



Agricultural Policies in Emerging and Transition Economies

AGRICULTURE AND FOOD



OECD



2000

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AGRICULTURAL POLICIES
IN EMERGING AND TRANSITION
ECONOMIES 2000



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FOREWORD

Agricultural policies in OECD countries have a major impact on emerging and transition economies (ETEs) and serve as a benchmark for gauging market liberalisation in ETEs. Similarly, agricultural policy developments in non-OECD economies are increasingly important to OECD countries. In view of this growing interdependence, it is important to understand clearly the interests and perspectives of emerging and transition economies with respect to agricultural trade issues. An analysis of these policy interests is also timely, as multilateral trade negotiations resume under the auspices of the World Trade Organisation.

The last round of agricultural trade liberalisation resulted in the Uruguay Round Agreement on Agriculture (URAA), which came into effect in 1995. This report addresses the policy issues arising in relation to the “three pillars” of the URAA: market access, export competition and domestic support. As part of the in-built agenda of agricultural trade reform, these three areas of reform are likely to be the departure points for further liberalisation. Our aim in reviewing the issues from an economic perspective is to identify more clearly what is at stake for ETEs, recognising both common interests as well as important areas where ETEs’ interests may diverge. An understanding of the complexity of policy interests is vital if a prospective WTO agreement is to achieve a balance between the interests of ETEs and those of developed countries.

The second part of this report monitors policies and evolving levels of support to agriculture in six transition countries: Estonia, Latvia, Lithuania, Romania, Russia and Slovak Republic. In-depth agricultural policy reviews have been carried out in close co-operation with each of these economies over the past five years, most recently for Romania. Building on this intensive analytical and institutional framework, the OECD subsequently keeps watch on the evolution of trends and levels of support as one measure of these countries’ movement toward market-based policies.

Following extensive reporting of policies in Brazil, China, India, Russia and South Africa in 1999, Part III of this year’s edition highlights the policy developments over the past 12-18 months in these countries. The chapter on Brazil features the key elements of domestic support programmes in that country. The chapter devoted to China includes an analysis of the implications of China’s entry into the multilateral trading system on international cereals and oilseeds markets, as well as an examination of the implications of trade reform for food security in China. A brief assessment and outlook is provided for all five countries.

Each year since 1992 the OECD has published an evaluation of agricultural policies in emerging and transition economies, focusing on key policy themes as well as individual country policy developments. This is the eighth publication of the series, prepared by the Directorate for Food, Agriculture and Fisheries as part of the programme of the Centre for Co-operation with Non-Members. This report was submitted to the Working Party on Agricultural Policies and Markets of the Committee for Agriculture and to the Joint Working Party of the Committee for Agriculture and the Trade Committee on 17 May 2000 under the written procedure. It is published under the responsibility of the Secretary-General of the OECD.

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This report draws on work carried out by the Policies, Trade and Adjustment Division of the Directorate for Food, Agriculture and Fisheries, as well as by the Trade Directorate of the OECD. Special appreciation is extended to staff from those units.

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EXECUTIVE SUMMARY

Part I of this report focuses on the **agricultural trade policy concerns of emerging and transition economies (ETEs)**. Specifically, it examines how ETEs would be affected by reforms in the areas of market access, export competition and domestic support. The key conclusions of the analysis are presented below.

The concerns of emerging and transition economies (ETEs) are likely to become increasingly prominent in multilateral trade negotiations.

ETEs are increasingly important to international trade, and are expected to participate more actively in the multilateral process. In particular, the anticipated WTO accession of China, Russia and Ukraine is expected to have important implications for the way in which trade agreements are reached. Furthermore, a number of ETEs have introduced liberalising reforms unilaterally and will be seeking concessions from countries with greater protection – in a number of cases, these are OECD countries.

Trade protection has restricted agriculture's contribution to economic growth.

Such is the extent of agricultural protection that the potential gains from agricultural liberalisation are estimated to be as high as the potential benefits from industrial liberalisation, even though agriculture accounts for a smaller fraction of world trade. The persistence of agricultural protection in many OECD countries has meant that whereas developing countries have seen their share of industrial markets increase in the last 20 years, their share of world agricultural markets has remained more or less unchanged.

ETEs are a diverse group, but nevertheless have a core set of common interests.

Although trade liberalisation promises aggregate gains, some countries may need a broader (multi-sector) agreement in order to benefit. Within countries, there will also be both winners and losers. Moreover, on specific issues, ETEs have a complex pattern of policy interests. Nevertheless, ETEs have a shared interest in being integrated into the world trading system, and in “transparent” legal commitments that are easily implemented and monitored.

Agricultural trade policy is not the only thing that matters.

Other important determinants of trade performance include macroeconomic and structural policies, and the extent to which principles of good governance are observed. Moreover, there are a number of obstacles to transition and development that are both important in their own right, and condition a country's ability to benefit from trade reform. These obstacles comprise all factors that impede the functioning of the market system. They include poor infrastructure; incomplete privatisation and land reform; labour market rigidities; weak contract enforcement; underdeveloped credit facilities; and inefficient marketing channels.

ETEs need trade policy commitments that allow them to address their development objectives.

ETEs have a self-interest in liberalising their agricultural trade policies. At the same time, they also need a trade agreement that does not limit their ability to pursue broader development goals. In particular, whilst trade reform should, on balance, help lift people out of poverty, it may need to be accompanied by appropriate domestic policies.

OECD countries are the most important markets for ETEs.

ETEs are concerned about both directions of market access; that is, foreign exporters' access into their markets, and their own exporters' access into overseas markets. The ETE net-exporters in this report are concerned primarily with their access to OECD country markets. For a number of net-importing ETEs, both directions of access are important. A number of ETEs maintain high tariffs, but these are often at least matched by the tendency of OECD countries to impose prohibitive tariffs on sensitive products.

ETEs' interests in export competition policies centre on the use of export subsidies by a limited number of OECD countries.

In the next round of multilateral negotiations, ETEs as a group will again be affected predominantly by the extent to which OECD countries commit to reductions in export subsidies, including implicit export subsidies. Few ETEs have the financial capacity to provide export subsidies. Direct policy changes will therefore be important in a limited number of transition economies, and – if the rules on export competition are extended to include export-reducing policies – in those ETEs that restrict agricultural exports.

A major concern of ETEs is that domestic support in OECD countries should be reduced.

The largest OECD countries dominate the use of domestic support measures. ETEs are affected by this support to the extent that it distorts trade. The tendency in OECD countries has been for support to be shifted into the Green Box of policies that are exempt from reduction commitments. In theory, these policies are no more than “minimally trade-distorting”, but their actual impact on production and trade may be significant.

If a new WTO agreement is to have the maximum effect, then it needs to limit countries' scope for avoiding their reform commitments.

This means *tightening* the laws, to eliminate possible loopholes, and *broadening* them, such that alternative means of restricting trade are closed down. A major threat to further trade liberalisation is that countries will become increasingly adept at limiting the impact of their reform commitments while staying within the letter of WTO law.

ETEs' capacity to benefit from a multilateral agreement is conditional on the development of their human and institutional capital.

Many ETEs suffer from deficiencies in basic information, such as economic statistics and customs data. Often, this institutional weakness is compounded by the fact that ETEs do not have the requisite trained professionals (statisticians, economists and policy analysts). The problems of a weak domestic, human and institutional resource base are further amplified by a lack of international representation, and by weak communication from domestic exporters to international negotiators and representatives. Investment in these areas would lead to a more balanced implementation of a multilateral trade agreement, as well as providing broader economic benefits.

Keeping a “**Watch on Support**” (Part II) for non-member transition countries is one way of monitoring their progress towards market orientation. In 1999 percentage PSEs (Producer Support Equivalents) decreased in **Estonia, Romania, Russia** and **the Slovak Republic**, ranging from –3% (Russia) to 25% (Slovak Republic). The PSE increased slightly to 18% in **Latvia** and 21% in **Lithuania**. In comparison, PSEs in OECD countries rose for the second consecutive year to an average of 40% in 1999. Even though these non-member countries provide less support to producers than OECD countries, higher shares of support in relation to GDP mean that this support places a heavier burden on non-member economies than is the case in OECD countries.

Highlights (Part III) of developments in five major agricultural economies show that macroeconomic performance has largely thrown off the effects of the Asian and Russian financial crises of 1998. Agricultural production has grown in all five countries, but at widely varying rates. While all five countries are major agricultural players, their roles in the multilateral trading system differ significantly.

- **Brazil's** overall economic performance was above expectations in 1999 and agricultural exports increased to new records in terms of both volumes and values. This was particularly remarkable in view of low commodity prices that prevailed in international markets in 1999.
- In **China** total agricultural production is beginning to level off due to lower crop production, and a shift from crops to livestock is emerging. China's grain economy has been subject to another round of reforms, which aim to make domestic policies more compatible with the policy environment likely to result from the anticipated WTO membership.
- **India's** small agricultural output growth of 0.8%, due mainly to low rainfall and reduced acreage, draws attention to the need for major structural and infrastructural improvements. As a major producer of dairy and fruits and vegetables, India needs investment in food processing to modernise and increase scale, to realise value-added and export potential, and to help with rural employment.
- **Russia's** agricultural output grew a modest 2.4%, remaining well below its pre-crisis levels. The primary agriculture sector remains to a large extent outside the workings of a market economy. Despite recent short-term import substitution effects for some products, Russia is likely to remain a major agricultural importer, especially of raw sugar, meats and dairy products.
- **South Africa's** agricultural output grew 3.7% in 1999 with horticulture in the lead. Despite agriculture's relatively low share of GDP at 4.1%, agricultural exports maintained their share of total exports at 8.7%. Job creation stands out as a major challenge for South Africa, as in the case of China and India, requiring significantly higher rates of growth and investment.

