



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*The CMEA** Countries and World Trade in Food and Agricultural Products*

In 1985 the European CMEA countries – including the Soviet Union – contained 8.1 per cent of the world's population living on 18 per cent of the world's area. This region possesses at least 20 per cent of the world's agricultural production potential. In 1986 the countries in question accounted for 16.1 per cent of world grain production and their share in world meat production was 18.1 per cent. At the same time, in 1986 these countries were obliged to import 14.2 billion dollars' worth of agricultural products, thus exerting a considerable influence on the development of the world market in some important agricultural products (for example, in the 1980s about a quarter of world cereal imports went to the European members of the CMEA). This explains the keen interest shown in recent years in the agricultural problems of the European CMEA countries. There can be no doubt about the future of agricultural markets; any interpretation of agricultural liberalization must include an analysis of the probable behaviour and special problems of this group of countries. This study deals with the agricultural foreign trade of the European member countries of the CMEA, including the Soviet Union. In addition to an analysis of international trade relations, attention is directed mainly towards the agricultural trade policy of the CMEA countries and the effects on this region of a possible liberalization of agricultural trade.

THE EUROPEAN CMEA COUNTRIES IN WORLD AGRICULTURAL TRADE

Table 1 shows the share of the European CMEA countries and the Soviet Union in the production of the major agricultural products and in international trade. Altogether 9.3 per cent of the world's agricultural imports went to the countries in question, while these countries' contribution to global imports was 3.9 per cent. So the part played by the CMEA countries in world agricultural trade is smaller than their importance in world production would justify. Another important feature is that in the past decade the part played by this group of countries in world agricultural trade has tended to decline. By 1986 their share in world imports had fallen to 80.9 per cent of its 1975 level. The ground lost was

* Karl Marx University of Economics, Budapest.

** CMEA: Council for Mutual Economic Assistance.

TABLE 1 *The share of the CMEA countries, including the Soviet Union, in the production of and foreign trade in agricultural products – per cent*

	1975	1980	1985	1986	1986 as a % of 1970
Cereals					
production	15.1	16.9	14.8	16.1	106.6
export	4.4	2.7	3.0	2.7	61.4
import	17.3	22.1	23.0	17.1	98.8
Wheat					
production	25.1	28.7	21.8	23.8	94.8
export	6.6	4.2	4.6	4.1	62.1
import	18.4	21.6	23.5	17.6	95.7
Meat					
production	19.6	17.8	18.2	18.1	92.3
export	11.4	9.1	9.3	8.7	76.3
import	9.8	12.2	9.4	9.4	95.9
Milk					
production	29.9	27.9	27.5	27.5	92.0
export	2.0	1.9	2.3	1.9	95.0
import	1.0	1.8	1.7	1.7	170.0
Eggs					
production	19.9	19.4	20.0	20.1	101.0
export	21.5	11.9	5.8	5.1	23.7
import	9.8	5.8	2.8	3.1	31.6
Sugar					
production	13.9 ^x	13.1	13.1	13.2	95.0
export	1.8	2.5	3.5	5.3	294.4
import	18.1	21.3	21.2	23.9	132.0

Note: x = 1976

Sources: FAO Production Year Book 1987, FAO, Rome
FAO Trade Year Book 1987, FAO, Rome

even greater in exports, where their share amounted to only 67.2 per cent of its 1975 level.

The background to this region's loss of ground in world agricultural trade varies widely from product to product. In the agricultural trade of the European CMEA countries cereals, protein fodder, meat, meat products and sugar are of decisive importance. The proportional share of these products in world trade has not diminished; in fact, the proportional share of imports to this region has actually increased as compared with the 1970s (in 1985 the countries concerned had a 19.1 per cent share of world imports of this group of products). This was due mainly to the big increase in the Soviet Unions's purchases of grain and meat in the 1970s.

The regions's role in world trade in agricultural products was especially badly affected by the decline in world market prices. Between 1979 and 1985 import

and export volumes remained virtually unchanged. In 1986, however, imports fell back considerably, by more than 20 per cent as compared with the level of 1979–81, while exports hardly changed. In 1985 export prices showed particularly unfavourable movements, but in 1986 price levels in exports improved perceptibly. Such a considerable fall in export prices indicates that the agricultural export structure of the countries concerned had not adapted itself to the new situation in the world market; commodity stocks were not available to allow an increase in turnover to compensate for price losses.

