

I. SECTORAL PERFORMANCE: CURRENT AND FUTURE POLICIES

AGRICULTURE AND FOOD SECTOR IN THE ECONOMY AND SECTORAL PERFORMANCE

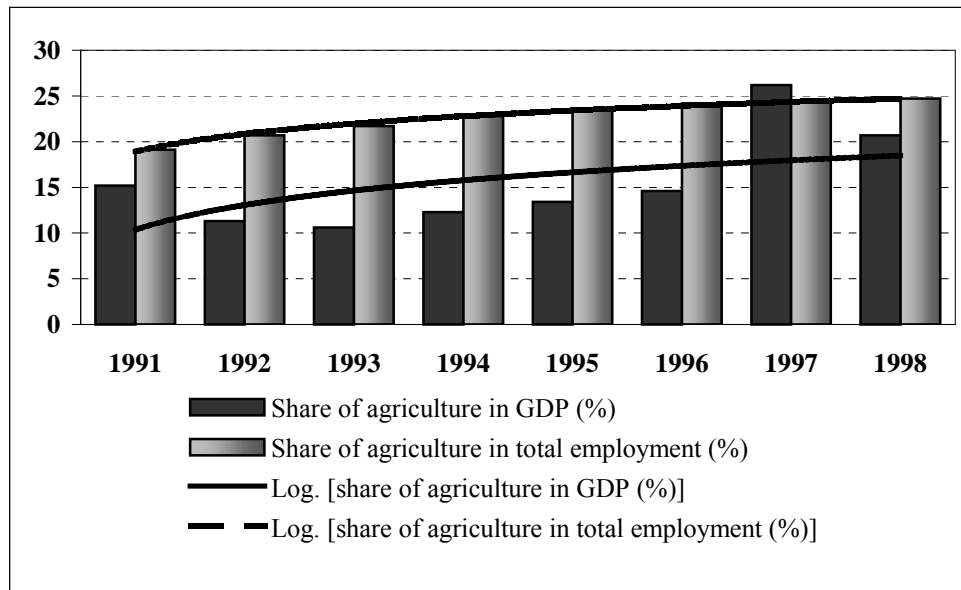
Bulgaria has good natural growing conditions on the two-thirds of its area that are not mountainous. It has fertile soils in the Danube and Maritsa Plains and on its coast. The climate is mild Continental in the north and Mediterranean in the south. Summer crops require irrigation, but water supply has not been a constraint in the past, since there are many rivers and lakes. Before World War II, Bulgarian agriculture was a diversified sector producing a wide range of raw and processed products for domestic consumption and export.

In the post-war period, the communist government's economic policy emphasized industry over agriculture, consistent with the role played by Bulgaria in the Council for Mutual Economic Assistance (CMEA) trade system. Nonetheless, agriculture continued to play a significant, though diminishing, role in the economy during the socialist period. To a greater extent than most other CEECs, agriculture in Bulgaria was organized in very large state-operated farms. It sometimes was presented as a model for other socialist countries, as per capita production and yields increased in the period 1950-80. In retrospect, and in common with other socialist economies, much of the growth was not due to improvement of total factor productivity, however, but to intensive use of other inputs, especially chemicals and fertilizers.

Bulgaria was, even more than other CEECs, integrated into the CMEA trading bloc. As in other socialist countries, trade deals—often barter—were arranged by a state trading agency which had a monopoly position. The country was a significant exporter of agricultural and agroindustrial products, although since exports in this sector (particularly tobacco and fruits and vegetables) were oriented largely toward the CMEA markets, neither price competitiveness nor quality mattered much. Once these markets broke down, Bulgarian exports were in a poor position to compete in the global economy. During the transition the sectoral performance deteriorated and today the sector remains in a precarious situation.

Agriculture in the Bulgarian Economy

The importance of the Bulgarian agricultural sector in the overall economy has remained high throughout the transition, when compared to other CEECs. It is also important to note that, contrary to Bulgaria, the share of food and agriculture has declined as a percentage of overall GDP in the most advanced transition countries, such as Hungary, the Czech Republic, and Poland. The sector's share in GDP through the mid-1990s (about 13% between 1991 and 1996) has been second only to that of the sector in Romania (20%). This climbed sharply in 1997 (26%) and 1998 (21%). (See **Figure 9**.)

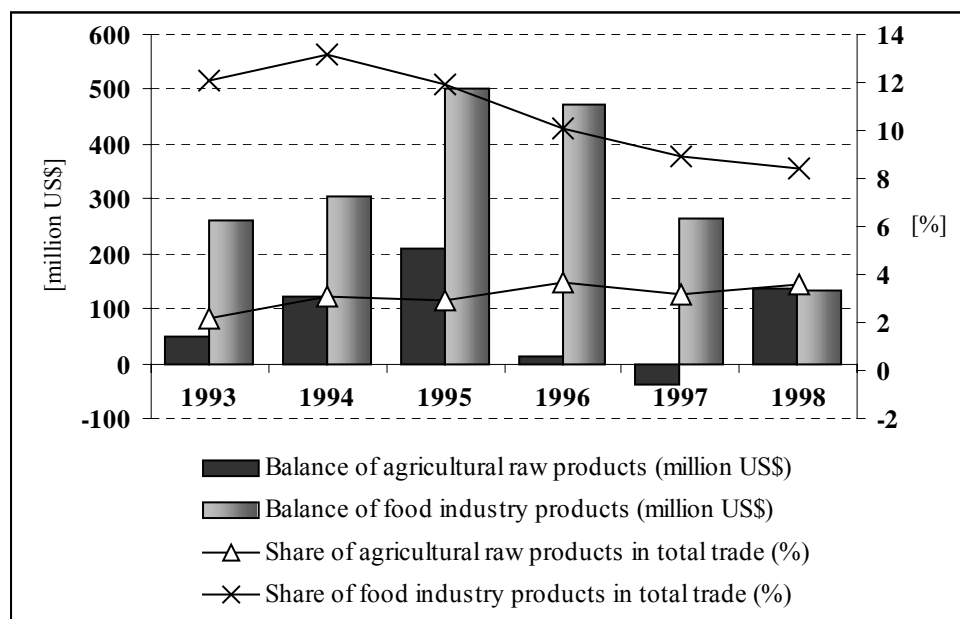
Figure 9: Share of Agriculture in GDP and in Total Employment, 1991-1998

Source: NSI, 1999; European Commission, 1998

According to European standards, agricultural employment in Bulgaria is very high, and only ranks behind Romania and Poland. Another noticeable phenomenon is that, in comparison to some more advanced CEE economies, Bulgaria has experienced an increase in the share of agriculture in total employment. During the economy-wide decline since 1991, and especially the crisis in 1996-97, the significance of agriculture has increased in two ways. First, while the rest of the economy continued to decline in 1997, agriculture grew due to a large extent to favorable growing conditions for grains. Second, agriculture has served as a safety net to absorb some of the labor that has been released from other sectors. Thus its share in employment has grown every year between 1991 and the crisis year 1997, when it reached 24.3% (**Figure 9**). It is the only sector in Bulgaria in which employment actually grew continuously over this period. Currently (1998), agriculture employs 24.7% of the population directly, and about 32% of the population lives in rural areas.

Food and agriculture is an essential component of Bulgaria's foreign trade. In the early 1990s agriculture contributed 20-25% to total exports. In 1998 the share of agriculture (including food) in exports was still 16.4%, which ranked Bulgaria first among the CEEC (**Figure 10**). At the same time, agricultural and food products among imports amounted to only 8-10%.

