation 1997, Paris.
- OVERBERG, B., TANGERMANN, S. (1997): Die Auswirkungen der Europa-Abkommen mit den mitteleuropäischen Ländern auf den Agrarhandel, *Agrarwirtschaft* 46.
- SCHIFF, M. (1996): Small is Beautiful: Preferential Trade Agreements and The Impact of Country Size, Market Share, Efficiency and Trade Policy, *World Bank Policy Research Working Paper*, Washington DC.
- SCHOTT, J. J. (1994): The Uruguay Round, An Assessment, Institute for International Economics, Washington DC.
- TANGERMANN, S., JOSLING, T.E. (1994): Pre-Accession Agricultural Policies for Central Europe and the European Union, Study commissioned by Directorate I of the EU Commission, Brussels.
- TARDITI, S., SENIOR-NELLO, S., MARSH, J. (1994): Agricultural Strategies for the Enlargement of the European Union to Central and Eastern European Countries, Study commissioned by Directorate I of the EU Commission, Brussels.
- TWESTEN, H. (1997): Implikationen der WTO-Verpflichtungen der Visegrad-Staaten für den Beitritt zur Europäischen Union, in: VON URFF, W., HEIBENHUBER, A. (eds.): *Land- und Ernährungswirtschaft in einer erweiterten EU. Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaus*, Volume 34, forthcoming.

- VALDÉS, A. (1997): *Joining an Existing Regional Trade Agreement: Issues and Policies from the Perspective of a Small Open Economy in Latin America*, in: VALDÉS, C., ROE, T.(eds.): *Economic Integration in the Western Hemisphere, Proceedings of a Symposium sponsored by the International Agricultural Trade Research Consortium and the Inter-American Institute for Cooperation on Agriculture*, June 1995, Costa Rica.
- YÜKSEL, A. S. (1996): *GATT/WTO: Welthandelssystem unter besonderer Berücksichtigung der Außenwirtschaftsbeziehungen der Europäischen Union*, Frankfurt a.M.

ANNEX 1: GENERAL OUTLINE OF THE URUGUAY ROUND AGREEMENT ON AGRICULTURE

The main provisions of the agreement on agriculture are shortly described in the following paragraph. For developing countries, the provisions are generally defined in such way to provide for longer time periods and ask for less reduction in agricultural protection. As Romania holds the developing country status, the respective market access, export subsidy and domestic support provisions are set in brackets.

I Market Access

a) Tariffication: one of the substantial achievements of the UR is seen in the transformation of non-tariff trade barriers, such as quantitative restrictions, voluntary export restraints, licenses and variable levies, into bound tariffs²⁶. Countries have to convert all existing non-tariff measures into tariffs, which are then combined with existing tariffs. This fusion of tariff equivalents and original tariffs is bound and cut by an unweighted average of 36 % over six years (24 % over 10 years) from their 1986-88 levels. Countries are flexible in structuring the cuts for individual products, cutting tariffs for some products by much more than average and by much less for others, as long as each tariff is reduced by at least 15 % over the implementation period.

b) Minimal Access Commitments: Imports of at least 3 % of the home consumption at the start, and at least 5 % at the end of the 6-year period have to be granted. This generally means that tariff rate quotas are established for specific products, with the in-quota tariff set at "low or minimal" rate, allowing competition between imported products and high-cost domestic products (SCHOTT, 1994).

II Export Subsidies

There has been agreement to reduce export subsidies in value by 36 (24) %, and in volume by 21 (14) % in equal annual installments from 1986-90 levels. In addition, a prohibition to subsidize exports of products which have not been subject to export subsidies in the base period has been introduced.

III Domestic Support

The agreement establishes a ceiling for the total domestic support calculated as the AMS. The AMS has to be reduced by 20 (10) % over six years from the average level of the base period (1986-88). "Green box" and "blue box" measures such as the EU structural funds or the US deficiency payments are excluded from this regulation.

²⁶ For a comprehensive description of the benefits of tariffs compared to non-tariff trade barriers see also OECD 1996a.