On the whole the regions' agricultural foreign trade balance is negative. In 1986 the negative balance of the European socialist countries' agricultural foreign trade turnover was 14.2 billion dollars. In 1986 the Soviet Union was the world's third biggest agricultural importer after the United States and the Federal Republic of Germany. In that year the Soviet Union imported more than 15 billion dollars' worth of agricultural products, while the value of Soviet agricultural exports was only 2.5 billion dollars.

Besides the Soviet Union, the six small European CMEA countries, considered as a whole, are in a permanent net importing position with regard to agricultural products. In 1986 the total value of their exports was 6.5 billion dollars, while that of imports was 7.8 billion dollars. The negative balance was thus 1.3 billion dollars, which represents a level of self-sufficiency of around 98 per cent. From the point of view of agricultural foreign trade the six countries can be divided into two groups. Those countries which are typically net importers are the German Democratic Republic, Czechoslovakia and, to a lesser extent, Poland. The amount of net import is especially large in the case of the GDR and Czechoslovakia. In addition to its sizeable volume of imports Poland carries on considerable export activity; in the past two to three years Poland's net agricultural imports have decreased to about a quarter of their 1981–3 level. Hungary, Romania and Bulgaria can be regarded as exporting countries. Hungary's export surplus in the production of foodstuffs is particularly outstanding. In 1986 Hungary accounted for more than 20 per cent of all agricultural exports from the European CMEA countries. Traditionally, Romania and Bulgaria are also agricultural exporting countries. In the case of Bulgaria the figures for 1985, when the weather was unusually bad, do not reflect the real situation: they fall below the level of previous years, but 1986, on the other hand, was a year of outstanding achievements in export.

In the agricultural foreign trade of the European CMEA countries the differences in the structure of exports and imports deserves attention. Among imports the dominant products are cereals, protein fodder, meat products, fruit and vegetables, tropical fruit and tropical agricultural products, especially coffee. Among exports – if we leave aside Hungary's grain exports and the large volume of Soviet cotton exports – the most characteristic items are meat and meat products, vegetable oil, and fresh and processed vegetables and fruit.

The foreign trade turnover in agricultural products plays a varying role in the economy and in the international trade relations of the individual countries. The proportion of agricultural products in total foreign trade is the biggest (about 25 per cent) for Hungarian exports; in 1985 Bulgaria came second with 18.4 per cent. In the case of the Soviet Union and Czechoslovakia this group of products accounts for only 6–8 per cent of exports. On the import side, the Soviet Union

tops the list. Agricultural products regularly account for 20–30 per cent of all Soviet imports, whereas this group of products represents only 10 per cent of Bulgaria's imports. Irrespective of the absolute proportions, export revenue and foreign exchange expenditure on agricultural foreign trade are significant factors in the balance of payments of all these countries. This is especially true of the smaller countries, which are accumulating bigger debt burdens and where the hard currency balance of agricultural foreign trade can be of decisive importance for the solution of payments problems in any given year.

In terms of their main relationships the agricultural foreign trade of the European CMEA countries can be analysed only indirectly. Only three countries¹ release comprehensive statistical information according to the UN system, but in the case of the other countries it is possible to trace the main relations on the basis of national statistics.

In the European socialist countries' agricultural trade with Western Europe, West European agricultural exports to Eastern Europe are of major significance. Western Europe, however, cannot be regarded as the regions' important agricultural supplier. In recent years West European agricultural exports to Eastern Europe have shown a substantial decline; in 1985 the total value of such exports was only 3.7 billion dollars, compared with 5.9 billion dollars in 1981 (this represents 14.8 per cent of the region's total agricultural import). The main suppliers were France, the Federal Republic of Germany, Holland and the United Kingdom. The Soviet Union heads the list of buyers, followed by the GDR and Poland.

Eastern Europe's contribution to Western Europe's agricultural imports is rather modest. In 1985 the value of agricultural exports to Western Europe from Eastern Europe was about 2.6 billion dollars, 2.5 per cent of all West European imports. The FRG is the main customer for exports from Eastern Europe, receiving about 30 per cent of these countries' exports. Their second biggest customer is Italy. In third place is France, whose imports from Eastern Europe fell back considerably between 1981 and 1985.

The developed industrial countries outside Europe can be regarded as the main agricultural suppliers of the region. This is due principally to the Soviet Union's sizeable imports of grain. Argentina, Canada, Australia and the USA provide the main bulk of grain exports to the Soviet Union. These countries are likewise the chief sources of the other socialist countries' grain imports. The volume of agricultural exports from the CMEA countries to developed capitalist countries outside Europe is fairly insignificant. It is worth while mentioning, however, the goods (mainly meat products and highly processed foodstuffs) sold by Romania, Hungary and Poland on the North American markets.