Figure 10: Foreign Trade with Agricultural and Food Products, Balances and Shares, 1993-1998



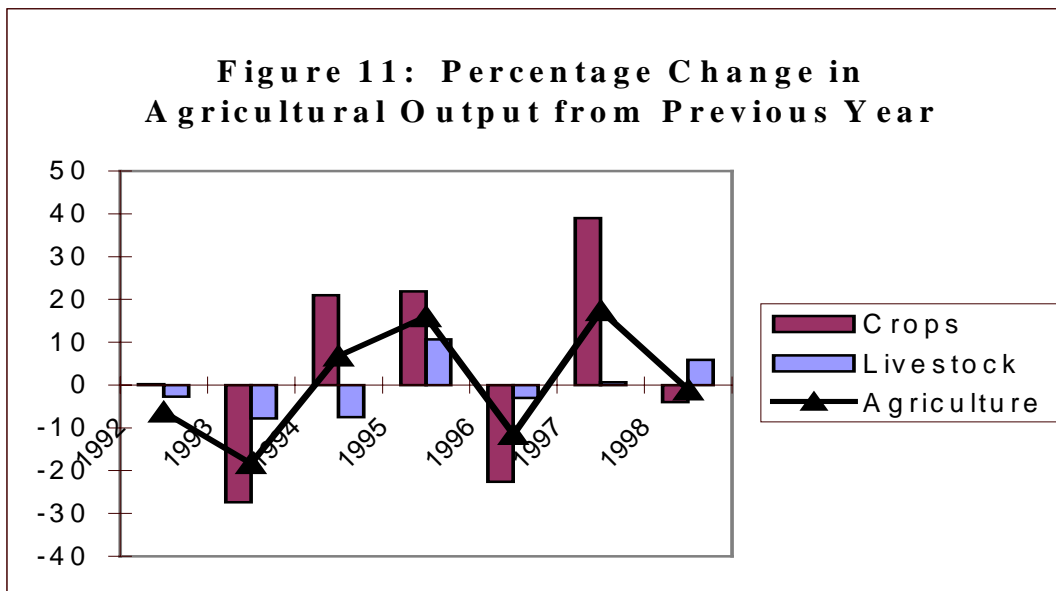
Source: NSI, 1998 and 1999; European Commission, 1998

Primary Agriculture during Transition

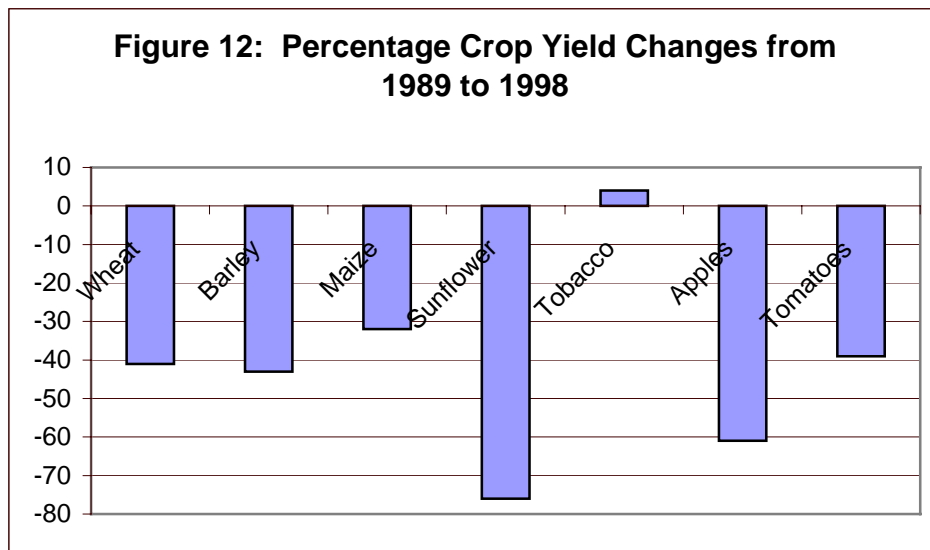
With the end of communism, the Government's first priority in agriculture was to dismantle the most visible symbols of that system—the complexes. This was given priority over other reforms in the areas of pricing policy and privatization, and the way in which it was carried out was quite disruptive. Non-land assets were to be distributed among those who had contributed land, non-land assets, or labor to the cooperative. Animals were the first assets to be distributed. Because of the highly subsidized nature of livestock production in the socialist period, the livestock population was inefficiently large, and declined as subsidies were reduced in any case. This tendency was exacerbated by the fact that many animals were given to farmers who were ill-equipped to care for them, resulting in a large reduction in the herd. In the distribution of land, farmers were supposed to be charged for improvements that had been undertaken in the socialist period. The level of these charges was set relatively high, and private land tenure was still tenuous, with the result that land claimants inflicted widespread intentional damage to irrigation infrastructure, livestock buildings, and orchards to reduce the value of the improvements and minimize their financial liability.

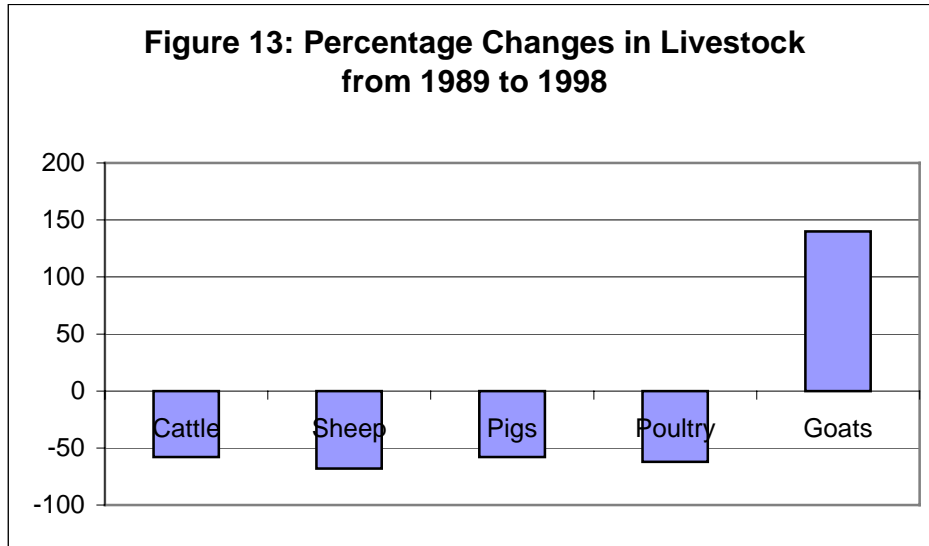
As a result of changes during transition, agricultural production has declined both in terms of output and yields of main products. In 1997, according to official FAO figures, agricultural production was only about 55% of its 1989 level. The performance of the food and agricultural sector shows a rather erratic pattern behind the overall declining tendencies (**Figure 11**). The crop production has fluctuated especially, when viewed on an annual basis. Since the number of animals also sharply declined and this was accompanied by lower yields, the result has been a drastic reduction in output of all

livestock products (**Figure 13**). The roles of crop and livestock production have been changing continuously, but in general crop sector has maintained its dominance.



The main crops are cereals, vegetables, tobacco. Yields of major crops (with the exception of tobacco) declined during the 1990s by 40% to 60% (**Figure 12**). Mineral fertilizer use declined precipitously from close to 800,000 tons in 1989 to less than 200,000 tons in 1996. Mechanization also declined, although not so dramatically. The major livestock products are meat, dairy and eggs. Most animal production declined at even greater rate than those for crops (**Figure 13**).

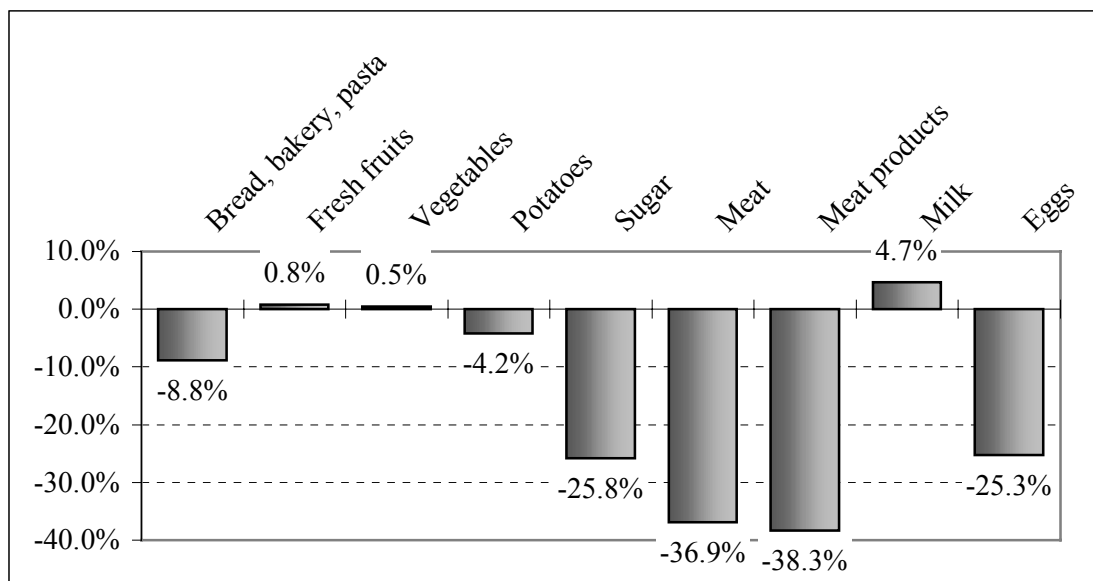




Domestic Consumption and Foreign Trade

The adverse effects of these internally generated supply-side disruptions were magnified by sharp falls in demand for agricultural products. This was due to declines in both external demand as Bulgaria's traditional trading relations in the CMEA disintegrated, and domestic demand as the economy contracted. The per capita consumption of major food and agricultural products, especially meat consumption, declined significantly (**Figure 14**).