ANNEX 2: Tables

Table 1: Trade Policies in the CEAs

	Export Subsidies	Import Subsidies	Export Tariffs	Import Tariffs	Import Quotas	Licences and Arrangements
BULGARIA	not applied ⁵	n.a.	fixed tariffs on wheat and flour ³	mostly for dairy products, 15-40% ³ cereals 25%, meat 20-70% dairy 15-25%, sugar 40% ⁵	applied ³	non- automatic licencing on imports of tobacco ⁵
CZECH REPUBLIC	for some products exported by State fund for Market Regulation ³ dairy products ⁵	n.a.	n.a.	escalatory tariffs, average 9% for primary-, 19% for semi-processed and 23% for fully processed goods, general average 19 %	tariff quotas ⁴	non- automatic licencing with quantity limits for exports automatic licencing of imports ⁵
ESTONIA	not applied ⁵	not applied ⁵	not applied ⁵	zero tariffs countervailing duties against imports below world market price ⁵	not applied ⁵	government support: up to 50% of costs of exporters for market research and advertising ⁵
HUNGARY	fixed rate export subsidies for wheat, poultry, pork, maize etc. ² (50% of agric. budget)	n.a.	n.a.	average tariff of 46% ³ weighted average 23% ⁵	n.a.	licences e.g. for wheat exports ³
LATVIA	periodically in 1995 ⁶ for dairy products ⁵	not applied ⁶	not applied ⁶	average tariff 40 % ad valorem ¹ live animals & meat 40%, dairy 55% fruit & vegetables 30-40% ⁵	until 3/97 for sugar still for grain and cereals ²	licences for grain trade ¹ since 3/97 for sugar ²
LITHUANIA	for dairy and meat products ⁵	not applied ⁶	up to 60 % ¹	10-30 % ¹ ; 5% olive oil ² 87 % for grain, 35% for refined sugar,	import tariff quotas ⁶	8 % VAT on domestic products, 18% on imports ⁵
POLAND	tax reductions ⁴ , pork to NIS ⁵ occasionally: sugar, butter, skimmed milk powder; pork, potato starch ³	exemption on customs duties on e.g. raw flax, oilseed cake, skins ⁴	n.a.	weighted average tariff 23 % (1996) ^{3,5}	tariff quotas ³	licencing ³
ROMANIA	not applied ⁴	n.a.	not applied ⁴	anti-dumping duties ⁴ 80% weighted average ⁵	tariff-quotas ⁴	licences: raw hide/skins, wood, advance payment for export of live animals, meat, milk & dairy, grains ⁴
SLOVAK REPUBLIC	e.g. skimmed milk powder, malt, honey (1995) ³	potatoes, sugar (1995) ³	n.a.	cereals 24%, sunflower seeds 46%, beef 39-43%, poultry 50% butter 78%, beet sugar 67% ⁵	n.a.	licences e.g. for export of bread wheat ³ Import deposits from 5/97 on ⁷
SLOVENIA	not applied ⁵	n.a.	n.a.	tariffs in accordance with GATT 20-70 % ad valorem (live cattle 80 %) ³	tariff quotas e.g. for wheat, maize ³	state monopoly on imports of e.g. wheat, sugar, oilseeds ³

Source: 1. INTERNET USDA: International Agriculture and Trade 5/97 2. EUROPEAN COMMISSION (1997b) 3. OECD (1997)
4. INTERNET EU: Sectoral and Trade Barriers Database 5. OECD/CCET (1996b) 6. KAZLAUSKIENE and MEYERS (1997)
7. EAST EUROPE 4/97; 5/97

Table 2: Main Trade Agreements of the CEAs

Country	Agreements with the European Union	CEFTA	BFTA	WTO	Bilateral Trade Agreements
Bulgaria	Interim Agreement on Trade 12/93 Europe Agreement 2/95	obs. ¹		M ³	Czech Republic Slovak Republic
Czech Republic	Interim Agreement on Trade 3/92 Europe Agreement 2/95	3/93		M	Slovak Republic (customs union) Bulgaria Romania Slovenia Latvia Estonia
Estonia	Trade & Economic Cooperation Agreement 2/93 Agreement on Free Trade and Trade-related Matters 1/95 Europe Agreement 2/98	obs.	(4/94) ² 1/97	N ⁴	Ukraine Czech Republic Norway Switzerland
Hungary	Interim Agreement on Trade 3/93 Europe Agreement 2/94	3/93		M	
Latvia	Trade & Economic Cooperation Agreement 2/93 Agreement on Free Trade and Trade-related Matters 1/95 Europe Agreement 2/98	obs.	(4/94) 1/97	N	Czech Republic Norway Switzerland
Lithuania	Trade & Economic Cooperation Agreement 2/93 Agreement on Free Trade and Trade-related Matters 1/95 Europe Agreement 2/98	obs.	(4/94) 1/97	N	Norway Switzerland Poland
Poland	Interim Agreement on Trade 3/92 Europe Agreement 2/94	3/93		M	Lithuania Israel
Romania	Interim Agreement on Trade 12/93 Europe Agreement 2/95	7/97		M	Czech Republic Slovak Republic Slovenia
Slovak Republic	Interim Agreement on Trade 3/92 Europe Agreement 2/95	3/93		M	Czech Republic (customs union) Bulgaria Romania
Slovenia	Trade and Economic Cooperation Agreements 9/93 Europe Agreement 6/95	1/96		M	Macedonia Czech Republic

1) observer status

2) BFTA for industrial products

3) member

4) negotiation and observer status

Source: EUROPEAN COMMISSION (1997b), OECD/OECD (1996c)