Agricultural trade within the European CMEA region deserves special attention. Here the agricultural export from the smaller European countries, principally Hungary and Bulgaria, to the Soviet Union is the characteristic feature. In the first half of the 1980s the Soviet Union was the outlet for about half of Hungary's agricultural exports, and more than 40 per cent of Czechoslovakia's agricultural exports also went to the Soviet Union. It should also be mentioned that the Soviet Union is the main buyer of Bulgaria's grain, fresh and processed fruit and vegetables, eggs and wine.

The agricultural trade among the socialist countries – like many other forms

of trade – is mostly carried on within a complicated system of ‘price bases’, which are different from world prices, and bilateral rouble accounting. The proportion of bilateral barter agreements is also very considerable. Only a relatively small amount of agricultural trade, which fluctuates widely from year to year according to specific market conditions, is transacted in hard currency at world market prices. It is in Soviet–Hungarian agricultural trade that the proportion of hard currency accounting is the biggest, although even here it represents only a fraction of total trade turnover.

The European socialist countries’ agricultural trade with developing countries lags behind trade with developed market economies both in value and in volume. Imports consist of tropical agricultural products, mainly coffee, cocoa and raw materials of agricultural origin. The developing countries’ biggest contribution is to Hungary’s agricultural imports (46 per cent of total imports), which is largely due to Hungary’s protein fodder purchases from Brazil.

AGRICULTURAL TRADE POLICIES

The agriculture of the seven countries – with their differing natural and economic circumstances – operates on the basis of historical traditions which differ in many respects. It is not surprising, therefore, that in each country agricultural policy and agricultural trade policy have special features which reflect special conditions. It should be underlined, however, that a similar economic structure and a common ideology and political system are clearly evident in the main features of agricultural trade policy.²

Foreign trade constitutes an integral part of the centrally planned economy in each of these countries. One of the most important characteristics of the classical planned economy is the state monopoly and high-level centralization of foreign trade. The implementation of targets which appear in national economic plans and contain the most important commercial policy aims is achieved through a combined system of national foreign trade plans and plans relating to individual foreign trading companies. The supply of commodity stocks necessary for foreign trade is provided for by a system of targets often in the form of obligatory instructions, that is, directives.

In this basically uniform system the most important differences can be observed in the case of the relations between plans on different levels and the means used for the implementation of economic policy objectives. The traditional method is well known: centralized foreign trade decisions, broken down to lower levels in the form of directives. Recently – and this is also well known – instruments characteristic of market economies (prices, loans, taxes and so on) have played an increasingly important part in the co-ordination of plan implementation.

A certain loosening of the centralization of foreign trade can also be observed. In some countries (Hungary, for example) cracks have also developed in the rigid state monopoly of foreign trade. It should be stressed, however, that the primacy of planning continues to be characteristic of all these countries, and the basic features of the agricultural foreign trade mechanism remain unchanged. In Hungary, for instance, where the decentralization of foreign trade is the furthest

advanced, two-thirds of agricultural products can still only be sold abroad within the old system through monopoly companies.

The basic feature of the agricultural policy of the seven countries in question is their drive to achieve self-sufficiency, to satisfy their wants to the maximum degree possible from their own products produced under the given natural conditions. In the net exporting countries this means an effort to maximize the positive balance of agricultural trade, while in the importing countries it takes the form of minimizing net expenditure. At the beginning of the 1980s the decline in the rate of economic growth, coupled with increasing debt burdens, intensified efforts towards autarky in the countries concerned. The import of agricultural products – as has already been mentioned – decreased both in volume and in value in the first half of the 1980s, and the level of self-sufficiency improved considerably.

In connection with the rise in the level of self-sufficiency, it should be stressed that in the countries we are considering the development of supply, which determines the consumption of foodstuffs, is not and will continue not to be determined primarily by market and price effects, but by consumption target figures in central plans. These target figures govern decisions on possible imports and serve to determine export commodity stocks. This is why, in the case of basic foodstuffs, in order to guarantee the level of consumption specified in the plan the countries concerned undertake to import certain commodities very often irrespective of the actual world market price level. The import of non-basic foodstuffs, on the other hand, largely depends on the changing international balance of payments. The countries in question regard the overwhelming majority of agricultural products of tropical origin as luxury items and restrict the amount of foreign exchange available for importing them. This explains why in the European socialist countries the supply of tropical agricultural products falls below real demand and per caput consumption of them is much lower than in market economies of the same level of development.