Figure 14: Change in per Capita Food Consumption: 1989-98

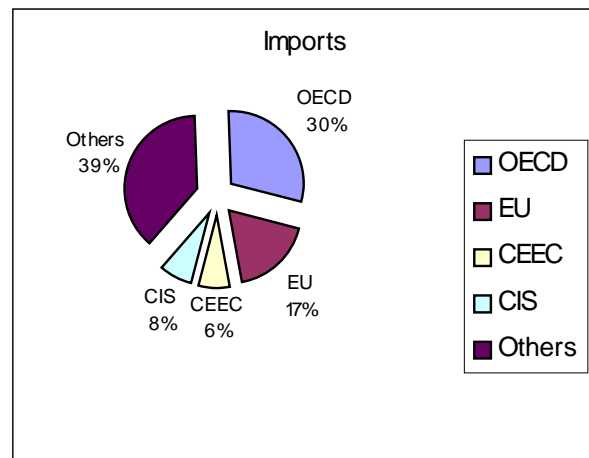
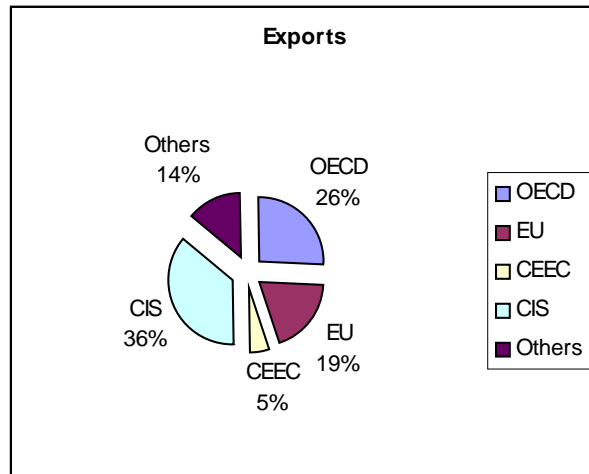


Source: NSI, 1998 and 1999, European Commission, 1998.

Bulgaria's agricultural exports plummeted at the beginning of the 1990s. In 1991 they were about 21% of their 1989 value, and exports to the former CMEA markets fell from 79% of the total in 1989, to 57% of the sharply diminished total in 1991. While exports have begun to recover, the share to former CMEA economies has continued to decline. Bulgaria has been particularly hard hit by the collapse of the Russian market after the financial crisis. Given the strong ruble devaluation and floating exchange rate regime, which makes imports very expensive in Russia now, it is doubtful that Bulgarian exports will be able to be competitive in this market in the foreseeable future. On the whole, however, Bulgaria has been the only CEEC other than Hungary able to maintain a net agricultural exporting position. The total positive balance of food and agricultural trade amounts to about US\$300 to US\$400 million annually (**Figure 10**).

The most important export products are wine, tobacco, fresh and processed fruit and vegetables. Notwithstanding the collapse of the Russian market, the CIS is still the predominant destination for Bulgarian exports, but the role of the EU and OECD countries has been increasing. On the import side, the OECD countries and the EU supply most of the imported goods to Bulgaria (**Figure 15**).

Figure 15: Breakdown of 1997 Exports and Imports by Country Group



MACRO ENVIRONMENT – AGRICULTURAL POLICY FRAMEWORK

Objectives and Aims of Bulgarian Agricultural Policy

The major goal of agricultural policy in Bulgaria as formulated by the government, is to facilitate growth in the agricultural sector based on the presence of private land ownership and private property of means of production (MAFAR 1998). This objective is to be achieved by:

- Establishing and strengthening of market structures based on stable ownership relations, which favor the development of an efficient agricultural production;
- Increasing competitiveness and developing conditions for export orientation of Bulgarian agriculture;
- Improving the living and working conditions of people working in agriculture and forestry sectors, as well as of people living in rural areas; and
- Preparing for EU accession, by efficient application of the major regulations of the EU internal market, gradual introduction of the market regimes of the CAP, adopting the EU structural policy mechanisms, and introducing EUROSTAT methods in agro-statistics.

This policy framework characterises the activities of the current government. The details of Bulgaria's agricultural policies, however, are evolving from completing the creation of a fully market conforming policy environment, to coping with the needs of EU accession.

Pricing and Trade Policy

Bulgaria's trade regime was characterized by tremendous instability after 1991, when import and export licensing requirements were removed for most products (with significant exceptions, especially in agriculture) and private and state trading organizations were allowed to import and export without special permission. This early liberalization notwithstanding, non-tariff trade policy measures were used intermittently by Government afterwards until 1998. Instability especially affected grains, oilseeds and their derivative products. From December 1995 to September 1997, basic regulations governing licensing exemptions and bans were changed no fewer than 25 times. This created severe impediments to market entry and investment, with private firms understandably viewing any favorable policy change as temporary.

As direct control mechanisms used under central planning were reduced during the 1990s, there was a tendency to use trade policy for very detailed, short-term intervention aimed at micro-managing domestic supplies and prices. Instruments for implementation of this policy included automatic and non-automatic licenses (import and export); export quotas, taxes and bans; minimum import and export prices; and duty free import quotas.

Pricing and trade policy during the transition was driven by a preoccupation with providing low-priced domestically produced food for the urban population. The

mechanism for implementing this policy—the “material balances” approach—in some important respects resembled that of central planning. Prices of important food products were set by the Government. Domestic consumption was estimated, and at a time when the forthcoming harvest could be forecast, the projected domestic consumption was compared to the quantity to be harvested. Any excess of supply over consumption was considered surplus to be sold abroad. Export licenses could then be issued up to this quantity. If it appeared that there would be deficit that would need to be met with relatively high-cost imports, the Government would sometimes issue licenses for duty-free imports, within a quota equal to the size of the projected deficit. Trade controls were reinforced by price controls. While the formal price control apparatus went through a number of changes—in products covered as well as in mechanics of operation—between 1989 and 1996, the goal was always to keep food prices low, and so agricultural products were always among the products covered. Products which were not expected to be in short supply were monitored through the “automatic licensing” regime, which was less burdensome than the “non-automatic licensing”, but which nonetheless served as the means by which the government would collect information to decide if and when products should be transferred back to the non-automatic licensing regime.

Producer prices of the major crops were held by this system at levels far below those that could have been received in a liberal trading environment. A World Bank mission conservatively estimated that price and export controls and taxes on wheat alone cost farmers US\$457 million in the 3-year period from 1994-96. The large gap between world and domestic prices also generated huge incentives to evade the export controls, and led to extensive corruption and illegal exports.

In 1996, the effects of these policy problems combined with poor weather to produce a dramatic fall in production, particularly of grains, production of which fell by almost 50% (compared to 1995). The harvest shortfall produced a domestic grain shortage, which was exacerbated by widespread illegal exports. This was one facet of the generalized economic chaos that led to the downfall of the socialist party government at that time. Fear of a repetition of these shortages shaped the early policies of the current government.

Since the crisis, the Government has made steady progress in liberalizing trade in agricultural products. All licensing requirements (automatic and non-automatic) for exports and imports of agricultural products and livestock have now been removed, with the exception of wood¹. The Government has also discontinued the practice of allowing duty-free imports within quotas of food items projected by the “material balances” calculations to be in temporary short supply. Elimination of the automatic licensing regime is significant because it lends credibility to the Government’s commitment not to undertake ad hoc interventions as in the past. Without the information from the license applications, the Government will not be able to monitor *ex ante*² trade in these items.

¹ It makes sense to maintain controls on wood exports as a conservation measure for a natural resource with uncertain ownership rights until clear ownership is established or a stumpage fee system can be put in place.

² Of course, the Government will still receive the same statistical information on trade flows on these items as it receives for other products from Customs data.

This will in turn reduce the ability—and temptation—to micro-manage. This credible commitment will reassure farmers and traders that they can make decisions based on market fundamentals, without worrying about ad hoc changes in trade policy.

The export taxes that were imposed on grains and oilseeds when they were removed from the non-automatic licensing regime have now been phased out. In addition, other long-standing export taxes (wool, hides and skins and live animals) have been removed. Thus, no export taxes remain on agricultural products, consistent with the Government's commitment to develop an open, export-oriented economy. The Government has also abolished the contract pricing system, which was the last vestige of price controls, so prices are now freely determined between buyers and sellers in the market.

The Government has also taken steps to expand farmers' access to imported inputs. One such step is the reduction of the tariff on fertilizer imports (formerly 40%) to 35%. Fertilizer imports, 249,000 tons in 1992, fell to around 33,000 tons in 1995 and 39,000 tons in 1996. While there are inconsistent data on total fertilizer use, it is clear that use has fallen significantly during the 1990s. Fertilizer prices in Bulgaria have been very high. While there are multiple causes of the high price of fertilizer and reductions in its use and imports, the 40% tariff has certainly been a contributing factor, so its reduction will provide significant benefits for farmers. The Government has also committed itself to further reductions in the tariff to 25% in January 2001 and 20% in 2002.