Part I

**AGRICULTURAL TRADE LIBERALISATION:
THE PERSPECTIVE OF EMERGING AND TRANSITION ECONOMIES**

AGRICULTURAL TRADE LIBERALISATION: THE PERSPECTIVE OF EMERGING AND TRANSITION ECONOMIES

1. Introduction

This OECD analysis of agricultural trade policies focuses on the interests and concerns of emerging and transition economies (ETEs).¹ The case for trade liberalisation rests on the potential for major improvements in economic welfare, as resources are allocated globally in accordance with the pattern of comparative advantage. However, the notion of aggregate gains is often too abstract for policy-makers in individual countries, who are interested in more specific questions. How will the country be affected on balance by multilateral reform? Who will win, and who will lose if protection is removed? How should those who no longer benefit from protection be compensated? How can policy-makers ensure that their countries' interests are reflected in the policy debate? The answers to these questions vary from one country to the next. This first part of *Agricultural Policies in Emerging and Transition Economies 2000* examines the trade policy interests of ETEs, and considers how their diverse concerns might be accommodated within a multilateral trade agreement.

Scope of the study

The question of how the interests of developed countries and ETEs can be reconciled to produce a “balanced” multilateral agreement is a broad one. Accordingly, the coverage of this study is limited to issues that can be considered in terms of the “three pillars” of the Uruguay Round Agreement on Agriculture (URAA).² Although the topics likely to emerge in the next WTO round will undoubtedly differ from those that were considered during the Uruguay Round, the key subjects covered by the Uruguay Round are still likely to figure. Moreover, some of the “new” issues that are likely to come to the fore can also be considered within this categorisation. For example, the tendency of tariffs to escalate with higher degrees of processing is essentially an issue of market access, while many of the implications of state trading enterprises for international trade can be considered under the headings of market access (state trading importers) or export competition (state trading exporters).

For each “pillar”, the analysis focuses primarily on the *economics* of the policy issues. Yet it is important to note that the URAA is essentially a *legal* agreement between WTO members, and that any prospective WTO agreement will have the same character. The contribution of this report therefore derives from the ability of economic analysis to help inform the development of appropriate legal specifications.³

Outside the three pillars – notably with respect to sanitary and phyto-sanitary (SPS) and technical barriers to trade (TBT) provisions – a number of new policy developments, such as the controversy over GMOs and concerns relating to health and safety issues, have changed the nature of the policy debate. In these areas, key features of the Uruguay Round's provisions will probably need to be revisited. In addition, a number of new topics are also likely to be on the agenda of the WTO Round. These include the implications for trade of the trend away from bulk commodity exports and towards higher value added (particularly through processing), and considerations of how the “multifunctional” characteristics of agriculture should be accommodated within the trade policy debate.⁴ As with SPS and TBT rules, not only will an agreement on these matters have to be reached, but the very conceptual and analytical basis on which that agreement should rest will have to be agreed first. Accordingly, all issues falling outside the three pillars of the URAA are excluded from the analysis.

This report presents a comparative analysis that, as far as is possible, analyses ETE policies on the same basis as policies in OECD countries. There are two main reasons for such an approach. One is that policies in OECD countries have a major economic impact on both exporting and importing ETEs. The other is that reform commitments undertaken and implemented in OECD countries provide a benchmark according to which agricultural trade liberalisation in ETEs can be measured. Accordingly, the paper draws extensively on existing studies of OECD country policies, and on specific work undertaken in the area of trade analysis.

Organisation of the study

Within the context of the “three pillars”, the following sections examine the diversity of interests among ETEs and consider how, in specific terms, these concerns are likely to affect the policy debate. The goal is to suggest some policy principles through which the legitimate trade policy concerns of ETEs might be addressed.

- Section 2 examines why agricultural trade liberalisation matters to ETEs and why it is important that the perspective of ETEs should be accommodated within the international policy debate.
- Section 3 examines where the policy interests of ETEs converge and where they diverge. The aim of this section is to identify which economic impacts of trade reform are of most importance to which groups of ETEs, and to provide an indication of how well the sample of ETEs and OECD countries represents the global pattern of policy interests.
- Sections 4, 5 and 6 disaggregate ETEs’ interests by considering how they are likely to be affected by changes to WTO rules on each of the “three pillars” of the URAA. In the case of market access and export competition, there are not only issues arising from the experience of URAA implementation, but also outstanding issues that were not addressed in the URAA but are nevertheless of significance to ETEs. For each “pillar”, there is an examination of how the provisions of the URAA were implemented in ETEs, and a comparison with the experience in OECD countries. There is also a consideration of how ETEs are affected by policy changes in OECD countries on the one hand, and by changes to their own policies on the other. For each issue, some possible policy approaches are suggested.
- Section 7 provides a discussion of some of the general factors that would condition the impact of a trade agreement on ETEs. These factors include general market conditions, the growing importance of regional trade agreements, and human and institutional resource constraints in ETEs.
- Section 8 presents the conclusions of the analysis.

2. Why agricultural trade liberalisation matters for Emerging and Transition Economies

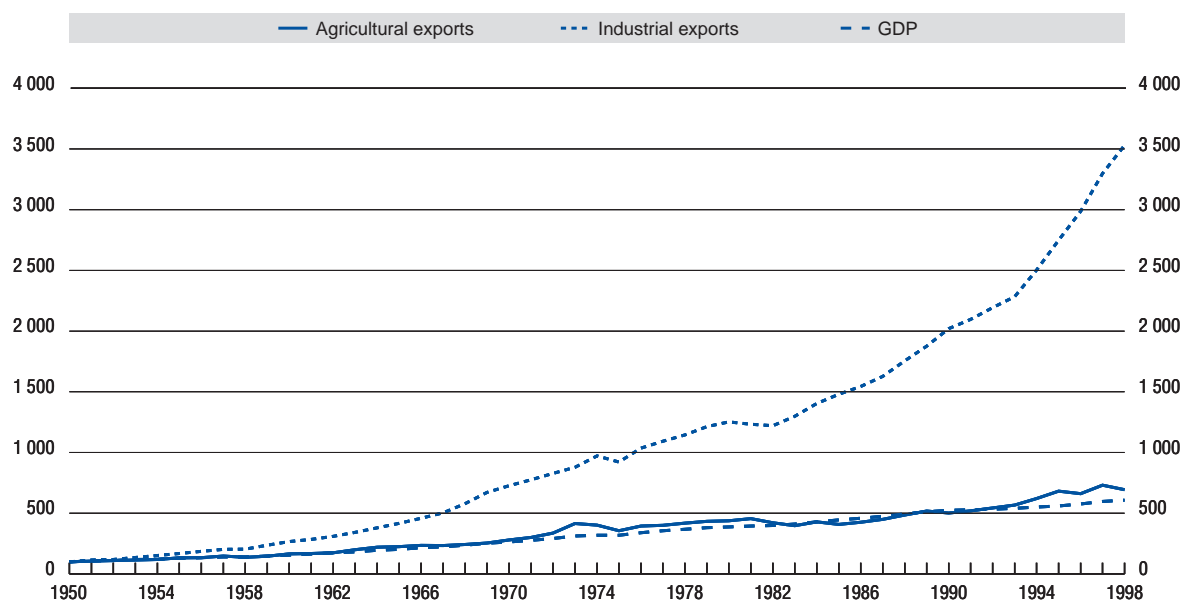
There are large potential welfare gains from trade liberalisation

The basic case for the multilateral liberalisation of agricultural policies rests on the potential for large global welfare gains. The origin of these gains lies in the concept of comparative advantage: that if resources are allocated to activities in which they are most efficient relative to the available alternatives, then aggregate welfare will increase. Trade protection prevents resources from being employed efficiently and thus reduces overall welfare. Such is the extent of agricultural protection that the potential gains from agricultural liberalisation are estimated to be as high as the potential gains from industrial liberalisation, even though agriculture accounts for a smaller fraction of world trade.⁵

Trade has been an engine of economic growth for manufactures...

Trade has been a major engine of economic growth in both developed and developing countries.⁶ Globally, the volume of merchandise trade grew by a factor of 17 in the second half of the 20th century, as compared with a six-fold increase in world production (Figure I.1).

Figure I.1. Trends in the growth of world exports and GDP
1950 = 100, constant prices



Shares in agriculture and industrial goods prior to 1980 extrapolated using data for 18 major exporting countries.
Sources: WTO (1995, 1997), OECD (1998).

The increase in global output translated into a doubling of world per capita income. The aggregate growth in trade was possible because, on balance, countries opened their borders to international trade. For example, average import tariffs on manufactures fell from 40% to 4% over this period.