Obviously in the economic system of the socialist countries the key questions of agricultural trade policy such as protectionism, the protection of internal markets and support for export cannot be interpreted in the same way as is usual in market economies. The protection of markets and the implementation of trade policy aims are ensured mainly by the foreign trade decision-making and planning mechanism, the state monopoly of foreign trade. The role of instruments common in market economies, such as prices, tariffs, quotas, levies, and so on, is secondary; in other words, their form depends on the circumstances of the particular economic system. There can be no doubt, however, that the above-mentioned target system (self-sufficiency) and mechanism (state-controlled, centralized trade) are capable of protecting the domestic market very effectively, which in other words can mean a very high level of protectionism. The system of export subsidies is also different from that employed in market economies, but it is used only by a few of the smaller countries.

The instruments used in market economies to measure agricultural protectionism can be interpreted only in the light of the special circumstances of the socialist countries. As a rule, the statistical information available is not adequate for the calculation of such indices, as, for example, NPC, EPC. As we know, Hungary was the first socialist country in which the NPC and EPC indices were calculated for the major agricultural products.³

TABLE 2 *Changes in nominal protection coefficients (NPC) for certain products*

Product	1968	1973	1976	1979	1980	1981	1982	1983
Wheat	1.13	0.42	0.52	0.59	0.50	0.50	0.55	0.58
Maize	0.85	0.57	0.55	0.67	0.62	0.67	0.85	0.81
Sunflower	1.12	0.65	0.66	0.77	0.96	0.89	0.91	0.90
Sunflower oil	1.77	0.92	0.54	0.95	0.99	0.99	1.05	1.03
Granulated sugar	2.57	0.73	1.07	2.48	1.34	1.57	1.68	2.52
Paprika powder	1.34	1.03	1.55	1.18	1.59	1.95	1.89	1.52
Wine (in casks)	0.79	0.75	1.02	0.85	0.64	1.09	1.06	1.04
Apples	0.86	0.40	0.58	0.65	0.63	2.98	1.51	11.48
Live cattle	0.70	0.60	1.06	0.92	0.96	0.90	0.95	0.91
Beef	0.59	0.46	1.02	0.76	1.02	0.97	1.09	1.12
Milk	0.57	0.84	1.18	1.04	0.86	0.78	0.67	0.60
White cream cheese	—	—	—	1.01	1.08	1.07	1.05	1.03
Live pigs	0.97	0.56	0.72	0.94	0.96	0.97	0.97	0.97
Half pigs	0.83	0.61	0.72	0.87	1.30	1.21	1.26	1.34
Live sheep	0.71	0.82	0.92	0.96	1.14	1.14	1.16	1.11
Mutton	0.42	0.36	0.51	0.86	0.99	1.05	0.97	1.22
Broiler chickens	0.89	0.75	0.93	1.10	0.98	0.93	1.03	0.98

TABLE 3 *Changes in effective protection coefficients (EPC)*

Product	1968	1973	1976	1979	1980	1981	1982	1983
Wheat	1.66	0.40	0.53	0.82	0.44	0.45	0.50	0.53
Maize	0.95	0.53	0.39	0.61	0.49	0.60	0.89	0.76
Sunflower	1.24	0.66	0.64	0.80	1.09	1.02	1.11	1.00
Sunflower oil	2.52	1.01	0.61	1.08	1.28	1.37	2.06	1.29
Granulated sugar	6.40	0.70	1.36	281.74	1.91	3.17	3.64	neg.
Paprika powder	1.49	1.10	2.26	1.42	2.30	3.78	2.59	1.86
Wine (in casks)	0.78	0.75	1.13	0.87	0.57	1.33	1.16	1.10
Apples	0.92	0.36	0.54	0.60	0.55	12.67	2.24	neg.
Live cattle	0.49	0.56	8.54	1.24	1.32	1.31	1.11	1.02
Beef	0.32	0.32	neg.	0.65	1.56	1.92	2.22	2.44
Milk	0.42	0.93	3.82	1.41	0.87	0.74	0.51	0.45
White cream cheese	—	—	—	1.16	1.26	1.20	1.10	1.05
Live pigs	1.34	0.50	0.96	3.10	3.26	2.17	1.44	1.71
Half pigs	0.78	0.60	0.90	1.42	24.98	3.16	2.80	4.56
Live sheep	0.47	0.91	1.30	1.18	1.70	2.19	1.79	1.58
Mutton	neg.	0.01	neg.	0.90	1.23	1.55	1.10	2.58
Broiler chickens	0.52	0.51	1.32	3.81	1.34	0.99	1.05	0.99

It is worth while looking at the results of these calculations summarized in Tables 2 and 3. Without drawing any conclusion in relation to either the region as a whole or any other socialist country, it can be observed that the Hungarian figures reveal a low level of protectionism; in fact, they even indicate a negative degree of protectionism.