The Government is also amending its seed laws and regulations, which have until now required that before being imported, varieties had to first be submitted for MAFAR approval ("registration"), which required lengthy testing. This is a common requirement among developing countries, based mainly on a paternalistic assumption that farmers are not capable of making good decisions on their own as to which varieties they should plant. There is now considerable evidence from countries that have reformed seed laws that this assumption is incorrect, and that in fact these reforms allow farmers access to technology that they would otherwise be denied. (This was demonstrated most recently in Romania, where the Government adopted the EU's Common Catalogue of Seeds under the ASAL, with good results.) The Council of Ministers of Bulgaria has now submitted legislation to the National Assembly to allow automatic registration in the country of all seed varieties in the EU Common Catalogue of Seeds.³ This is both a step toward accession and a step which will have salutary effects on productivity. While this legislation is pending in the National Assembly, the Council of Ministers has passed an ordinance with the same effect, which will allow farmers to take immediate advantage of the changed policy.

³ Under the EU system, any variety tested and approved for one country is normally automatically accepted in all the other EU countries. Thus, farmers in each country have access to a tremendous range of varieties in the Common Catalogue. Even this system is somewhat restrictive relative to the system used in the U.S. and India, among others. In these countries, varieties do not have to be approved by the government to be sold, so farmers have access to an even wider assortment of varieties than do farmers in the EU. However, for countries which will in the near future accede to the EU, it makes more sense to adopt the EU system.

Bulgaria joined the World Trade Organization on January 1, 1997. Its levels of bound tariffs on agricultural products are in general rather high, relative to those of other CEECs (comparable to Poland and Slovenia, but below those of Romania, according to an Organization for Economic Cooperation and Development (OECD) evaluation of bound tariff rates) and those of developed countries, including the EU. Applied Bulgarian agricultural tariffs are high in comparison to those on industrial imports, though close to those in the EU. For primary agricultural production, current tariffs on an import weighted basis are 24%, or twice the level obtaining for industrial tariffs. (This is higher than the Czech and Slovak Republics and Slovenia, though lower than Hungary, Poland, and Romania.) The highest protection among primary products is afforded to meats (especially poultry), vegetables and fruit. Among processed food products, protection is very high for vinegar, dairy products, fermented beverages and alcohol, frozen and preserved vegetables, meat preparation, sugar, chocolate, and vegetable oils. The tariff schedule shows a strong cascading pattern, with higher tariffs on finished and processed products than on primary products. One implication of cascading is the higher protection it affords to domestic processors, relative to primary producers.

Intervention on the Tobacco Market

Tobacco is the only agricultural product in which the government still intervenes extensively and directly. Tobacco is a sensitive crop for Bulgaria because of the number of farmers employed in its cultivation, the tolerance of tobacco for less fertile lands, and the share of tobacco in exports. The area under tobacco occupies about 3% of total arable land in Bulgaria. In 1996-1997 tobacco exports accounted for 40% of the value of total agricultural exports.

The agricultural policy in the tobacco subsector in Bulgaria is implemented according to the Law on Tobacco and Tobacco Products. By this law a legal entity under MAF is established—Fund Tobacco—with the tasks to ensure the implementation of the state policy in this subsector. Its main activities are related to regulating production and trade in tobacco as well as preparing the national strategy for the development of the subsector. The Fund keeps a national register of all tobacco producers in Bulgaria with the production quotas, the actual output, and the necessary data for opening bank accounts (premiums are paid through bank transfer to bank accounts administratively open by the Fund). In the register, there are 225 legal entities and 75,000 physical entities.

Tobacco Fund supports the registered tobacco producers by paying a cash premium and providing tobacco seeds free of charge. The premium is set as a percent of the minimum purchase price. The value of the premium is approved by the Council of Ministers. The aim of the policy of support is to regulate the quantities produced according to the domestic and international demand as well as the implementation of the social policy in the regions where tobacco growing is the main source of income. The allocation of quotas for tobacco production by size and producers is done by the municipalities following a number of criteria:

- persons, associations and cooperatives whose income is only from tobacco production;
- families with numerous children, socially vulnerable families who are inhabitants of the settlement;
- people with traditions and experience in tobacco production of not less than 5 years.

For the period 1995-98 the state has disbursed significant premiums (**Table 5**). The purchase prices are set by the Council of Ministers every year.

Table 5: Tobacco Premium Disbursements 1995-1998
(thousand leva)

| Type of subsidy | 1995 | 1996 | 1997 | 1998 |
|--|---------------|------------------|------------------|----------------|
| Supply of tobacco seeds free of charge | 76,362 | 1,614 | 181,633 | 370,867 |
| Price premiums paid to producers | - | 2,061,361 | 3,044,209 | 321,069 |
| Total value | 76,362 | 2,062,975 | 3,225,842 | 691,936 |

Agricultural Support System

Since 1997, the agricultural support system has evolved from one in which prices were administratively determined and protection or taxation levels for individual products were set according to non-economic and non-transparent criteria, to a system of minimal government intervention, with the exception of the tobacco sub-sector. Prices are closely connected to world prices, and support is for the most part provided by transparent border measures. Although there has been, in recent years, some direct government intervention of a kind not consistent with a developed market economy (e.g., loans to farmers which were required to be repaid in commodities delivered to state agencies), this has now ceased. Thus with respect to these pricing and trade policies, the Bulgarian system is now consistent with a market economy. (As noted below, the other major mechanism for support—credit subsidies—are not consistent and will need to be phased out on the road to accession.) Unlike in many other transition economies, which still need to reform their non-transparent administrative mechanisms and direct government procurement which are used to determine prices, the primary remaining policy issues in Bulgaria are related to the levels of support, and the path of harmonization with the CAP. The following sections address these questions.

Levels of Protection for Main Agricultural Activities

In order to analyze the current level of protection for agricultural production in Bulgaria, the protection indicators used in contemporary agriculture policy analysis were applied to twelve major agricultural activities. For more information about these indicators see **Box 1**. The methodology used to calculate these indicators is described in **Annex 1**. The selected plant production activities are wheat, barley, maize, sunflower

seeds, tomatoes, potatoes, and grapes. Production of milk, beef, pork, poultry, and eggs has been selected as livestock production activities. For the computation of NRPs and ERPs, wheat, barley, maize, sunflower and poultry meat are considered as exportables, while the other commodities were considered as importables. Table 6 summarizes the main results of these computations.

Box 1: Measures of Protection

The **Nominal Rate of Protection (NRP)** is the simplest and easiest measurable indicator of price distortions. It serves as a summary indicator for all actions with regard to taxation and subsidization, causing domestic and border prices (which represent the value to society—the “social price”) to differ from each other. Thus, it can be used to identify (dis-)incentives to local producers. It is computed on the basis of the ratio of the domestic price (p_i^D) of a tradable commodity i to its border price equivalent (p_i^B):

$$\text{NRP}_i \text{ in } \% = \left(\frac{p_i^D}{p_i^B} - 1 \right) * 100$$

Thus,

- if $\text{NRP} > 0\%$, the actual market price is above the social price, implying an implicit protection of producers and taxation of consumers.
- if $\text{NRP} < 0\%$, the actual market price is lower than the social price, implying an implicit taxation of producers and subsidization of consumers;
- if $\text{NRP} = 0\%$, the coefficient implies a neutral structure of protection.

The **Effective Rate of Protection (ERP)** is an extension to the nominal protection concept. This extension includes the combined effects of price distortions on output and input markets. Because it is conceivable, for instance, that domestic prices on output markets are implicitly taxed, but input use is implicitly subsidized, the effective protection concept measures the aggregate impact of all underlying influences on the producer (production factors). The ERP is computed on basis of the ratio of value-added in the production of i measured at domestic prices (VA_i^D) over such value-added at border prices (VA_i^B) (the coefficient a_{ij} is a technical coefficient, indicating the level of the use of the intermediate factor j per unit of production of output i):

$$\text{ERP}_i \text{ in } \% = \left(\frac{VA_i^D}{VA_i^B} - 1 \right) * 100 = \left(\frac{p_i^D - \sum_j a_{ij} p_j^D}{p_i^B - \sum_j a_{ij} p_j^B} - 1 \right) * 100,$$

Thus,

- if $\text{ERP} > 0\%$, it implies a direct protection of domestic producers of the commodity i . This results in positive incentives for producers of the commodity, since they receive higher returns on their resources.
- if $\text{ERP} < 0\%$, it implies underlying disincentives to domestic producers of the commodity i . Domestic producers will only remain in the activity if they produce more efficiently than foreign producers.
- if $\text{ERP} = 0\%$, it implies a neutral structure of net incentives.