... but less so for agriculture

The growth in agricultural trade has been relatively modest, more or less matching the overall pace of economic growth. In part this reflects the declining importance of agriculture relative to other sectors. However, a major factor is trade protection.⁷ Here, competing forces have dictated the development of agricultural trade. On the one hand, high levels of support in some OECD countries have led to surpluses that have been exported (with the use of export subsidies) onto world markets. At the same time, barriers to imports in OECD countries, together with export-limiting policies in a number of developing countries, have had an offsetting effect on the volume of trade. As resources have been redistributed away from the allocation suggested by the principle of comparative advantage, the ability of agriculture to contribute to global prosperity has been undermined.

Whereas developing countries have increased their share of world trade in manufactures, this has not been the case in agriculture

At issue is the ability of ETEs to share in the potential welfare gains. Many developing countries have a comparative advantage in some form of agricultural production. This may stem from a relative abundance of land (as in Argentina and Brazil), or a large supply of labour (notably in China and India). Yet, although developing

countries as a whole have increased their share of world trade in manufactures, this has not been the case in agriculture. Whereas all developing countries (*i.e.* those conforming to the World Bank's classification) increased their share of world merchandise exports from 17.7% to 28.8% between 1980 and 1997, their share of world agricultural exports remained virtually unchanged over this period, rising from 36.4% to 37.5% (Figure I.2).

A major reason for this lack of market penetration is that agricultural markets remain highly protected

A major reason for this inability to capture a larger share of agricultural trade is that protection has remained high. Average bound tariffs on agricultural products remain high at over 40% – roughly the same as the rate on manufactures in 1950. The failure of agriculture to be covered substantively by all multilateral (GATT) agreements prior to the Uruguay Round allowed agricultural trade reform to remain 50 years behind reform in manufactures (Figure I.3).⁸ Moreover, annual agricultural support in OECD countries totalled USD 361 billion in 1999 (OECD, 2000) – double the value of total agricultural exports from developing countries (UNCTAD). The farm policies of OECD countries are estimated to account for about half the trade distortions imposed on developing countries, with developing countries' own trade distortions accounting for the other half. In terms of economic welfare, OECD farm support is estimated to cost developing countries about USD 20 billion per year (Anderson, Hoekman and Strutt, 1999).

Figure I.2. Export market shares of developing countries

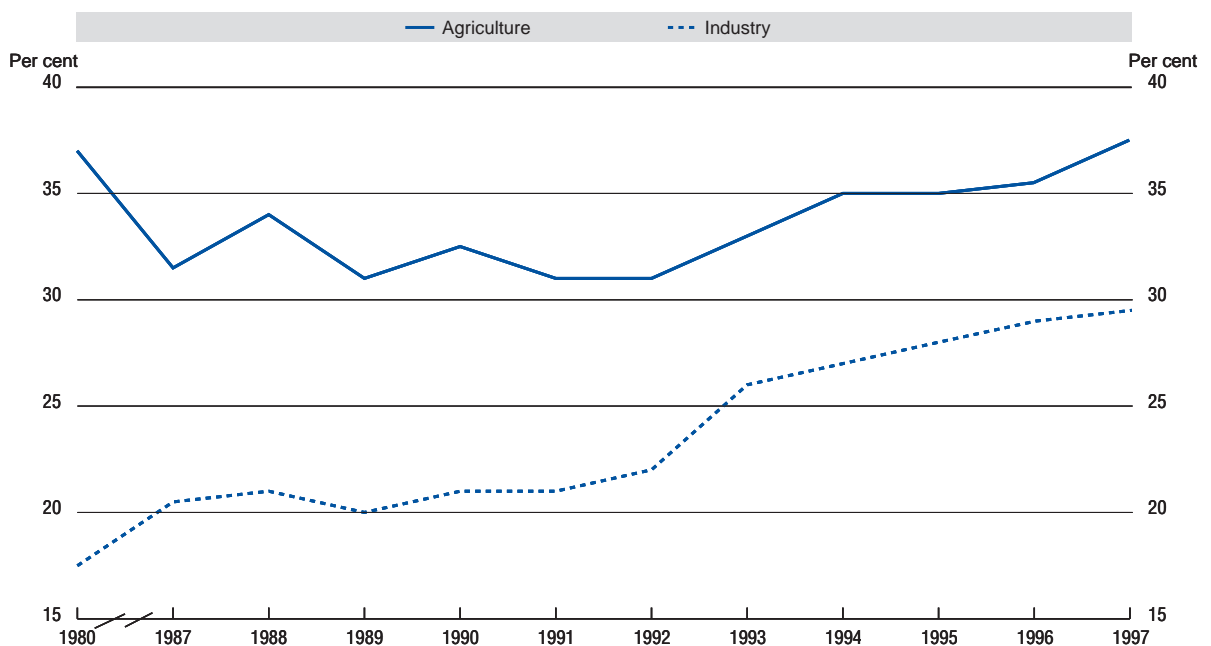
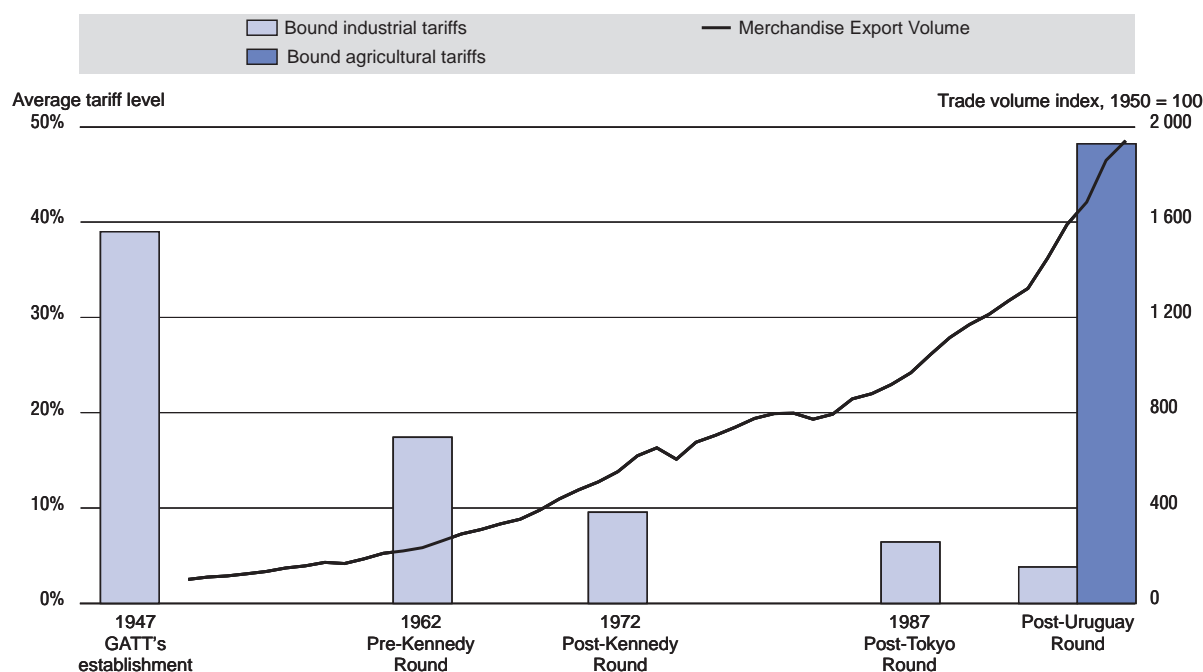


Figure I.3. Tariffs and the growth of international trade



Source: OECD (1998).

Transactions costs act as implicit barriers to trade and may distort the pattern of comparative advantage

The principle of comparative advantage applies, by definition, to all countries. Box I.1 explains why the concept is just as relevant for countries with low productivity (high unit costs) as it is for countries with high productivity. Nevertheless, there are a number of reasons why a country might not be able to gain from specialising in those commodities in which it has a comparative advantage. The most obvious of these is explicit trade protection, whether this is applied by trading partners or by the country itself. However, other factors can also operate as implicit barriers to trade. For example, poor infrastructure imposes costs that can protect local producers from the effects of trade and competition. At the same time, it can prevent industries that enjoy a comparative advantage from exploiting the potential to absorb resources from other sectors and export. In general, transactions costs constrain trade in those sectors that incur them. Transactions costs include a number of obstacles to economic development, such as labour market rigidities, a lack of rural credit, weak contract enforcement and inefficient marketing channels. These distort the pattern of comparative advantage to the extent that they influence relative costs and prices.

A major challenge of transition and development is to reduce these transactions costs such that trade can occur on the basis of comparative advantage

A further factor that makes it difficult for policymakers to operationalise the concept of comparative advantage is that opportunity costs can change over time. In the case of ETEs, the obstacles to development noted above result in a pattern of relative costs that may change once these impediments are overcome. For example, the underdevelopment of rural credit facilities, or insecure property

Box I.1. Comparative advantage: its relevance for countries with low productivity

Comparative advantage is a *relative* concept that applies to all countries irrespective of their level of development. A country has a comparative advantage in an economic activity if the *opportunity cost* of production – that is, the cost relative to the available alternative – is lower than in other countries. The gains from trade arise when countries specialise in those goods in which they have a comparative advantage, and export them in order to buy goods in which they have a comparative disadvantage.

The following analogy helps distinguish the notion of comparative advantage from that of absolute advantage. A business executive may repair his own car more quickly than the mechanic he visits – in other words he may have an *absolute* advantage in both his regular job and in car repair. Yet it still makes sense for him to employ the mechanic if he can earn more by staying at work and paying the mechanic out of his earnings. Similarly, the mechanic benefits from this arrangement, even if he is a less efficient car repairman than the businessman.