Table 3: Value of CEA Trade in Agricultural and Food Products with the EU (in Mio ECU)

Countries	Exports to EU-15						Imports from EU-15						Net Trade with the EU				
	1992	1993	1994	1995	1996	change (1996/1992)	1992	1993	1994	1995	1996	change (1996/1992)	1992	1993	1994	1995	1996
Bulgaria	172	165	189	217	198	16%	122	209	218	222	145	19%	49	-45	-29	-4	53
Czech Rep.¹	267	219	250	280	269	23%	408	414	543	743	832	104%	-140	-195	-293	-463	-563
Estonia	8	10	18	27	38	376%	64	80	84	178	219	241%	-56	-71	-66	-151	-181
Hungary	754	670	741	872	935	24%	224	332	424	424	363	62%	530	337	317	447	573
Latvia	5	11	9	13	18	296%	68	91	124	194	215	215%	-64	-80	-115	-182	-197
Lithuania	22	36	31	46	61	181%	114	157	171	164	209	84%	-92	-120	-140	-118	-147
Poland	859	729	791	877	858	0%	898	1.059	1.060	1.226	1.467	63%	-39	-330	-269	-349	-609
Romania	74	79	100	121	130	76%	316	312	174	278	293	-7%	-242	-233	-74	-157	-163
Slovak Rep.¹	267	37	48	60	62	67%	408	108	125	197	213	-48%	-140	-71	-77	-137	-150
CEA-10	46	69	68	58	65	41%	68	205	263	359	363	434%	-22	-136	-195	-301	-298
CEA-10	2.474	2.025	2.245	2.570	2.635	7%	2.689	2.969	3.187	3.985	4.318	61%	-216	-943	-942	-1.415	-1.682

1) Between 1993 and 1996 for the Czech Republic and the Slovak Republic.

Source: own calculations based on data from EUROSTAT (1997).

Table 4: Destination and Origin of CEA Agricultural Trade: Share of Country Groups in Total Value

	EU		Other OECD		CEAs ¹		NIS		Other	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Bulgaria	22	21	1	15	25	8	40	9	12	47
Czech Republic	38	57	3	6	38	16	15	0	6	20
Estonia	20	64	3	8	15	12	59	10	2	6
Hungary	47	43	6	8	17	5	20	1	10	43
Latvia	15	51	0	0	12	27	72	12	1	11
Lithuania	18	45	4	3	12	17	63	21	4	14
Poland	49	70	2	5	6	10	36	6	7	9
Romania	22	40	13	15	10	6	18	5	37	35
Slovak Republic	17	36	2	4	56	43	19	1	7	17
Slovenia	32	47	4	9	3	14	5	2	57	29
CEA-10²	38	55	4	7	16	14	29	5	12	20

1) Includes Poland, Hungary and Czech Republic which became members of OECD in 1996.

2) Weighted with the share of each CEA in total CEA exports and imports.

Source: own calculations based on data from OECD (1997).