In a first step, examining the profile of nominal protection (NRPs), for most of the analyzed main products reveal relatively moderate levels of nominal protection. On average, prices of the analyzed products were found to be implicitly subsidized by 2.1%. NRPs of the threshing crops, which all have been considered as exportables, range from

an implicit subsidization of 8.6% (wheat) to an implicit taxation of 16.2% (sunflower). The vegetable products, potatoes and tomatoes, were found to be implicitly taxed at 5.4% and 12.0%, respectively.

Comparing domestic prices for livestock products to their border price equivalents shows that meat products are implicitly taxed at relatively low levels (NRPs for beef: -1.7%, pork: -7.2%, poultry: -8.0%)⁴. The negative NRPs for meat products suggest that consumers benefit from relatively lower prices for these three products. They are taxed with higher prices for the livestock products eggs and especially milk. The price of milk was identified as the most striking case of implicit subsidization to primary producers. The estimate of nominal protection of 32.7% for milk suggests high levels of price interventions⁵.

In order to examine the impact on farmers' income of the complete set of all existing market influences, the nominal protection of (potentially) purchased intermediary inputs to agriculture was computed⁶. On average, the nominal protection of intermediary inputs corresponds to an implicit taxation of farmers by 8.8% (see **Table 6 and Figure 16**). Even if this aggregate measure can be classified as relatively moderate, a disaggregated view on the analyzed production activities draws a striking picture. While the NRPs for intermediary inputs for most livestock production indicate an almost neutral or slightly taxing impact on aggregate input costs (NRPs ranging from 3.5% in the case of beef to 9.0% in the case of egg production), NRPs for intermediary inputs in crop production are exceptionally high. With exception of potato production (NRP 0.1) the implicit taxation of aggregate input costs ranges from 21.4% in grape production to 48.6% in production of sunflower seeds.

As an illustration of the components that are incorporated in these implicit taxations, the following provides a closer look on the effects of the separate inputs on input costs of wheat production which are, in aggregate, implicitly taxed by 36.1%. As displayed in **Table 6** the costs of intermediary inputs per ton of wheat amount to 58 BGN. The most important single cost positions are seeds (46% of input costs), mineral fertilizers (25%), and fuel (17%). Another 12% are costs of pesticides, tradable inputs in repair and maintenance, and other direct costs. A comparison of domestic prices of each

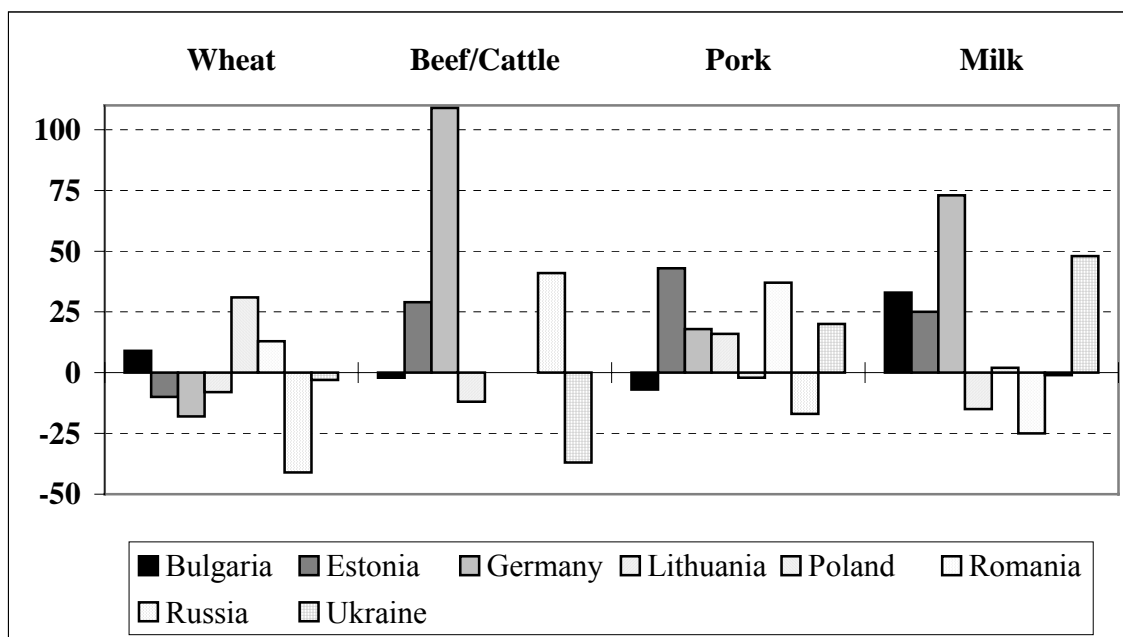
⁴ As all protection measures, these figures should be interpreted as rough indicators of the order of magnitudes and not as exact measures. All activities of meat production are computed on the basis of carcass weight measures and compared to border price equivalents. Especially for the livestock activities this calculation may incorporate high deviations, since the definition of comparators is more difficult than in trades with clearly standardized products. Particularly in the case of beef, the NRP has to be interpreted with caution due to potentially incomplete data on the quality of the traded product. Thus, the NRP for beef should rather be interpreted as 'practically no protection' rather than 'taxation of 2%'.

⁵ As will be shown below in the presentation of the results of divergence separation, this significant NRP is mainly determined by direct policy impacts (70% of total divergence) and only to a minor share by structural effects (30% of total divergence).

⁶ In this context, some words on the 'reverse' interpretation of the NRPs on tradable inputs have to be said. Since Bulgarian farmers are consumers of that input rather than producers, positive NRPs on tradable inputs have to be interpreted as discrimination (implicit taxation) against farmers, whereas negative NRPs indicate a protection of farmers that 'consume' this input or input-mix.

of these inputs with their border price equivalents reveal an implicit taxation of 8.6% for seed, 89.5% for mineral fertilizers⁷, and 119.9% for fuel.

Figure 16: Comparison of Nominal Protection of Selected Agricultural Outputs



Remark: Results for Bulgaria: 1998, other results: 1997.

Source: Valdes (ed.), 1999; Csaki, Valdes and Fock, 1998; Valdes and Kray, 1999; own calculations.

The aggregate impact on the income of primary producers, i.e. its proxy value-added, was computed using the Effective Rate of Protection (ERP) which measures the combined effects of price distortions on output and input markets (see **Box 1**)⁸. **Table 6** and **Figure 15** display the value-added of the analyzed activities at domestic prices vis-à-vis value-added at border price equivalents⁹. For most of the crop production activities value-added accounts for around 65% of gross output value, which is an exceptionally high value compared to other transition economies (where often not even values above 50% can be observed). Livestock activities turned out to generate extremely low relative levels of value-added (around 20% of gross output value). In the two cases of potato and pork production no positive value-added can be generated. Due to the high importance of

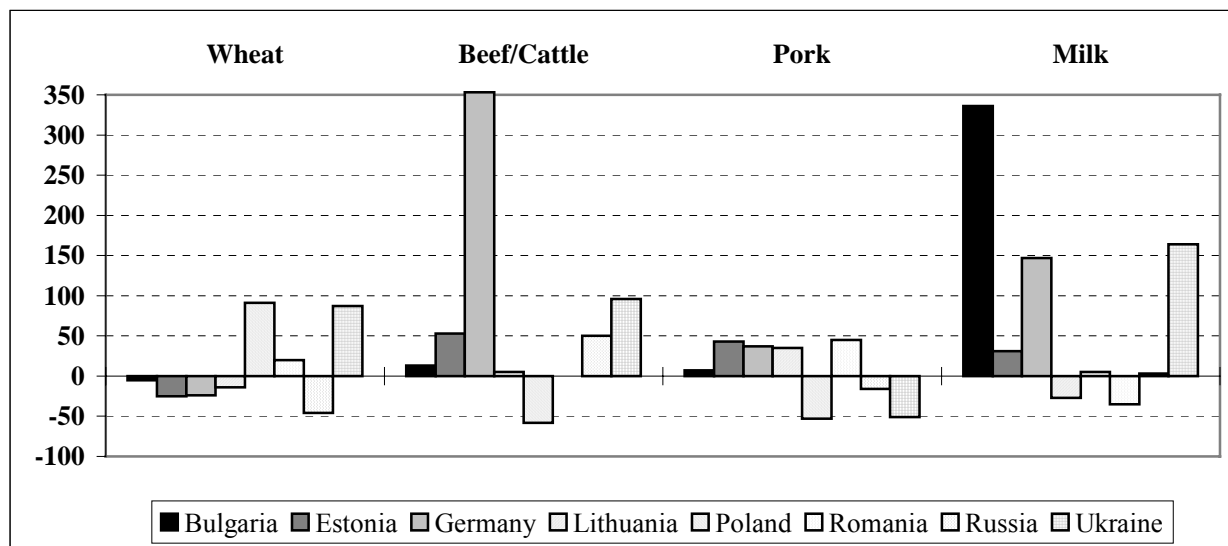
⁷ Weighted average of nitrogenous, phosphorous, and potassium fertilizers. Border price equivalents have been calculated on basis of the most common export/import competing substitute.