The principle of comparative advantage can dispel a standard argument, often applied in the context of the agricultural sectors of ETEs; namely, that they do not stand to benefit from trade because their agricultural sectors are not productive enough to stand up to international competition. The fallacy of this argument can be demonstrated with a classic real world example. After the Second World War, British productivity was far lower than that in the United States. However, the UK economy was much more dependent on international trade (generating similar levels of export earnings to the United States) and did not lose its ability to generate export revenues because of its lack of productivity. The following table, which uses data for 39 industries in 1950, compares the ratio of US to British productivity with the values of US and British exports. In all industries, British productivity was lower (*i.e.* unit costs were higher). Yet in those industries where US productivity was less than 3.4 times British productivity, the United Kingdom had larger exports. The United Kingdom had an absolute advantage in nothing, but a comparative advantage in those industries where its productivity exceeded 30% of the US level.

	Industries in which value of:	
	US exports > UK exports	US exports < UK exports
Ratio of US to UK productivity: Greater than 3.4	22	4
Less than 3.4	3	10

Source: Krugman (1994).

The United Kingdom's ability to outsell the United States in industries in which its productivity was inferior depended on the fact that factors were paid correspondingly less than in the United States. In fact, UK wages were less than half the level of US wages. Was this bad for British workers? The answer is no. The relevant benchmark is what they would have earned in the absence of trade, and this would have been even lower. Bringing the example up to date, capital, labour and other factors typically earn lower returns in ETEs than they do in OECD countries, but it is these lower returns that enable them to compete on international markets – to the mutual benefit of both ETEs and OECD countries.

property rights, may implicitly tax agriculture relative to industry. This means that agriculture may have a comparative advantage in the long-term but not in the short-term. The argument that industries should be protected from international competition until these “transition-specific” or “development” objectives are met is similar to the traditional argument that infant industries need to be protected. The dangers are twofold: one is that, under the umbrella of protection, industries may not become efficient; the other is that policy-makers are likely to have difficulty identifying which sectors are likely to have an underlying (*i.e.* long-term) comparative advantage. The policy challenge – in effect *the* challenge of transition and development – is to pursue improvements in all the dynamic factors that affect costs and thereby condition the economy's ability to trade on the basis of underlying comparative advantage.

The “new trade theory” suggests that the gains from trade may be even larger than predicted by classical trade theory

The classical explanation of the gains from trade (which assumes perfect competition and constant returns technology) has been questioned in the context of the increased activities by multinational firms and growing trade in branded food products. Yet, the “new trade theory” suggests that imperfect competition and economies of scale will result in additional gains from trade, over and above those predicted by the classical explanation.⁹ Economies of scale allow countries to benefit from further specialisation and trade, while open trade forces national monopolies to rationalise their operations. Consumers are also likely to benefit from greater choice. These gains may reinforce the aggregate benefits suggested by traditional trade theory, so that trade is welfare improving at both the sub-national and the national level. However, there may be some circumstances in which an individual country could be worse off, for example if international specialisation causes industries with increasing returns to be lost to those with constant returns.

But, despite the prospect of aggregate gains from trade reform, the country-specific effects are less certain

Despite the strong evidence that trade acts as an important source of economic growth, there is widespread public concern that trade liberalisation in general, and agricultural trade reform in particular, might not serve the interests of individual countries. In the case of ETES, this may reflect the belief that the mechanics of trade reform do not lead to a “level playing field”. OECD countries have a responsibility to consider the effects of their policies on ETES, especially regarding the issue of market access.¹⁰ It is also in their interest to do so. More broadly, some academic studies have questioned the conventional wisdom that, for individual countries, there is a direct relationship between openness to trade and economic growth.¹¹

Trade reform is just one determinant of economic performance

It is important to recognise at the outset that a host of factors other than openness to trade may explain a country’s economic performance. Other determinants include macroeconomic and structural policies, social policies and the extent to which principles of good governance are observed. Moreover, there are theoretical qualifications to the premise in favour of free trade. These include those suggested by the “new trade theory”, the possibility of positive production externalities in import-competing sectors, and, in the more recent “endogenous growth” literature, the scope for gains from protecting technologically dynamic sectors.

The collective interest in open markets usually applies at the individual country level too...

These arguments are essentially caveats to the principle of comparative advantage. In each case, they must also be weighed against the efficiency benefits that come from exposure to international competition. Indeed, most studies of agricultural protection suggest that countries would gain from unilateral as well as multilateral reform, due to the more efficient use of domestic resources. Moreover, given that the aggregate global gains from trade reform are well established, the protectionist argument often hinges on the assumption that the country protects while the broader trading environment remains open. Such a narrow view is at odds with the principle of the common good, and unsustainable globally.

... although there will be a mixture of winners and losers

Despite the evidence of aggregate welfare gains, some countries may lose from agricultural trade liberalisation, and, within countries, there will be both winners and losers as resources are reallocated according

to their comparative advantage. Most ETEs are expected to gain: exporters from improved terms of trade relative to those they would obtain in the absence of reform; importers from improved domestic resource allocation. The potential losers are net exporters with preferential arrangements they stand to lose, and food importers where there is no potential improvement in domestic efficiency to offset the effect of higher world prices.¹² In the case of the former, it is questionable whether the dependency fostered by preferential agreements is of long-term benefit. In the latter group, the potentially adverse impacts were recognised in the WTO *Decision on Measures Concerning the Possible Negative Effect of the Reform Programme on Least Developed and Net Food-Importing Developing Countries* (the NFIDC Decision). Both categories may gain overall from multi-sector liberalisation and, in the case of an agriculture-specific agreement, could in principle be compensated from the pool of net welfare gains.

Trade reform entails structural change and raises concerns about the extent of poverty

Within countries, the beneficiaries of protection are likely to lose, at least in the short term. This will inevitably have implications for the internal distribution of income. For many ETEs, such internal upheavals raise legitimate concerns about the incidence and degree of poverty. Although global per capita incomes have doubled in the last 50 years, there are still an estimated 1.5 billion people in the world living in poverty. Most of these are developing country farmers, but there are also many urban poor people who spend a large share of their incomes on food. Who wins and who loses will depend on whether the government protects farmers via high prices or consumers via low prices.

Trade reform helps generate the income necessary to lift people out of poverty but may need to be accompanied by appropriate domestic policies

The benefits of trade liberalisation come from net gains in economic welfare, and improved economic performance should, on balance, help lift people out of poverty. Nevertheless, liberalisation is not, by itself, a guarantor of reduced poverty. To a large extent, the issue is one of domestic policy, since domestic programmes can be used to ensure that the losers from policy change are provided with compensation and helped through the process of adjustment. The overlap with trade policy comes through the way in which such programmes are treated by the provisions of a multilateral trade agreement. Under the Uruguay Round Agreement on Agriculture (URAA), some such measures fall within the Green Box classification and are thus exempt from reduction commitments.

Agricultural policies target a range of objectives...

Agricultural policies target a range of objectives beyond supporting farm incomes. The emphasis varies from country to country, but the list includes protection of the environment, food security, support of rural communities, the prevention of rural-urban migration and preservation of the rural landscape. The relative weights that countries attach to these objectives will vary from one country to the next, with the level of economic development usually an important determinant of a country's priorities. For example, the social consequences of rural-urban migration are a bigger concern for many emerging economies than aesthetic considerations concerning the countryside.

... that should ideally be pursued in the least trade-distorting way

Agricultural trade liberalisation, through its effects on producers' and consumers' incentives, is likely to have implications for each of these objectives. OECD analysis recognises the legitimacy of multiple objectives and is concerned with the manner in which they are pursued. The ideal policies are those that target these objectives without distorting production and consumption, and hence trade. However, the pursuit of some objectives may require taxes or subsidies that would cause output and consumption to differ from a "zero intervention" level and thus affect world markets. The political balance needed to ensure that the aggregate gains from trade are not lost in the pursuit of national objectives is reflected in the 1998 OECD Communiqué of Agriculture Ministers, which stresses the need to avoid policies that distort production and trade.

The policy challenge

The URAA was a watershed in that, for the first time, agriculture was subject to multilateral rules and disciplines

Although agricultural markets remain highly protected, the conclusion of the Uruguay Round in 1994 was a watershed. For the first time, agricultural policies were subject to effective multilateral rules and disciplines. Under the Uruguay Round Agreement on Agriculture (URAA), bound tariffs replaced non-tariff import barriers; countries were obliged to open closed markets; export subsidies were curbed; domestic programmes were categorised on the basis of their potential to distort trade; and the most trade-distorting forms of support were disciplined.

Agriculture was also affected by a number of other aspects of the Uruguay Round Agreement. Agreements were reached on the application of SPS and TBT regulations, with the aim of forestalling the use of such measures for purposes of trade protection. Other agreements having an effect on agriculture included those covering dispute settlements and the use of countervailing measures. In addition, the existing articles of the General Agreement on Tariffs and Trade remained both operative and applicable to agriculture.