The NPCs (Nominal Protection Coefficients) summed up in Table 2 show slight positive or negative protectionism in the period between 1968 and 1970 in the case of vegetable products; in other words, domestic producers' prices corresponded approximately to world market prices. In the case of meat products, however, up to 1980 negative protectionism, that is, the undervaluation of domestic products against foreign market prices, was characteristic. From the mid-1970s negative protectionism intensified in the case of vegetable products. The indices for apples and wine have shown positive protectionism since 1981, and that for vegetable oil since 1983. Since 1980 in the case of animal products price differentials have moved in a positive direction, though still within acceptable limits. Protectionism is the strongest in the case of half pigs.

Examining the EPC (Effective Protection Coefficient) indices we can come to similar conclusions (Table 3). Within the examined period of 16 years the 1973 world market price explosion forms a demarcation line here too. Up to 1972 in the case of vegetable products the positive protectionism shown by the NPC index intensified (grain, sunflower seed and oil, granulated sugar, seasoning paprika), while negative protectionism diminished (maize, wine, apples); in other words, cost-efficiency measured against world market prices was lower than the level indicated by domestic prices to producers. In the period prior to 1973, in the case of animal products the negative price differential – measured on value added – lessened, and in the case of live pigs it actually became positive. The indices for mutton cannot be evaluated, because in the first few years the extremely low domestic prices did not even cover material costs.

In the period after 1973 the EPC indices for grain and maize show a strong downward price shift, while for sunflower seed and wine the difference is insignificant. In the case of apples, under the influence of world market prices, which declined steadily after 1981 and fell dramatically in 1983, for the last three years the EPC index shows positive protectionism, while the indices for other vegetable products show positive price differentials of varying size. In the case of animal products – with the exception of milk – after 1973 decidedly positive protectionism prevailed, owing mainly to cheap domestic feed grain but also to the fact that until 1980/81 there was no substantial improvement in efficiency.

One of the consequences of the socialist economic management system is that trade policy lays great emphasis on bilateral relations, and on the need for equilibrium in these various relations. A considerable proportion of the socialist countries' agricultural trade is effected not in free foreign exchange but as part of complicated, sometimes multilateral, barter agreements and activities. The proportion of such deals is especially significant in the trade between the socialist countries and in their import from Third World countries. I am convinced that in the short term the Third World countries can increase their agricultural exports to the CMEA region only if they are prepared to enter into such agreements, or to counterbalance their agricultural exports to the socialist countries with purchases from them.

THE EUROPEAN CMEA COUNTRIES AND THE LIBERALIZATION OF AGRICULTURAL TRADE

There is a lot of talk these days about the liberalization of agricultural trade and this issue plays an important part in the current GATT negotiations. Several studies⁴ have analysed the effects of the possible liberalization on different groups of countries. These analyses hardly touch upon the European CMEA region. With the help of the IIASA (International Institute for Applied Systems Analysis, Laxenburg Austria) global agricultural model system⁵ and using the results of calculations concerning the effects of the liberalization of agricultural trade, we have also examined the probable effect on the CMEA countries of the elimination of agricultural protectionism.

The CMEA countries are dealt with in the IIASA model system as a unified region with production and foreign trade aggregated at CMEA level.⁶ So we have not taken into consideration the individual countries' independent and in many respects different agricultural policies and agricultural market interests. The economic management block of the model describes the system of economic management which uses direct plan directives and in which the connection between world market and domestic market prices is extremely loose. Obviously in this system agricultural protectionism takes on a different meaning from the one it has in market economies. This limits the conclusions that can be drawn from the findings of the model system with regard to the CMEA countries. Nevertheless there are a lot of interesting conclusions that do emerge from this aggregated examination.

At the heart of the IIASA analysis stand five versions of free trade/unilateral liberalization of the OECD, the EEC, the USA and the developing countries, then the liberalization of all countries with market economies,⁷ in which the assumption is that throughout these changes the CMEA countries will maintain their present policies and that liberalization will therefore not extend to this region. It can be stated (see Table 4) that in all versions of our calculations the economic effects of the elimination of agricultural protectionism demonstrable at CMEA level are negative. It is in the case of unilateral liberalization on the part of the OECD countries that the CMEA stands to lose the most. Liberalization by all countries with market economies would have a slightly less unfavourable effect. The elimination of protectionism by the developing countries would have almost insignificant consequences, although the effect of this would also be negative.