⁸ A caveat on the ERP estimates provided here: the available cost structures have not been adjusted for the impact of changes in relative prices of tradable inputs on the input matrix (i.e., fixed coefficient assumption). Such an adjustment is conceptually possible but it is beyond the scope of this study as it requires fairly sophisticated input data and a clear notion of the relevant production function. The consequence of the fixed coefficient assumption is that it could overstate the true input costs.

⁹ While the computations of NRP took only account of the main products (e.g. milk as main product of milk production), the revenue positions in the computation of value-added do also account for byproduct of the farming activities, e.g. in the case of milk production the byproducts 'calves' and 'manure' have been integrated to the calculations.

livestock production for Bulgarian agriculture the weighted share of generated value-added accounts for 33% of gross agricultural output value of the analyzed activities.

Figure 17: Comparison of Effective Protection of Selected Agricultural Activities



Note: Results for Bulgaria: 1998, other results: 1997.

Source: Valdes (ed.), 1999; Csaki, Valdes and Fock, 1998; Valdes and Kray, 1999; own calculations.

As expected, the levels of effective protection are more pronounced (in some cases even adverse) than those of nominal protection. On average the incomes of producers of the analyzed activities are implicitly subsidized by 3.9%, which in fact is twice as high than the average nominal protection. Again, crop production and livestock production show significantly different patterns of protection. Without exception, all crop activities are implicitly taxed – the ones with a negative NRP have a significantly more negative ERP, whereas positive NRPs are more than compensated by the high protection to inputs. Sunflower seed and potato production are the most striking cases where, mainly as a result of the policy regime and market structure, the domestic value-added per ton was approximately 25% and 58% lower, respectively, than it would have been at border equivalence prices. The main reason for the difference between the nominal and the effective rates is the implicit taxation of intermediary input consumption mainly through the domestic level of fertilizer and energy prices.

For all livestock production activities positive ERPs are observable. The positive ERPs for beef, pork, and poultry meat production suggest that actual value-added per ton of carcass weight in 1998 was 13.0%, 7.0%, and 17.1% higher, respectively, than it would have been at border equivalence prices. In principle, the same general interpretation applies to milk production (ERP 336.4%), but the high ERP value requires some additional explanation. **Table 6** shows that value-added at border equivalence prices would be negative (-25.3 BGN/t), whereas it is positive at actual prices. Thus the relatively high ERP value originates from the arithmetic of the computation of the coefficient (see **Box 1**). In addition, the computation depends on adjusting prices for

quality when comparing domestic and border prices, and this adjustment is especially tricky for a product like milk, where the domestic product (fresh milk) is difficult to compare with the traded product, since little fresh milk moves in international trade. Thus, the ERP calculations indicate the correct direction of income changes but the absolute level has to be interpreted with special care. This is also relevant for the interpretation of the ERP of egg production. In this case, value-added at border prices is close to zero, actual value-added (and thus absolute transfers) is relatively low but significantly lower than its reference equivalent¹⁰.

Table 6: Measures of Protection for Major Agricultural Activities, 1998

| Indices | Wheat | Barley | Maize | Sunflower | Tomatoes | Potatoes | Grapes |
|--|------------------------------------|-------------------|-------------------|----------------------|----------|----------|--------|
| | <i>BGN per ton of main product</i> | | | | | | |
| Actual price | 135.1 | 132.0 | 166.7 | 366.1 | 254.0 | 140.2 | 634.9 |
| Border equivalence price | 124.5 | 143.8 | 159.0 | 436.8 | 288.5 | 148.2 | 620.0 |
| Intermediary inputs, actual prices | 58.3 | 36.8 | 58.3 | 80.9 | 16.6 | 162.1 | 111.4 |
| Intermed. inputs, border equiv. prices | 42.8 | 28.1 | 45.2 | 54.4 | 12.4 | 162.0 | 91.8 |
| Value-added, actual prices ^c | 85.6 | 102.6 | 108.4 | 285.2 | 237.4 | -21.9 | 523.5 |
| Value-added, border equiv. prices ^c | 90.4 | 123.1 | 113.8 | 382.4 | 276.1 | -13.8 | 528.2 |
| | <i>Percent</i> | | | | | | |
| ERP | -5.3 | -16.6 | -4.8 | -25.4 | -14.0 | -58.4 | -0.9 |
| NRP, main product | 8.6 | -8.2 | 4.8 | -16.2 | -12.0 | -5.4 | 2.4 |
| NPR, average, tradable inputs | 36.1 | 30.9 | 29.1 | 48.6 | 34.2 | 0.1 | 21.4 |
| Indices | Milk ^a | Beef ^b | Pork ^b | Poultry ^b | Eggs | | Total |
| | <i>BGN per ton of main product</i> | | | | | | |
| Actual price | 358.4 | 2,745.5 | 1,708.3 | 2,087.8 | 1,333.3 | | — |
| Border equivalence price | 270.1 | 2,792.8 | 1,840.1 | 2,269.1 | 1,167.3 | | — |
| Intermediary inputs, actual prices | 409.6 | 2,513.1 | 2,719.6 | 1,914.1 | 1,315.2 | | — |
| Intermed. inputs, border equiv. prices | 392.3 | 2,428.7 | 2,598.8 | 1,823.1 | 1,206.8 | | — |
| Value-added, actual prices ^c | 59.8 | 804.2 | -379.0 | 1,104.2 | 205.5 | | — |
| Value-added, border equiv. prices ^c | -25.3 | 711.9 | -407.8 | 943.0 | 60.6 | | — |
| | <i>Percent</i> | | | | | | |
| ERP | 336.4 | 13.0 | 7.0 | 17.1 | 239.3 | | 3.9 |
| NRP, main product | 32.7 | -1.7 | -7.2 | -8.0 | 14.2 | | 2.1 |
| NPR, average, tradable inputs | 4.4 | 3.5 | 4.6 | 5.0 | 9.0 | | 8.8 |

^a cow-milk only ^b (c.w.): all results displayed for carcass weight

^c Value-added is calculated on base of gross output values from main products and, if applicable, from by-products, i.e. value-added differs from 'actual price' minus 'intermediary inputs by gross output value from by-products.

Source: own calculations.

To better understand the sources of the patterns of protection as they have been presented above, divergences on output prices as well as aggregate effects on value-added have been analyzed by the Divergence Separation Module Approach (DSM; for methodology see **Annex 1**). The DSM results (see **Table 7**) show that the observed

¹⁰ To illustrate this, consider an example where an activity would generate a value-added at border prices of 0.2 BGN/t (very close to zero), but actual value-added accounts to 2.2 BGN/t (which, indeed, still is a very low level). Even if absolute transfers to the producer were only 2.0 BGN/t the calculated ERP would amount to 1000%. The authors of the study are aware of the fact that the deviation of results due to marginal calculation errors (through all the steps of the computation) also is significantly increased in such cases.

aggregate effective protection of 3.9% is the effect of an implicit subsidization of farm incomes by current agricultural policies (19.7% relative to incomes that would prevail at border equivalence prices) that is partially offset by an implicit taxation of farm incomes by structural distortions¹¹ (15.9%). In detail, direct policy effects were observed to induce a 10.2% implicit subsidization of gross output value and a 6.3% implicit taxation of intermediary input costs. Price interventions due to import tariffs on importable commodities are the main factor in these effects. In aggregate, market imperfection and other factors summarized in 'structural distortions' cause farmers' gross output value to decline by 3.6% and cause increased costs of intermediary inputs of approximately 2.4%. As a consequence of these policy and structural effects, farmers' gross output value and their intermediary input costs were higher by 6.6% and 8.8%, respectively, than they would be after removal of all of these divergences.