Table 5: Similarity between NonMC and NewMC Exports to the EU¹

All Agricultural Products										
	Czech Rep.		Estonia		Hungary		Poland		Slovenia	
	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996
Bulgaria	0,14	0,16	0,11	0,09	0,42	0,37	0,26	0,26	0,20	0,22
Latvia	0,20	0,28	0,35	0,42	0,12	0,13	0,30	0,31	0,14	0,14
Lithuania	0,22	0,23	0,37	0,47	0,17	0,16	0,41	0,36	0,22	0,20
Romania	0,29	0,29	0,09	0,08	0,38	0,39	0,34	0,34	0,25	0,26
Slovak Rep.	0,56	0,53	0,16	0,15	0,29	0,27	0,32	0,31	0,21	0,22
Group 1: Agricultural Raw Products										
	Czech Rep.		Estonia		Hungary		Poland		Slovenia	
	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996
Bulgaria	0,19	0,25	0,13	0,26	0,43	0,36	0,23	0,21	0,14	0,14
Latvia	0,09	0,14	0,34	0,15	0,08	0,11	0,17	0,14	0,06	0,10
Lithuania	0,13	0,12	0,38	0,45	0,10	0,09	0,29	0,28	0,18	0,06
Romania	0,57	0,52	0,08	0,07	0,57	0,63	0,64	0,49	0,18	0,27
Slovak Rep.	0,58	0,50	0,07	0,10	0,50	0,52	0,63	0,57	0,13	0,17
Group 2: Minimally Processed Agricultural Products										
	Czech Rep.		Estonia		Hungary		Poland		Slovenia	
	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996
Bulgaria	0,19	0,16	0,15	0,10	0,53	0,45	0,38	0,36	0,18	0,21
Latvia	0,18	0,20	0,49	0,60	0,13	0,17	0,32	0,37	0,14	0,17
Lithuania	0,25	0,21	0,26	0,33	0,19	0,17	0,37	0,34	0,23	0,18
Romania	0,22	0,18	0,14	0,15	0,30	0,30	0,31	0,35	0,18	0,18
Slovak Rep.	0,57	0,61	0,18	0,21	0,26	0,27	0,35	0,30	0,26	0,23
Group 3: Semi-processed Agricultural and Food Products										
	Czech Rep.		Estonia		Hungary		Poland		Slovenia	
	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996
Bulgaria	0,20	0,21	0,19	0,16	0,58	0,54	0,37	0,33	0,33	0,26
Latvia	0,33	0,44	0,49	0,50	0,13	0,05	0,39	0,32	0,08	0,05
Lithuania	0,33	0,38	0,52	0,61	0,28	0,27	0,34	0,33	0,24	0,23
Romania	0,34	0,52	0,14	0,09	0,40	0,44	0,35	0,35	0,22	0,17
Slovak Rep.	0,70	0,64	0,22	0,18	0,31	0,35	0,27	0,29	0,30	0,35
Group 4: Highly Processed Agricultural and Food Products										
	Czech Rep.		Estonia		Hungary		Poland		Slovenia	
	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996	Average 1994-1996	1996
Bulgaria	0,09	0,11	0,13	0,17	0,33	0,35	0,18	0,20	0,19	0,24
Latvia	0,24	0,29	0,25	0,42	0,17	0,20	0,45	0,29	0,27	0,42
Lithuania	0,15	0,11	0,28	0,35	0,13	0,12	0,60	0,56	0,18	0,19
Romania	0,14	0,12	0,10	0,09	0,42	0,43	0,24	0,19	0,37	0,36
Slovak Rep.	0,31	0,25	0,14	0,18	0,19	0,11	0,21	0,14	0,40	0,32

1) Measured with the Finger-Kreinin Export Similarity Index.

Source: own calculations based on data from EUROSTAT (1997).

Table 6: Relative Importance of Agricultural Exports of the NonMCs into the EU with respect to their Level of Processing

PRODUCT	(% of Total Agricultural Exports into the EU)				
	Bulgaria	Latvia	Lithuania	Romania	Slovak Republic
1996					
Agricultural Products					
- Raw ¹	10	4	2	31	21
- Minimally processed ²	30	45	28	28	29
- Semi-processed ³	16	36	52	15	41
- Highly processed ⁴	44	15	17	25	9
Average 1994-1996					
Agricultural Products					
- Raw	14	5	3	30	28
- Minimally processed	33	47	36	29	25
- Semi-processed	15	21	42	15	39
- Highly processed	39	27	18	26	8

The reference product groups according to the CN nomenclature are:

- 1) 102-106; 301; 401; 409, 410; 501, 502, 507, 509, 511; 601, 602; 807-810; 905-909; 1001-1008; 1201-1203, 1209; 1301; 1403; 1802; 2401
- 2) 201-210; 302, 303, 306, 307; 407; 503-506; 508, 510; 603, 604; 701-709, 714; 801-806, 814; 901-904, 910; 1202, 1204-1207, 1210-1214; 1401, 1402, 1404; 1503, 1506; 1603; 1703
- 3) 304, 305; 402-405, 408; 710-713; 811-813; 1101-1109; 1208; 1302; 1501, 1502, 1504, 1505, 1507-1522; 1701, 1702; 1801, 1803-1805; 2101, 2102; 2201, 2207; 2301-2309
- 4) 406; 1601, 1602, 1604, 1605; 1704; 1806; 1901-1905; 2001-2009; 2103-2106; 2202-2206, 2208, 2209; 2402, 2403

Source: own calculations based on data from EUROSTAT (1997).

Table 7: Share of NonMCs' Exports to the EU in which the NonMC and the considered NewMC have a Relative Revealed Comparative Advantage¹

NonMC	Czech Republic		Estonia		Hungary		Poland		Slovenia	
	Average		Average		Average		Average		Average	
	1994-1996	1996	1994-1996	1996	1994-1996	1996	1994-1996	1996	1994-1996	1996
Bulgaria	0,21	0,14	0,13	0,06	0,68	0,64	0,33	0,30	0,50	0,53
Latvia	0,39	0,42	0,42	0,60	0,20	0,11	0,58	0,61	0,24	0,21
Lithuania	0,45	0,43	0,44	0,56	0,27	0,22	0,68	0,79	0,54	0,64
Romania	0,34	0,35	0,11	0,14	0,70	0,70	0,54	0,54	0,40	0,44
Slovak Rep.	0,72	0,67	0,21	0,27	0,46	0,44	0,62	0,64	0,32	0,45

1) Measured with the Relative Revealed Comparative Advantage Index (see equation (2)).

Source: own calculations based on data from EUROSTAT (1997).

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