These results – however surprising they may seem – prove on more detailed examination to be realistic. The CMEA is at present one of the world's biggest net importing regions with respect to agricultural products. Its main source of imports is the developed capitalist world, the OECD region, which practises agricultural protectionism. Any expansion and restructuring of world trade which might accompany agricultural liberalization and any relative increase in world market prices as a whole would not have a beneficial effect on the CMEA countries. In the event of liberalization, substantial price rises can be predicted for all the major CMEA import items. The economic balance – assuming that the economic structure and policy remain unchanged – is negative even if we take into account the probable increase in the prices of the regions's exports. It should be mentioned here too, however, that in our examination we assumed only partial

TABLE 4 *The effects of the three free trade runs of IIASA model system on economic development*
/Divergence from the Reference Run in the year 2000/

Sector Version	World	Countries	CMEA Countries	Developing Countries
<i>Agricultural GDP^a</i>				
OECD liberalization	0.12	-1.55	-0.44	1.95
Developing countries' liberalization	0.35	-0.42	-0.04	-0.75
General liberalization	-0.15	-2.03	-0.46	1.45
<i>Non-agricultural GDP^a</i>				
OECD liberalization	-0.04	0.18	-0.39	-0.41
Developing countries' liberalization	-0.04	0.03	-0.12	-0.21
General liberalization	-0.06	0.20	-0.29	-0.78
<i>Total GDP^b</i>				
OECD liberalization	0.22	0.48	-0.40	-0.02
Developing countries' liberalization	0.05	0.15	-0.11	-0.10
General liberalization	0.28	0.63	-0.30	-0.22

Notes: ^aAveraged on the basis of the value of national production at 1970 US \$ prices

^bAt 1970 US \$ world market prices

liberalization of trade, that is, we 'liberated' only the trade in agricultural products from intervention. So in analysing the results it must always be borne in mind that the industrial products which constitute the bulk of trade remain subject to the present restrictions. In the event of comprehensive liberalization the effects on the CMEA would probably be different.

Starting from the five versions of free trade runs, we postulated and examined the effects of more flexible market behaviour on the part of the CMEA as well.⁸ In a further version we assumed that producers' prices within the CMEA would follow long-term world market price movements, and we also took account of free trade type behaviour on the part of the CMEA countries (in the production model we removed the restrictions on self-sufficiency). The effects of these changes on a global scale are not very significant. However, the results of our calculations clearly show that the losses suffered by the CMEA as a result of other countries' agricultural liberalization measures will be greatest if the region fails to accommodate itself to changes in other countries. So the more the CMEA accommodates itself and liberalizes its trade, the smaller the uncomfortable effects of agricultural trade liberalization will be, provided, that is, that these changes coincide with a worldwide movement towards agricultural free trade. By reorganizing the regions' agricultural structure on the basis of its comparative advantages, by taking a more active part in world trade, and by increasing export sales revenue we can compensate for import price losses and in the long term by such changes establish the foundations for more rapid development of the whole CMEA economy.

The statements referring to the CMEA as a whole mask the differing interests of the individual countries. The main reason for this is that within the CMEA there is no integrated agricultural policy similar to the so-called common agricultural policy of the EEC, which supports and protects domestic production on a common financial basis. Therefore the interests of agricultural importing and exporting countries within the CMEA in relation to free trade are clearly different, at least in the short run.

In the short term the unfavourable effects of the elimination of agricultural protectionism would be more decisive for the importing countries, and in particular for the Soviet Union. There can be no doubt that in the present situation worldwide agricultural protectionism, especially that practised by the developed countries, is definitely advantageous for the agricultural importing countries of the CMEA region. Thanks to the unrealistically low market prices resulting from artificially created overproduction, ultimately the importing countries also indirectly enjoy the benefits of the billions spent by the EEC and the other developed countries on subsidizing the agricultural sector. These advantages would disappear overnight if the elimination of protectionism drove world market prices higher. The positive economic effects of free trade, however, would be felt only in the long term. (Naturally, what was said earlier about the partial liberalization of trade – applying only to agricultural products – is valid in this context too.)

On the other hand, however, it is the agricultural exporting countries of the CMEA which are hit hardest by the negative effects of today's agricultural protectionism.

- These small Central European countries together with their agricultural products have been driven out of their historical markets, the developed West European countries, the EEC, practically without any economic compensation; in other words, their exports to these places are badly affected by the present discriminatory measures.
- These countries find it more and more difficult to compete in third markets with the subsidized exports from rich countries at the low world market prices created by the protectionist policies of the developed countries.
- Since at CMEA level a policy which grants preferences to domestic production exists only in an indirect form and the system of bilateral agreements offers only partial protection, the state-subsidized export by the developed countries of accumulated surpluses weakens the position of the small exporting countries within the CMEA.