Table 7: Separation of Divergences for Major Activities, 1998

| Indices | Wheat | Barley | Maize | Sunflower | Tomatoes | Potatoes | Grapes |
|-------------------------------------|-------------------|-------------------|------------------------------------|----------------------|----------|----------|--------|
| | | | <i>BGN per ton of main product</i> | | | | |
| Gross output value distortions | 10.7 | -11.8 | 7.7 | -70.7 | -34.5 | -8.0 | 14.9 |
| o.w. direct policy distortions | -10.4 | -10.1 | -12.7 | -80.0 | 124.8 | 26.5 | 179.2 |
| Structural distortions | 21.1 | -1.7 | 20.4 | 9.3 | -159.2 | -34.4 | -164.2 |
| Intermediary input cost distortions | 15.4 | 8.7 | 13.2 | 26.5 | 4.2 | 0.1 | 19.6 |
| o.w. direct policy distortions | 5.2 | 4.8 | 5.4 | 13.7 | 1.1 | 28.7 | 12.7 |
| Structural distortions | 10.2 | 3.8 | 7.7 | 12.8 | 3.1 | -28.6 | 7.0 |
| Value-added distortions | -4.8 | -20.5 | -5.5 | -97.2 | -38.7 | -8.1 | -4.7 |
| o.w. direct policy distortions | -15.6 | -15.0 | -18.1 | -93.7 | 123.6 | -2.2 | 166.5 |
| Structural distortions | 10.8 | -5.5 | 12.7 | -3.5 | -162.3 | -5.8 | -171.2 |
| | | | <i>Percent</i> | | | | |
| ERP | -5.3 | -16.6 | -4.8 | -25.4 | -14.0 | -58.4 | -0.9 |
| o.w. direct policy distortions | -17.2 | -12.2 | -15.9 | -24.5 | 44.8 | -16.1 | 31.5 |
| Structural distortions | 12.0 | -4.5 | 11.1 | -0.9 | -58.8 | -42.2 | -32.4 |
| | | | | | | Total | Total |
| Indices | Milk ^a | Beef ^b | Pork ^b | Poultry ^b | Eggs | (abs.) | (rel.) |
| | | | <i>BGN per ton of main product</i> | | | | |
| Gross output value distortions | 102.4 | 176.7 | 149.6 | 252.2 | 253.3 | 24.4 | 6.6 |
| o.w. direct policy distortions | 74.8 | 558.0 | 587.8 | 28.9 | 42.8 | 37.7 | 10.2 |
| Structural distortions | 27.6 | -381.2 | -438.3 | 223.3 | 210.5 | -13.3 | -3.6 |
| Intermediary input cost distortions | 17.3 | 84.4 | 120.8 | 91.0 | 108.4 | 19.8 | 8.8 |
| o.w. direct policy distortions | 15.5 | 76.7 | 117.0 | 88.5 | 85.3 | 14.3 | 6.3 |
| Structural distortions | 1.8 | 7.7 | 3.8 | 2.5 | 23.1 | 5.5 | 2.4 |
| Value-added distortions | 85.1 | 92.4 | 28.7 | 161.2 | 145.0 | 4.6 | 3.9 |
| o.w. direct policy distortions | 59.3 | 481.3 | 470.8 | -59.7 | -42.5 | 23.5 | 19.7 |
| Structural distortions | 25.8 | -389.0 | -442.1 | 220.8 | 187.4 | -18.8 | -15.8 |
| | | | <i>Percent</i> | | | | |
| ERP | 336.4 | 13.0 | 7.0 | 17.1 | 239.3 | | 3.9 |
| o.w. direct policy distortions | 234.2 | 67.6 | 115.5 | -6.3 | -70.1 | | 19.7 |
| Structural distortions | 102.1 | -54.6 | -108.4 | 23.4 | 309.4 | | -15.8 |

^a cow-milk only ^b (c.w.): all results displayed for carcass weight

Source: own calculations.

¹¹ As explained earlier in this study 'structural distortion' is a residual value that incorporates the aggregate effect of market imperfections, spillover effects of other policies, imperfect effect shifts to primary producers, and, of course, potentially existing statistical data errors.

Comparing Bulgaria's Agricultural Policy with that of the EU

Integration into the EU is one of Bulgaria's key foreign policy priorities, founded on a broad consensus of the political forces and in the society and officially declared to be without alternative for modern Bulgaria¹². This far-reaching strategic objective creates a momentum for structural reforms prior to a membership to the EU and will have to cover all sectors of the national economy. As a substantial part of this strategy Bulgaria's agricultural policy will gradually have to adopt a policy and institutional framework compatible with the *Common Agricultural Policy of the EU* (CAP). However, EU agricultural policies are also evolving so that CAP at the time of Bulgaria's accession to the EU will probably differ from today's CAP as well as from the CAP framework to be created under the provisions of Agenda 2000 reforms. As part of the process of identifying plausible policy scenarios at the time of Bulgaria's integration into the EU, the following subsections present an outline of the market regulations under the CAP today and under the CAP modified by the Agenda 2000.

The Common Agricultural Policy of the EU

The Common Agricultural Policy of the EU is one of the most important Union policies and is, as indicated by the term 'common policy', a matter reserved exclusively for the Community¹³. Since its creation in 1962 the provisions of the CAP never have been a static framework. In the early 1980s, as a result of the decline in the agricultural sector and the high budgetary cost, the imbalance between supply and demand in European and international markets and a proliferation of unilateral, bilateral and multilateral activities by the Community (a consequence of preferential agreements with third countries), the Community set up a framework for a series of reforms of the CAP. This reform may be divided into three phases: a first phase before the European Council of February 1988 adopting a series of decisions based on the documents COM(83)500 and COM(85)333 (the *Green Paper*); a second phase, in which the Commission Communication on 'the Development and Future of the CAP' was submitted to the Council; and a third phase starting with the Council meeting of May 1992 (*McSharry Reform*). In the first two phases the changes introduced were of two basic kinds: (a) restrictive measures applying to the prices and mechanisms under the COMs to help stabilize markets, and (b) structural measures both to compensate farmers for the repercussions of the first measures and to reduce production. The third phase of the reform involves a radical change in the support system for Community agriculture, since a system of compensation payments or direct income support replaces the support scheme based on guarantee prices. Agenda 2000 envisions a fourth phase in reform of the CAP, marked by the forthcoming accession of the CEECs and the forthcoming revision of the WTO agreements. It can be characterized as a further development of the 1992 reform rather than a turnaround towards full market liberalization. It further develops the replacement of guaranteed prices with direct income support in the main 'continental'

¹² Republic of Bulgaria, 1998b, p.1.

¹³ The provisions relating to the CAP are laid out in the *Treaty on Establishing the European Community* ('*Treaty of Amsterdam*'), Articles 32 (ex Article 38 of Treaty of Rome) to 38 (ex 46) (see European Union, 1997a). The products subject to the provision of Articles 33 to 38 are listed in Annex I to this Treaty.

sectors (herbaceous plants, beefmeat, milk), supplemented by reforms in the various 'Mediterranean' sectors (olive oil, tobacco, wine) or in the peripheral regions (bananas)¹⁴. Moreover, compensation in the form of direct payments to primary producers is to be organized in a different way compared to the previous regulations, namely via decentralization by partially integrating compensatory payments into national envelopes, financed entirely by the EAGGF Guarantee Section and distributed according to the size of national agricultural production.

Within the CAP framework, the *Common Organizations of Market* (COMs) always have been the basic instrument, used to manage agricultural production and to stabilize markets according to the declared objectives of the CAP¹⁵. The COMs are based on three main principles¹⁶ of:

- * *a unified market*, i.e. free movement of farm products between Member States;
- * *Community preference*, i.e. preferential treatment of goods produced in the Union, being of declining relevance as a result of multi- and bilateral agreements and unilateral concessions; and
- * *financial solidarity*, i.e. CAP spending must be borne by the Community budget.

COMs were gradually introduced and now cover most EU agricultural products¹⁷, accounting for 90% of the final agricultural output of the Community. Having gone through the major price support reforms of 1984, 1988, and 1992 and after the agricultural agreements of the Uruguay Round, the current CAP has focused on gradually reducing institutional prices, reducing the influence of intervention and consolidating direct aids as the basic support mechanism¹⁸. Supplementary measures like production quotas, guaranteed maximum quantities, and set-aside obligations aim on a control of supply. The current design of the COMs can be classified in five categories¹⁹:

- * **COMs with guarantee prices and direct aids to complement production**
Applied to cereals, beef, rice, sheepmeat, olive oil, bananas and milk (from 2003), which account for one third of final Community agricultural production. This type

¹⁴ See European Parliament, 1999.

¹⁵ Objectives of the CAP according to Article 33 (ex 39) of the Treaty on EC are (a) to increase agricultural productivity, (b) to ensure a fair standard of living for the agricultural community, (c) to stabilize markets, (d) to ensure the availability of supplies, and (e) to ensure that supplies reach consumers at reasonable prices. To attain these objectives, Article 34 (ex 40) provides for the establishment of a common organization of agricultural markets. This organization shall take, depending on the product concerned the form of common rules of competition, a compulsory coordination of the various national market organizations, or a European market organization. The organization may include all measures required to attain the objectives set out in Article 33, in particular regulation of prices, aids for the production and marketing of the various products, storage and carryover arrangements and common machinery for stabilizing imports or exports.

¹⁶ See European Parliament, 1999.

¹⁷ With the only major exceptions being alcohol and potatoes.