The policy challenge is to consolidate the limited liberalisation that resulted from the URAA

In the context of future multilateral trade negotiations, the policy challenge is to consolidate what in practice turned out to be only limited liberalisation of trade in agricultural products. For example, applied tariffs on agricultural products remain, on average, nearly four times as high as tariffs on industrial goods. Moreover, in the past two years support in OECD countries has ratcheted upwards, under pressure from lower world prices.¹³

The complexities of the negotiating process make it easy for countries to lose sight of the potential gains from agricultural trade reform

The URAA took seven years to conclude and was marked by political difficulties, even though the main features of the Agreement were negotiated among a narrower group of countries than will seek to shape the next prospective WTO agreement. The agreement's modest economic impact derived from a number of factors, including the difficulty of negotiating a package that was acceptable to all participants in the multilateral process and the (sometimes unforeseen) flexibility afforded to countries in interpreting their URAA commitments. Amid the difficulties of negotiation, it is easy to lose sight of the fact that not only are most countries likely to share in the global gains from trade liberalisation, but the benefits are such that most would also benefit

from unilateral reform. This point is often lost in a process through which countries trade “concessions”. A tactical dilemma for unilateral reformers (a group that includes many developing economies) is that they may be able to improve their negotiating leverage by returning to applied tariffs that are closer to their URAA commitment levels.

Why the perspective of ETEs is important

The concerns of ETEs are of interest to policy-makers everywhere

Notwithstanding the diversity of policy interests among ETEs, there are several reasons why policy-makers everywhere should be interested in the collective concerns of these countries:

ETEs are increasingly important to international trade

- The overall economic implications of a new multilateral trade deal will depend to a greater extent on the provisions for ETEs. The increasing importance of non-OECD member countries to international trade, and their potentially greater importance to agricultural trade, means that an identification of which trade issues are likely to emerge cannot be considered exclusively from the perspective of OECD Member countries.

Liberalising ETEs will expect greater access to protected markets in OECD countries

- Many ETEs have introduced liberalising reforms for reasons other than Uruguay Round commitments. The catalysts for reform include regional trade agreements (RTAs), IMF structural adjustment programmes and the need for domestic economic reforms. In many cases, the agricultural sectors of ETEs are more liberalised than the sectors of developed OECD countries. Countries that have liberalised will naturally be seeking concessions from countries with greater protection.

ETEs are expected to participate more actively in the multilateral process...

- The Uruguay Round agreement was negotiated primarily by developed countries (although it was ratified by consensus among all countries). This led to a number of “asymmetries” in terms of the way its provisions affected individual countries. ETEs will be hoping to reduce unfavourable asymmetries by increasing their participation in the multilateral process.¹⁴ More generally, a number of countries have stressed the need for an agreement that is seen to be fair to all countries.

... with new WTO members having an important impact

- The anticipated accession of China, Russia and Ukraine to the WTO will have important implications for the way in which trade agreements are reached.

ETEs will also be seeking to give voice to their common interests

- Last but not least, ETEs have a number of common economic interests. For a start, all countries – developed and developing – have an interest in a liberal trading system. ETEs are also likely to have common priorities that differ from those of developed OECD countries (for example, the importance they attach to food security), while their scope for some types of policy reform is more likely to be impeded by the underdevelopment of institutions.

3. What stake do ETEs have in agricultural trade reform?

This section seeks to identify ETEs’ policy interests with respect to the three pillars of the URAA

To obtain a broad picture of what ETEs stand to win or lose from further agricultural trade liberalisation, some background information is needed. This section provides basic magnitudes on the volume and direction of agricultural trade, together with some data on the extent

to which different agricultural markets are protected. This serves to indicate the direction in which trade patterns would be likely to change if trade protection were reduced or removed. An overview of ETEs' trading characteristics is then provided. This makes it possible to identify where countries' positions converge, and where they diverge, on agricultural trade policy issues. Specifically, it facilitates a preliminary identification of where ETEs' policy interests lie with respect to reforms under the three pillars of the URAA.

World trade in agricultural products

Food and agriculture's share of global merchandise trade has fallen to about 10%...

Global trade in food and agricultural products was worth approximately USD 450 billion in 1998 according to UN-FAO estimates. This figure represents about 10% of the value of all merchandise trade. Although agricultural trade is increasing in absolute terms, its share of total trade has declined steadily throughout the century. This trend shows no sign of abating. According to World Bank estimates, the share of food and agriculture in total merchandise trade fell from 17% to 10% between 1980 and 1997.¹⁵

... with most of this trade in semi-processed and processed products

About 80% of agricultural trade is in food products rather than raw agricultural materials, with the share of semi-processed and processed products increasing over time. Between 1993 and 1998, food and agricultural trade increased by 28% in US dollar terms. Most of this increase was attributable to greater traded volumes for processed agricultural products. Between 1964 and 1994, the share of processed products in the food and agricultural exports of OECD countries increased from 49% to 67%. For developing countries, the share increased from 41% to 54% over the same period, while for least developed countries it declined from 27% to 17%.¹⁶

OECD countries dominate international agricultural trade...

In 1998, OECD countries accounted for about 70% of both global exports and global imports of agricultural products. The share of world imports accounted for by OECD countries was virtually unchanged from 1993, while the proportion of global exports registered a slight decline over the same period. The six emerging economies covered by this report (Argentina, Brazil, Chile, China, India and South Africa) accounted for 5.8% of world agricultural imports in 1998 and 11.1% of world agricultural exports, with both contributions increasing from 1993. Of the six, only China was a net importer in 1998 (it was a net exporter five years previously). Transition countries are, on aggregate, net agricultural importers, although their net deficit declined between 1993 and 1998. As a consequence, transition economies contribute more to world imports (6.5% in 1998) than they do to exports (4.2%).

... and when the ETEs examined in this report are included, the vast majority of world trade is accounted for

Added together, OECD countries and the ETEs examined in this report account for the vast majority of world agricultural trade. In 1998, their shares of world imports and exports were 82% and 84% respectively. Collectively, this group of 29 OECD countries and 17 ETEs also accounts for a large share of the world's population. In 1998, the proportion was 66%, with China and India alone accounting for 37%. The importance of agriculture in non-OECD member

countries means that the share of the world's rural population represented by these 46 countries was even higher, at 72%.

Who trades with whom?

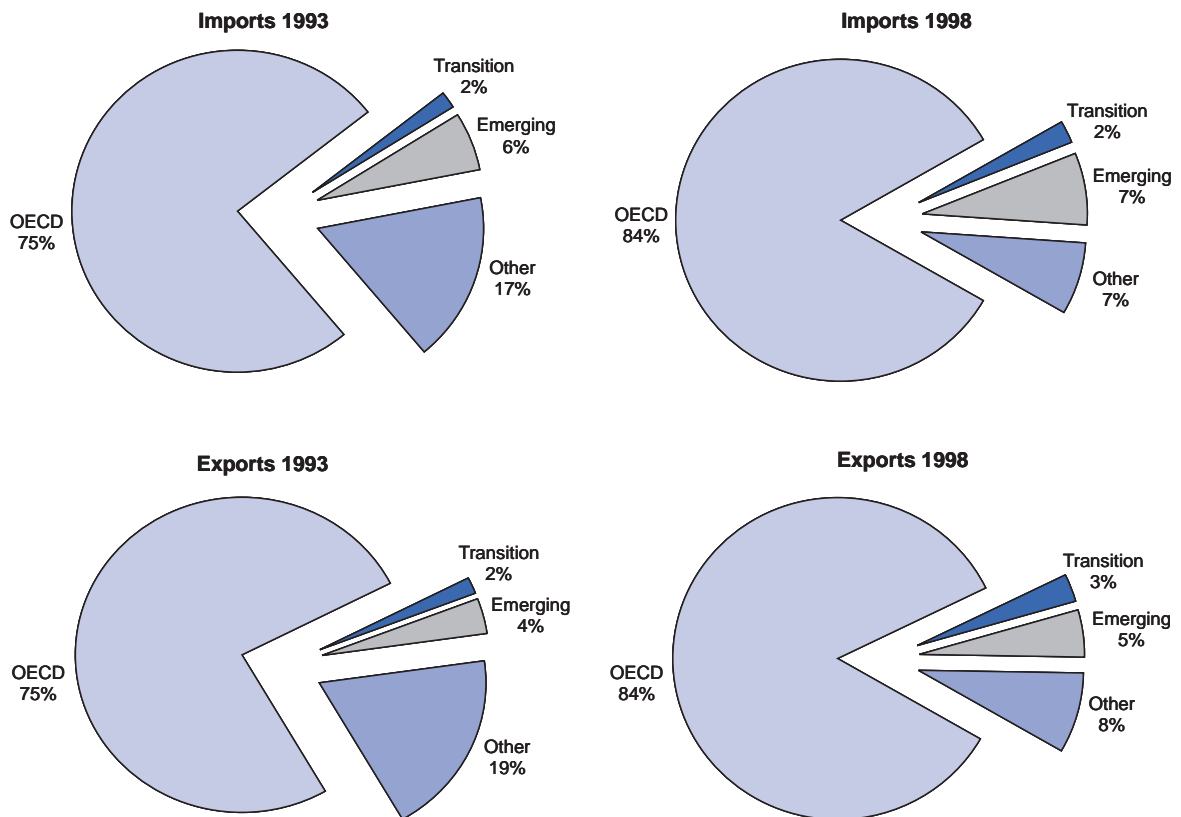
OECD countries trade mostly with each other

OECD countries trade predominantly with other OECD countries. Figure I.4 shows the shares of OECD exports and imports going to four blocs of countries: other OECD countries, transition countries (excluding the Czech Republic, Hungary and Poland), emerging economies and all other countries. The figures are reported for 1993 and 1998 to give an idea of how the direction of trade has changed since Uruguay Round implementation began. On both the export and import side, the dominance of intra-OECD trade is understated because intra-EU trade is excluded from the figures.