It is no accident, therefore, that an agricultural world market free from protectionism would yield immediate economic advantages for the small agricultural exporting CMEA countries. This explains the increasing efforts of agricultural exporting countries within the CMEA to reform agricultural trade and prices. This question featured on the agenda of the last CMEA council meeting, but because of wide differences of opinion and interests no definite agreement was reached. The fact that Hungary has joined the Cairns group of 14 agricultural exporting countries is a clear indication of the more active trade policy being pursued by the agricultural exporting countries of the CMEA.

So it is indisputable that the *short-term* interests of the agricultural exporting and importing CMEA countries differ with regard to agricultural free trade. If we think in terms of *longer* perspectives, it can be demonstrated that the interests of the agricultural exporting and importing CMEA countries are identical. Development of domestic production based on local potential and comparative advantages, and intensive participation in the international division of labour can only be accomplished in a less protectionist world. In the longer term it would be beneficial to the food-importing CMEA countries too, because the rising cost of imports would give fresh impetus to the efforts already being made to develop domestic agriculture and might help along the difficult process of agricultural integration.

NOTES

¹Czechoslovakia, Hungary and Poland.

²For the agricultural policy of the respective countries see Breda and Wädekin (eds.) 1988.

³On the basis of Hungarian data these calculations to determine the extent of agricultural protectionism were carried out by researchers for the Agricultural Economics Research Institute, Budapest, with the help of experts from the World Bank. Detailed calculation methods and findings can be found in the study by Borszeki Mészáros and Varga (1986).

⁴See Parikh, Fischer, Frohberg and Gulbrandsen (1988); Anderson and Tyers (1987); Valdes and Zeitz (1980).

⁵In connection with the IIASA model system see Parikh and Rabár (1981).

⁶For the CMEA component of IIASA global agricultural model see Csáki (1985).

⁷For information about these runs see K Parikh *et al.*, *op. cit.*

⁸For information about these runs see Csáki and Rabár (1986).

REFERENCES

- Agricultural Review for Europe, 1987, No. 28. Vol. II. *Agricultural Trade 1985–6*, UN/ECE, New York.
- Anderson, K. and Tyers, R., 1987, *Global Effects of Liberalizing Trade in Agriculture*, University of Adelaide.
- Borszéki, É., Mészáros, S. and Varga, Gy., 1986, *Competitiveness of our Food Economy*, Közgazdasági és Jogi Könyv-Kiadó, Budapest (in Hungarian).
- Breda, J. L. and Wädekin, K. E. (eds), 1988, *Socialist Agriculture in Transition*, Westview Press, Boulder, London.
- Csáki, Cs., 1981, *A National Policy Model for the Hungarian Food and Agriculture Sector*, International Institute for Applied Systems Analysis. RR-81–23, Laxenburg, Austria.
- Csáki, Cs., 1982, *Long-term Prospects for Agricultural Development in the European CMEA Countries Including the Soviet Union*, International Institute for Applied Systems Analysis, RR-82–25, Laxenburg, Austria.
- Csáki, Cs., 1985, *Systems Simulation and Systems Analysis in Agriculture*, Akadémiai Kiadó, Elsevier, Budapest Amsterdam.
- Csáki, Cs. and Rabár, F., 1986, 'The Impacts of Trade Liberalization in Agriculture', *Közgazdasági Szemle*, 12. sz. (in Hungarian).
- Csáki, Cs., 1988, 'The Dilemmas of Agricultural Development', Figyelő 4. szám (in Hungarian).
- Parikh, K. S. and Rabár, F., 1981, *Food for All in a Sustainable World: the IIASA Food and Agriculture Program*, Sr. 81–2., IIASA, Laxenburg, Austria.
- Parikh, K. S., Fischer, G., Froberg, K., and Gulbrandsen, O., 1988, *Towards Free Trade in Agriculture*, Martinus Nijhoff Publishers, Dordrecht Boston Lancaster.
- Valdés, A. and Zietz, J., 1980, *Agricultural Protection in OECD Countries: Its Cost to Less Developed Countries*, Research Report No 21, IFPRI, Washington DC.

DISCUSSION OPENING – SECONDO TARDITI

The issues presented in this paper are exceptionally topical and important in the present debate on international trade. Possible developments of 'perestroika' and 'glasnost' (openness) in USSR and other CMEA countries may change profoundly the existing international trade of agricultural products and may have a drastic impact on national agricultural policies as well. These effects would interact with the impact of successful GATT negotiations in lowering barriers to international agricultural trade.