¹⁸ For COMs that provide for support to be granted to farmers in the form of direct payments Council Regulation (EC) No 1259/1999 of 17 May 1999 establishes common rules for direct support schemes under the common agricultural policy.

¹⁹ See European Parliament, 1999.

of COM has become more important as a result of the CAP reform packages adopted in 1992 and 1999.

- * **COMs with automatic intervention**
Applied to sugar and dairy products, affecting just over one fifth of Community final production. This type of COM also involves minimum or guarantee prices paid to farmers by public intervention agencies in exchange for delivery of their products, where market prices are too low. Prior to 1992, this type of COM was the one most characteristic of the CAP.
- * **COMs with conditional intervention**
Applied to wine, pigmeat and some fresh fruit and vegetables, affecting approximately one fifth of Community final production. These COMs also involve a guarantee price scheme, although it is applicable only in the event of a serious market crisis. The European Commission decides whether such a crisis exists.
- * **COMs with direct production aids only**
Applied to oilseeds, protein crops, feeding stuffs, tobacco, textiles, peas and beans, hops and processed fruit and vegetables (approximately 10% of Community final production). Production aids are granted at a flat rate or proportional to the quantities produced or yields.
- * **COMs without direct production support**
Applied to poultry, eggs, processed agricultural products, flowers and plants, some fresh fruit and vegetables and other marginal products. These products receive only customs protection.

Annex 2 briefly outlines the COMs applied to the main EU agricultural product markets under both current CAP provisions and the Agenda 2000 reform framework²⁰.

Current Bulgarian Agricultural Policy Framework vis-à-vis the Common Agricultural Policy

In evaluating the Bulgarian agricultural policy framework relative to that of the EU, three questions are relevant: 1) does Bulgaria have policies which are inconsistent with those of a market economy?; 2) how do support levels compare to those under the CAP, and does this present a problem for the economy, or an obstacle for accession?; and 3) what changes are needed in existing institutions to enable Bulgaria to implement the CAP?

The pricing and trade policies currently being followed by the Government are consistent with a developed market economy. While some actions are needed to complete the reform agenda in this area (see below), the policy instruments are generally transparent and allow the market to function normally. The exceptions to this are the tobacco regime, and the credit subsidies, which are in any case being reduced under the Government's current plans, and should be phased out during the pre-accession period.

²⁰ If not otherwise indicated, the information on COMs been derived from European Commission, 1999d and 1999e; European Council, 1999a; European Parliament, 1999; Csaki, Valdes, Fock, 1998; and Valdes, Kray, 1999.

With respect to support levels, Bulgaria currently has an aggregate level of support for agricultural production which is quite low compared to the EU and to many of its regional neighbors. It is part of a sensible macroeconomic policy framework that has been the cornerstone for Bulgaria's economic recovery from the depths of the 1996-97 crisis. In evaluating this policy, it should also be kept in mind that, first, in the past, some farmers—especially grain producers—were heavily discriminated against, as grain prices were kept artificially low by administered prices and export taxes and controls. These farmers are now better off than they were under the previous policy regime. Second, subsidies to farmers, if not paid directly from the budget, would harm consumers, which already are faced by increasing food prices. It is also important to recognize that this current low level of support will ease the adjustment to the CAP framework, regardless of what the CAP policies are at the time of accession. Farmers will be able to adjust more easily to higher levels of support—if CAP levels indeed turn out to be higher at accession—than they would be able to adjust to lower levels, if support in Bulgaria were increased now and then had to be reduced to harmonize with the CAP as it evolved in the pre-accession period. For these reasons, the current support level should not be an obstacle for Bulgaria's accession; on the contrary, this will facilitate the adjustment. The evolution of commodity-specific policies in Bulgaria is outlined in **Annex 3**, with a description of the current framework for the major commodities.

It is in the area of institutional development that Bulgaria has relatively far to go to be in a position to implement the CAP. While the institutional framework is addressed in greater detail later in this paper, it should be mentioned here that both public institutions and private institutions will need to be developed. These include farmer organizations, wholesale channels (through which intervention is carried out under the CAP), and a comprehensive farmer and animal registration system to allow the delivery of direct payments.

The current, relatively low, support levels will force Bulgarian farmers to try to increase their productive efficiency, which is clearly necessary. But they will be able to do so only if given a proper institutional environment, a well-functioning overall economy, and access to investment resources.

Bulgaria's optimal agricultural policy strategy therefore may be to focus on efforts to: (1) complete the adjustment agenda to develop a functional market economy; (2) move to a second stage of institutional reform; and (3) structure its pre-accession strategy, including investments under the SAPARD program, to ensure that preparation is done properly and expediently, and that available funds are used to best advantage.

Trade and Pricing Policy

In a very short period of time, Bulgaria has progressed from one of the worst trade regimes in the region to one of the most open and less distortive. A few actions are still needed to complete the reform program, including:

- Adhere to the government's announced schedule for reducing fertilizer tariffs (25% in January 2001 and 20% in 2002).

- Pass law to allow for automatic registration for seed varieties in the EU Common Catalogue (currently in Parliament).

In trade and pricing policy, two additional areas need to be addressed. I would also make the following as bullet points: One is the general area of sanitary, veterinary, and phytosanitary licensing requirements for imports and exports, and the associated fee structure. It is clear that such requirements must be in place, but it appears that as they currently exist, they may place an unreasonable burden on importers, exporters, and even on some producers for the domestic market. A further review of these areas is needed to identify how the burden can be reduced while still maintaining the necessary inspections. The second is the tobacco sector, since that is the only area where the Government still significantly intervenes in ways that are not consistent with efficient private sector development. Reduction of distortion in other sectors has increased relative distortions for tobacco. The current policy framework for this sub-sector is also an obstacle to EU accession.

In the medium term, Bulgaria will have to make decisions with regard to harmonization of its trade policy with that of the EU. In agriculture, this will revolve mainly around the question of when to adopt the trade measures (tariffs and export subsidies) of the CAP. The section of this report with detailed simulations of the results of different options for harmonizing with the CAP shows the costs and benefits to different groups of each option. One clear conclusion from that exercise is that rapid implementation of CAP mechanisms would have very high costs for both Bulgarian consumers and taxpayers. For this and other reasons, it would be difficult for Bulgaria to activate these mechanisms before accession. Instead, Bulgaria could place its emphasis on setting up institutions that will be required for CAP implementation, leaving the trade policy and price support measures until the time of accession. However, reforms in trade policy for agricultural inputs could be highly beneficial for Bulgarian farmers. As shown by the effective protection measures, high prices for inputs are taxing Bulgarian farmers. Tariffs on these should be reduced, which would in general also bring them more in line with those of the EU.

Rural Finance and Credit Policy

Availability of investment capital continues to be a constraint on the ability of agricultural and agroindustrial producers to restructure and improve competitiveness. While anecdotal evidence suggests that there may be some marginal improvements in credit access compared to past years, it is clearly not sufficient. Banks continue to demand high collateral (both because of the very stringent prudential regulations they face and because they view agriculture as a risky sector in which they have little expertise), and farmers continue to be reluctant to mortgage their homes, which is the only kind of collateral they have which banks would consider acceptable. Investment credit lines of SFA are not used because banks are not willing to make what they consider small, high-risk loans for the small margin on these lines. The government should focus on getting farmers some liquidity for investment capital, but in a way that will attract, not crowd out, lending by the commercial banks and other forms of financing. The priority actions should be:

- Adhere to announced timetable for phasing out SFA short-term credit lines.
- Shift emphasis from direct long-term credit to partial risk guarantees in SFA credit lines.
- Require that risk evaluation of investment projects supported by SFA be exclusively done by commercial banks.
- Make agroindustrial investments eligible for SFA credit and guarantees. (These are the borrowers with collateral that the banks might find acceptable, that is, their plant and equipment. Helping agroindustry to recover is a crucial step to help producers. This action would require amending the Law on Support for Agricultural Producers.)
- Pass an appropriate law on Credit Coops.
- Allow SFA funds to be channeled through Credit Coops.
- Restructure SFA as the paying agency for SAPARD funds (currently underway).
- Pay banks a fixed fee for SFA loans, the size of which would be the same no matter what the size of the loan. (This would cover their fixed costs and remove the current disincentive to even consider small loans.)
- Improve legal environment for collateral in secured transactions and mortgages.
- Improve legal environment for equipment and machinery leasing.

In rural finance, the medium term goal should be to integrate agricultural credit into the general finance system, rather than relying only on specialized institutions. There should, of course, be institutions that specialize in agricultural lending, but their agricultural focus would be the result of their special skills and comparative advantage in this type of lending; there would be no institutions like the current SFA which are run by the Government exclusively for one sector. Before accession, the role of the SFA will need to be completely changed, so that it is no longer a conduit for credit subsidies.