Non-OECD countries have not increased their penetration of OECD markets

On both the import side and the export side, intra-OECD trade has become more important. In 1998, 83% of OECD agricultural imports came from other OECD countries, while 85% of agricultural exports went to other OECD countries. There has been little penetration of OECD markets by ETEs, whose combined share of OECD agricultural imports increased from 8% to 9%.

Figure I.4. Direction of OECD agricultural trade before and during the UR



“Other countries” (*i.e.* those outside the 46 Member group of OECD countries and ETEs) saw their share of OECD agricultural imports decline from 17% to 7%. Similarly, they have become less important as an outlet for OECD exports as surpluses have declined.

The European Union is the dominant trading partner of central and eastern European countries...

For many transition economies, particularly those in Central and Eastern Europe, the European Union is the dominant trading partner. For most CEECs, the European Union is more important as a source of imports than it is as an export destination (*i.e.* there is a net deficit with the European Union). For transition economies in general, the OECD accounts for a greater share of agricultural imports than agricultural exports. This is particularly notable in the Baltic countries where 60-70% of agricultural imports come from OECD countries, while 20-30% of agricultural exports go to OECD countries (most exports go to the NIS). For most transition economies, the relative importance of trading relations with the European Union, and with other transition economies, implies that the biggest impact arising from a WTO agreement would be via its impact on agricultural policies in the European Union and in other transition countries.

... while the trading relationships of Emerging Economies are diverse

The emerging economies show a more diverse profile of trading relationships. It is interesting to note that Brazil sends half its exports to the European Union, compared with just 27% in the case of Argentina. Nearly two-thirds of South African exports go to OECD countries, not least because of the underdevelopment of regional African markets.

Developing countries are exporting more to other developing countries

In general, developing countries are sending an increasing share of their agricultural exports to other developing countries. One reason for this is that, on average, developing countries are growing more rapidly than developed ones. At the same time, the increasing share of non-bulk food trade in total food trade reinforces the reorientation of trade, since protection in developed countries is often higher for semi-processed and processed products (OECD, 1997). On the other hand, the growth of agricultural trade among developing countries is restrained by tariffs that, in many cases, remain high.

How protected are agricultural markets?

Agricultural support in OECD countries has returned to pre-Uruguay Round levels

OECD countries dominate international trade, so it is instructive to look, first of all, at the extent of support in these countries. In 1999, the total value of support provided to agriculture in OECD countries was an estimated USD 361 billion, or 1.4% of OECD GDP. The Producer Support Estimate (PSE) across all OECD countries totalled 40% of the value of production. The jump in support over the past two years has almost reversed a gradual decline over the preceding ten years, whereby the PSE declined from 41% to 31% between 1987 and 1997. These figures are indicative of increased demands for protection when world prices are under pressure.

The degree of support varies widely across countries and across commodities...

The PSE for all OECD countries conceals wide variations in the level of support among countries, with the PSE ranging from 1% of total gross farm receipts in 1998 (New Zealand) to 65% or more (Iceland, Japan, Korea, Norway, Switzerland). There are also wide variations

between commodities, with the highest levels of support typically recorded for sugar, milk and rice. From a trade standpoint, a positive development has been the increasing share of direct payments in total support. However, support that is not linked directly to production still represents only about 20% of total support (compared with a share of 65% for market price support).

... yet import barriers are generally much higher than in other sectors

For many countries and commodities the import tariffs remain high. On average, for agricultural goods, bound tariffs average 37%, compared with 5-10% for other products. For a number of agricultural commodities, the tariffs remain extremely high, in many cases above 200%).¹⁷

The protection of agriculture relative to industry is, on average, higher in OECD countries than in ETEs...

The protection of agriculture relative to industry is a general phenomenon in OECD countries. For example, trade weighted aggregate MFN tariffs average 17.1% for agriculture and 4.7% for manufactures. In “high- income countries”,¹⁸ the bias against agricultural imports is even more pronounced, with agricultural tariffs of 17.5% as against an average of 3.8% for manufactures – a ratio of 4.6 to 1.¹⁹ Trade-weighted figures can be misleading. In the first place, high tariffs are not captured adequately precisely because they restrict trade. By definition, they also attach less importance to smaller trades, such as those often undertaken by ETEs. All averages have their shortcomings: none fully captures the tendency for “sensitive” sectors to be afforded greater protection. For example, although average tariffs are often no higher in OECD countries than in ETEs, only Australia, the Czech Republic, Hungary and New Zealand among OECD countries do not have at least one tariff that exceeds India’s peak of 150%.

... but the true extent of protection is difficult to measure

PSEs and applied tariffs are important, but nevertheless limited, measures of support and protection. They do not capture a host of implicit restrictions on trade, such as may be afforded in the allocation of tariff-rate quotas, by licensing regimes, or through the discretionary power of state trading enterprises.

In addition, individual markets may be subject to a range of competing, or reinforcing, policy effects

Understanding the specific distortions imposed on world food markets also requires that a range of complicated effects be disentangled. For example, a few OECD countries dominate the use of export subsidies. Although most OECD exports are in semi-processed or processed products, and most go to other OECD countries, the majority of export subsidies are on bulk commodities going to non-OECD countries. In some cases, these exports will be subject to import levies in the recipient country. Under these circumstances, trade is evidently being distorted, but – because of the subsidies – it is not clear that it is being restricted. As another example, the trade restriction implied by tariffs in OECD countries may be reinforced by export restrictions in ETEs. Finally, the effects of domestic support on production and trade are difficult to quantify. Even when these policies are decoupled at the margin, they may keep resources in agriculture and thus affect world markets.

The welfare losses associated with trade distortions are large but difficult to measure precisely...

As much as it is difficult to measure trade protection, it is even more difficult to gauge the welfare gains that would derive from a reduction in support. One reason is the inability of the data on protection to fully portray the range of policy restrictions. Related to this constraint, policy mechanisms are usually represented in a stylised manner, in order to make economic models tractable.²⁰

... although the aggregate gains from trade reform are not in doubt

Despite these difficulties, the orders of magnitude are not in doubt. As noted earlier, agricultural trade liberalisation is estimated to offer a potential of USD 70 billion in annual economic welfare gains. In absolute terms, developed countries are expected to be the biggest beneficiaries. This is because they harm their own welfare most by protecting their farm sectors at the expense of consumers and taxpayers. However, measured relative to initial income, many developing countries emerge as the biggest winners from reduced protection. The precise numbers obtained from a general equilibrium modelling exercise can be questioned. However, the main conclusion is clear: agricultural markets remain highly protected and their liberalisation would result in a large improvement in overall welfare, from which ETEs would, on balance, benefit.

The OECD countries and ETEs covered in this report collectively account for the majority of world agricultural trade

The heterogeneity of ETE interests

OECD countries dominate international agricultural trade. When the 17 ETEs examined in this report are added to the OECD totals, the combined grouping accounts for the majority of both agricultural trade and the share of the world's population affected by that trade. The overall sample therefore represents the economic weight of interests with a stake in agricultural trade reform.

However, many countries are excluded, and these countries may have different economic interests

However, there are over 200 countries in the world, so the coverage of this study extends to less than a quarter of all countries. Moreover, eight of the ETEs in this study are not yet WTO members, so the sample captures less than 30% of the WTO's 135-strong membership. This would be less important if the remaining 70% displayed a similar pattern of economic interests. However, there are some significant ways in which they differ.

The ETE sample is representative in terms of trade volumes and affected populations, but not in terms of a "head count" of countries' interests

The heterogeneity of ETEs' interests is demonstrated by the taxonomy of 148 developing countries presented in Appendix I.²¹ A key point to be noted here is that there is a large number of low-income, net food importing countries that are under-represented in the ETE sample. However, a considerable number of net food importers (42%) are also net agricultural exporters, so the sample is more representative than a casual inspection might suggest. In practical terms, there are nevertheless ways in which the concerns relating to agricultural trade reform will vary according to whether the focus is on trade volumes and affected populations, or a simple "head count" of countries' interests. These issues are discussed in Appendix I.

Only WTO members are obliged to reform their policies under a multilateral trade agreement...

WTO membership is obviously very important in determining what a country stands to win or lose from a multilateral agreement. The provisions of the URAA apply only to WTO members. The WTO has existed formally since January 1995, and all countries that were signatories to the GATT were admitted as members once they had ratified the April 1994 WTO Agreement. Since its inception, a number of countries have joined the WTO, including three transition economies whose agricultural policies are monitored by the OECD: Bulgaria, Estonia and Latvia. A pre-requisite of accession to the WTO is a commitment to implement the URAA. In practice, this amounts to a process of negotiating with a WTO working party and bilaterally with major trading partners.