At least four issues may be suggested for the discussion: (a) the likely impact on CMEA countries of the international trade liberalization pursued by GATT negotiations; (b) the impact that liberalization of CMEA economies would have on domestic production and consumption; (c) the impact of these domestic changes on international trade and on the agricultural policies of market economies; (d) the effects that liberalization in domestic economies and in international trade would have on the income redistribution of CMEA countries.

(a) Some forecasts of the impact of liberalization of international trade on CMEA countries are available. The statements presented in the paper are coherent with economic theory and common sense.

Liberalization of international trade would raise the price level on international markets. CMEA countries, being a net importing region, are bound to lose, at least in the short run. Among these countries, net exporters of agricultural products (Hungary, Bulgaria and Rumania) are likely to benefit from higher

world market prices, while other countries are likely to lose according to the composition and deficit of their agricultural trade balance. Quantitative estimates of these impacts are nevertheless scarce due to the lack of statistical information and analytical work on these subjects.

(b) The domestic impact of economic liberalization in CMEA countries is very important but even more uncertain and difficult to predict, as political and social forces are intensely interacting with economic forces. Will Gorbachev succeed in decentralizing and opening the USSR economy to international trade? Is economic liberalization of the product markets feasible without a parallel liberalization of the capital and labour markets? How long will it take? Will all CMEA countries follow the USSR *glasnost*? In the recent CMEA summit East Germany and Rumania did not seem to show much interest in these economic reforms.

What will be the impact on the agricultural sector? Some results presented in this conference by Augustyn Wos for Poland are encouraging. Decentralization of the existing administrative allocation of resources is progressing. At present, the share of agricultural prices fixed by government has decreased to less than 40 per cent, bureaucratic management is reduced and economic relations are gradually demonopolized. As a result production costs have diminished and between the second half of the 1970s and the first half of the 1980s the rate of growth of agricultural output has doubled.

(c) The impact of the economic and trade liberalization in CMEA countries on world agricultural markets is likely to be the most important issue for the majority of participants in this conference, but available information is unfortunately very scarce.

Limited statistical sources and methodological problems are delaying analyses and forecasts of the economic effects of liberalizing centrally planned economies. Actually almost all global models presented in this congress do not analyse in detail the effects of trade liberalization by centrally planned economies. The paper we are discussing is no exception, it only presents a synthesis of possible outcomes.

In practice the likely impact of liberalization in CMEA countries on international trade may be much stronger than expected. If the whole economy is liberalized, the impact on domestic production and on international trade may be very different from projections computed on the bases of past development trends.

As reported in the paper, CMEA countries now account for only 8 per cent of world population, but they account for 18 per cent of land, and are estimated to account for 20 per cent of the global potential agricultural production. Notwithstanding this resource endowment, CMEA countries are at present a net importing region for agricultural products. Efficiency gains from economic liberalization could therefore be striking and greatly modify present patterns of international agricultural trade.

(d) The analysis of the effects of agricultural policies on resource allocation may be usefully integrated with the analysis of their impact on income distribution, as we concluded at the Jakarta IAAE Conference. The effects of agricultural policies on income redistribution is particularly important when dealing with

socialist countries, where personal income distribution is a major political objective.

Although in developed market economies agricultural policies often raise food prices while in CMEA countries price levels are lower, from another point of view the effects of trade liberalization on resource allocation may be considered similar in market and in socialist economies. In both economies administered agricultural prices may be gradually substituted for by more market-oriented prices, favouring private entrepreneurship and a better domestic and international allocation of resources.

The impact of trade liberalization on interpersonal income distribution may be quite divergent. A reduction in agricultural price support in market economies is likely to improve interpersonal income distribution, as it curtails artificial income transfers to farmers in proportion to the amount of marketed production. On the contrary, in socialist economies, a reduced government intervention in agriculture, together with privatization of land and capital is likely to worsen the existing income distribution. Governments therefore trade-off a greater economic efficiency and economic development with a more unequal distribution of personal income.

This reform is likely to increase the overall economic welfare during the liberalization process, as the welfare gains in resource allocation would probably outweigh the welfare losses associated with a worsened interpersonal income distribution. Besides, national objectives in income distribution may be attained more directly by means of macroeconomic policies.

However, in the longer run, the likely improvements on resource allocation could be threatened by the emergence of vested interests in the private sector aiming at artificially supporting prices of agricultural production, as it happens at present in developed market economies. This possible development would further worsen the existing interpersonal distribution of income.