... but the WTO members stand to gain more than non-members do

The benefits of WTO membership are twofold: first, a member gains leverage with other countries through access to the multilateral rules-based system; second, it typically reaps an economic benefit from the own-policy reforms that membership entails.²² Superficially, countries that are not members may seem to benefit from a more liberal trading environment without having to reform their own policies. In practice, these countries would probably benefit from liberalisation, have no legal recourse when they fail to gain access to other markets, and are likely to miss out through less favourable treatment by WTO members (*e.g.* with respect to the allocation of tariff-rate quotas, or by being charged tariffs above MFN rates).²³

Appendix I illustrates the heterogeneous characteristics of ETEs. Yet the World Bank and UN categories are themselves broad aggregations.

Other factors that may be important in explaining a country's position on trade policy issues include: the general importance of agriculture to the national economy...

There are further ways in which the trading characteristics of ETEs vary from one country to the next, and which may be important in determining a country's position on issues relating to agricultural trade reform. One factor is the general importance of agriculture to the national economy, in terms of its contribution to output and employment. The ETEs considered in this study are, with the exception of China and India, in the middle income category. The higher level of development means that agriculture, although usually important, is less crucial to the national economy than in low-income economies. At the other extreme, the poorest economies in Africa and Asia are usually more heavily dependent on subsistence farming and are therefore less likely to be affected directly by trade reform.

... the types of commodity that are traded...

A second factor is the types of commodity traded, for example whether the country exports temperate or tropical products, or low-value or high-value food products. Most of the ETEs in this study tend to export temperate products. These are typically subject to greater protection in OECD countries, primarily because they are more likely to compete with domestic production. Exporting ETEs are also more heavily dependent on bulk commodity exports than OECD countries. This is partly because the level of tariffs often escalates according to the degree of processing, thereby impeding the development of downstream processing sectors.

... the country's ability to take advantage of market access commitments...

A third factor is a country's capacity to take prompt advantage of access to OECD markets. This has been particularly important in the case of exports from the central and eastern European countries (CEECs) into the European Union. Hungary has been more successful than other CEECs in exporting into the European Union. In some cases (mainly pigmeat and poultry), these exports have been subsidised, but Hungary has traditionally been the most competitive producer of grains and oilseeds in Central Europe (which has also reduced the costs of feeding livestock). It has also gained an advantage over its CEEC neighbours through its experience as a regional exporter and by virtue of the speed with which it has privatised and attracted foreign capital into its downstream sectors.

... the country's other regional trading commitments...

A fourth determinant of a country's interest in multilateral trade reform is the extent to which its trade is conducted on the basis of regional trading arrangements. Most of the ETEs covered in this report belong to a regional trade agreement (RTA). The three Baltic countries and seven CEECs also have Association Agreements with the European Union and are in the process of acceding to full EU membership. The larger emerging economies have a greater diversity of trading relationships, with partner countries that are more likely to be outside their own region. In the case of Argentina and Brazil, for example, this means that membership of Mercosur does not detract from the importance of multilateral trade reform. On the other hand, the European Union dominates the trading relationships of the CEECs, while, for CEFTA members, the combination of EU and CEFTA trade accounts for the vast majority of total trade. This means that a major impact of a WTO agreement on CEECs would come indirectly through its effect on the evolution of EU policies.

RTAs complement the multilateral process to the extent that RTAs create additional trade. Whether or not they do so is an empirical question that is beyond the scope of this report. In principle, however, the answer depends on the type of RTA in question: an RTA that negotiates for more liberal trading relations with third parties is no threat to the multilateral system; while one that seeks to close its borders to non-members is.²⁴

... and the country's status at the WTO

The importance of WTO membership itself has already been noted. For members, the commitments vary according to whether or not the country holds special status in the form of Developing Country (LDC), Least Developed Country (LLDC) or Net Food Importing Developing Country (NFIDC) recognition.

Over three-quarters of WTO members have been accorded "developing country" or "least developed country" status. These countries are treated differently by the provisions of the URAA (the differences are described in the boxes outlining the details of the agreement). Among the 29 OECD Members, three (Korea, Mexico and Turkey) receive developing country treatment at the WTO. Among the non-OECD members monitored, six: Argentina, Brazil, Chile, India, South Africa and Romania (the only transition country) are classified as developing countries.²⁵ Developing country status is asserted by the country itself, agreed bilaterally as part of its

negotiated commitments, and then ratified by the full WTO membership. As such, it is a *political* decision and is not based on an explicit *economic* measure of development, such as GDP per capita. Least-developed countries conform to the definition of the United Nations Economic and Social Council.

Common interests

There are, nevertheless, fundamental areas in which the interests of ETEs converge

Although ETEs often have diverse trade policy interests, there are important areas in which their interests converge:

- All ETEs have an interest in a liberal trading system. Even food-importing countries that may lose from the liberalisation of agricultural policies have a broader interest in a multi-sector agreement that enables them to become better integrated with the world economy.
- Similarly, most ETEs would benefit if agricultural policy mechanisms were more transparent. Again, there may be cases where individual ETEs are able to benefit from the legal complexity of URAA requirements, or from the complex and non-transparent policy mechanisms that the agreement introduced (notably TRQs). But, in general, it is the more developed countries that have been better able to take advantage of this lack of transparency.
- Likewise, ETEs have a common interest in increasing the effectiveness of their participation at the WTO. This is important because there are specific areas where the policy requirements of developing and transition economies differ systematically from those of developed OECD countries. In the area of farm policy, for example, it is questionable whether ETEs could afford to implement the kinds of “decoupled” (*i.e.* Green Box) direct payment schemes that have been introduced in OECD countries. At the same time, there are a number of policy interventions that legitimately target development needs and yet are treated on the same basis as direct payments in OECD countries (*i.e.* both are exempt from reduction commitments). More generally, ETEs have a common interest in increasing the extent to which they are able to influence the outcome of negotiations, and in ensuring easier access to the WTO’s dispute settlement procedures.

Summary of ETE interests

Each country has a unique set of trade policy interests, although there are common areas of concern among ETEs

Agricultural trade liberalisation gives rise to policy concerns that are unique for every country. A country’s policy priorities will depend on its initial resource endowments and technological development, which go some way to explaining a number of key characteristics, including the country’s position as a net exporter or a net importer, and its openness to trade. Other important factors are the basic pattern of trade, in terms of which commodities are traded with which countries. These patterns are related simultaneously to a country’s own policies and the policies of its trading partners.²⁶ At the same time, ETEs have a mutual interest in an open trading system, in

achieving a “balanced” WTO agreement that treats all countries fairly, and in more transparent policies. The remainder of this report examines where the interests of ETEs diverge and converge on specific policy issues relating to the “three pillars” of the URAA.

4. Market access issues

On market access issues, there are three main interest groups: exporters, consumers of imports, and producers who face import-competition

For each country, the market access issue has two dimensions: exporters’ access to foreign markets on the one hand, and foreign exporters’ access to home markets on the other. In both cases, the interests of consumers conflict with those of producers who face competition from imports. Whose concerns receive priority is partly an economic issue. For example, access to foreign markets is likely to be the dominant concern of net exporting countries. It is also a political matter. For example, a country’s position on how much access it should grant to foreign exporters will depend on the relative weights attached to the interests of producers and consumers. In order to interpret ETEs’ policy concerns, it is important to examine both directions of market access; that is, to compare their own reforms with reforms in those OECD countries to whose markets they seek access.

ETEs are interested in how the market access provisions of the URAA can be improved to address their specific concerns

The URAA contained a number of provisions aimed at improving the general conditions of market access. For ETEs, the key questions are how well the actual formulation of the rules served their specific interests, and what changes would enable their concerns to be accommodated more fully. In this regard, the outstanding policy issues can be divided into two categories: 1) those that derive from seven years of experience in implementing the URAA, and 2) other issues relating to market access that were not covered substantively by the URAA but may be important in forthcoming negotiations.

ETEs’ concerns relate to both the technicalities of implementation and the economic impacts of the agreement’s provisions

In the former case, the policy concerns for ETEs relate to both the *technicalities* of implementing the URAA and the subsequent *economic impacts*. The technical issues concern the extent to which the Agreement required countries to undertake tangible policy reforms as a result of their URAA commitments, and the degree to which ETEs were able to employ the same degree of latitude as OECD countries in interpreting their commitments.

Tariff escalation, the activities of STEs, and the use of anti-dumping procedures, are further topics of concern for ETEs

In the case of topics that were not covered by the URAA, there are three major areas that are of concern to ETEs. These are the tendency for tariffs on agricultural products to escalate according to the degree of processing undertaken; the possibility that the activities of importing state trading enterprises (STEs) might be subject to stricter trading disciplines; and the alleged use of unjustified anti-dumping duties against ETE exports.

Issues arising from the experience of URAA implementation

The market access provisions of the URAA are summarised in Box I.2. The technical issues arising from the process of implementation derive from the flexibility afforded to WTO members in terms

Box I.2. **Summary of Uruguay Round Agreement on Agriculture Market Access Provisions**

Tariffication, tariff bindings, and reductions

- Non-tariff barriers were to be converted to tariff equivalents (tariffication) equal to the difference between internal and external prices existing in the base period.
- All tariffs were to be bound (*i.e.* could not be increased without notification and compensation).
- Existing and new tariffs were to be reduced by 36% on a simple average (unweighted) basis, in equal instalments over 6 years. Developing countries were obliged to make cuts of 24% over 10 years.
- Tariffs for each item were to be reduced by a minimum of 15% (10% in the case of developing countries).

Minimum and current access

- Minimum access quotas were established for tariffied commodities. The specified guidelines were 3% of base period domestic consumption rising to 5% by the end of the implementation period.
- With respect to tariffied commodities (for which imports exceeded 5% of domestic consumption) current access commitments were to be granted on terms at least equivalent to those in the base period.
- To ensure that these access opportunities would be met, countries agreed to establish tariff-rate quotas, with the access amounts subject to a low duty and imports above that amount subject to the tariff established through tariffication and subject to reduction commitments.

Safeguards, exceptions, and special and differential treatment

- A special temporary agricultural safeguard mechanism was put in place for products subject to tariffication. This could be imposed if the increase in the volume of imports, or the drop in price of imports, exceeded certain trigger levels.
- Special treatment allowed countries, under certain conditions, to postpone tariffication until the end of the implementation period, provided that larger minimum access opportunities were granted.
- Developing countries were allowed the flexibility of ceiling bindings, longer implementation periods (10 years) and lower reduction commitments on tariffs (24% average reduction with a 10% minimum). Least developed countries were subject to tariffication and binding but exempt from reduction commitments.

Base period, implementation period

- Base period: September 1986 if tariffs were already applied; 1986-88 if they were not.
- Implementation: 6 years, beginning in 1995 (10 years for developing countries).

Source: OECD (1999).

of how they chose to implement the agreement. The scope that countries had to bind tariffs at rates above the implied rates in the base period (so-called “dirty tariffication”) led to substantial difference between bound and applied rates (referred to as “water in the tariffs”). Other sources of discretion include the level of aggregation at which tariffs were set, the choice of specific or *ad valorem* tariffs, the methods by which tariff -rate quotas (TRQs) were allocated, and the use of special safeguards or contingencies. Table I.1 summarises the instruments left in place by the URAA, the reforms that were required of these instruments, and the resulting policy issues. In each case, a description of the process of reform is followed by a discussion of the outstanding policy issues and the presentation of some possible policy approaches.

Table I.1. Market access issues arising from URAA implementation

Instruments	Reforms	Outstanding Policy Issues
Tariffs	Tariffication and tariff cuts	High bound and applied rates Water in the tariffs Tariff peaks and tariff dispersion Selection of tariff lines Specific <i>versus ad valorem</i> tariffs
TRQs	Introduction to administer minimum access	Low TRQ fill rates Fairness of TRQ allocation
Contingencies	Differential treatment Special safeguard and other exemptions	Criteria for eligibility Effective availability

*Reform: tariffication and tariff cuts****Tariffication was a major accomplishment of the URAA...***

A major accomplishment of the URAA was that trade under the WTO became subject to a tariffs-only regime. Tariffs have a number of important advantages over non-tariff barriers. They are more transparent, less discriminatory, easier to reduce and less susceptible to corruption. They also impose fewer economic distortions by allowing world price changes to be transmitted onto domestic markets. Prior to the conclusion of the Uruguay Round, about two-thirds of all tariff lines had some form of non-tariff protection (Shanahan). The URAA made all these policies illegal, although some exceptions were granted with respect to the prohibition of non-tariff barriers.²⁷ There are also general exceptions, contained in GATT 1994, which can override the URAA prohibition on non-tariff measures. These include: *i*) exceptions necessary to protect plant, animal and human life and health [Article XX(*b*)]; *ii*) exceptions for balance of payments purposes [Articles XII and XVIII(*b*)]; *iii*) general safeguards (Article XIX); and *iv*) anti-dumping and countervailing duty actions (Article VI). The application of these safeguards and exemptions is discussed later.

... and is almost complete

Annex Table I.1 shows the extent to which tariffication has been accomplished in OECD countries and selected NMEs, together with the mean bound rates for these countries. The data are reported for agricultural and industrial sectors respectively. In the agricultural sector, the process of tariffication is virtually complete, with bound tariffs established for at least 90% of all tariff lines in all countries. Most countries have achieved a similar level of tariffication in industrial sectors, but the process is less complete. For example, India has yet to tariffify about one-third of its industrial tariffs.

Under the URAA, each country had to establish a base level for agricultural tariffs, from which reductions were to be made through the implementation period. In the case where tariffs were already in place, the base tariff was to be set at the rate applied in September 1986. Where new tariff bindings had to be established, the existing non-tariff barriers were to be converted to the average tariff equivalent over the period 1986-88. The exercise was ratified by the full WTO membership.

Outstanding issue 1: high bound and applied rates

Bound rates are generally higher for agriculture than for industry...

Annex Table I.1 reveals that mean bound tariff rates are generally higher for agriculture than for industry. Among the sample countries, only Australia, Canada and New Zealand have tariffs that are lower in agriculture than in industry. It is difficult to generalise from a small sample of ETEs, but all those reported in Annex Table I.1 have bound tariffs that are higher in agriculture. The countries least likely to conform to this pattern are low-income net food importing countries where the priority is access to low cost imports, rather than protection of the domestic farm sector. The emphasis of this paper on larger emerging economies, where domestic farm interests are important even if the country is a net importer, means that the data reported may give a misleading impression of the rates of protection in developing countries.

Annex Table I.2 reports the base and bound tariff rates for the major agricultural commodities (*i.e.* those for which the OECD computes PSEs). The country coverage in this table is restricted to Argentina, Brazil, Chile and India; the central and eastern European OECD Members (Poland, Hungary and the Czech Republic); and one non-OECD member transition country, the Slovak Republic. Note that these data are presented at the 6-digit level of the Harmonised System (HS), whereas countries can declare tariffs at greater or lesser degrees of commodity aggregation.²⁸

... while emerging exporters have lower and more uniform bound rates

Argentina, Brazil and Chile (all net agricultural exporters) have lower and more uniform bound tariffs than India or any of the transition countries. India used its status as a developing country to establish ceiling bindings that were, in some cases, much higher than the base calculations (notably on sugar and dairy products). The bound rates in the transition countries are highly uneven, with each country having zero duty on some commodities, but bound rates in excess of 100% on sensitive products.

Countries had flexibility in the setting of bindings

The URAA gave both ETEs and OECD countries considerable flexibility over tariff bindings. Many OECD countries were able to bind tariffs above the effective rates applied in the 1986-88 base period. At the same time, developing countries had the scope to offer ceiling bindings, *i.e.* to bind tariffs at rates higher than those applied in the base period. Flexibility over the setting of base period bound rates was compounded by the scope for limiting tariff reductions on "sensitive" products to the minimum 15%. The result of this flexibility has been the persistence of high tariffs; "water" in the tariffs; and an uneven pattern of reform. These effects are described below.

Protection in OECD countries is often concentrated in "sensitive" sectors

Annex Table I.3 shows the average bound rates for staple agricultural commodities. The *ad valorem* tariff equivalents in this table were calculated using the over-quota tariff rate in cases where tariff-rate quotas (TRQs) were administered, and – in the cases where specific tariffs were applied – by comparing the specific duty to the world price of the commodity in question. The data here show some interesting patterns. Despite the high tariff bindings in India (which

submitted ceiling bindings considerably higher than the applied rates), only Australia, the Czech Republic, Hungary and New Zealand among the reported OECD countries do not have at least one tariff higher than India's peak tariff of 150%. Tariffs in the Czech Republic and Hungary are mostly lower than in Poland, where the tariffs are closer to those applied in the European Union.

Among transition economies, tariffs are higher in countries originally scheduled for the first wave of EU accession

Annex Table I.4 contains ad valorem tariffs obtained from UNCTAD's Trade Analysis Information System (TRAINS) database.²⁹ For most commodities, the transition countries that are not OECD members have lower tariffs than those applied by the Czech Republic, Hungary and Poland. With few exceptions, the mean tariff is higher in OECD countries than in either the emerging or transition categories.³⁰

Outstanding issue 2: water in the tariffs

On average, there is more water in the tariffs of emerging economies than the tariffs of transition economies

Annex Table I.5 shows the differences between bound and applied rates for the cases where both sets of information have been obtained. The data here show bound rates at the end of the implementation period, whereas the reported MFN rates refer to the latest available data.³¹ In Argentina, Brazil and Chile, MFN rates are already well under the bound rates, with differences in excess of 20% for most commodities. In India, the differences are even more striking with bound rates of 100% for many commodities contrasting with a peak MFN rate of 40%. The situation is markedly different in Poland, Hungary and the Czech Republic, where the latest available MFN rates exceed the bound rates they must meet in 2000.³²

Bound rates can become a target for protectionist pressures

For ETEs, the setting of bound rates that were higher than applied tariffs was the way of retaining the scope for a reversal of liberalising reforms. For developing countries, a common justification is that tariffs are sometimes needed to support domestic prices and protect depressed farm incomes. For EU applicants on the other hand, such a strategy made it more likely that their applied rates could converge upwards with the higher rates in the European Union without causing them to violate their commitments. A major difficulty is that once a high bound rate is established, it can become a target for internal political pressure. In Poland, for example, the pressure for the allowable difference to be used resulted in the tariff on common wheat increasing from 3% in 1998 to 27.5% in 1999, and that on butter increasing from 40% to 112%.

Outstanding issue 3: tariff dispersion and tariff peaks

There are huge variations in applied tariffs, particularly in OECD countries

A brief inspection of Annex Tables I.3 and I.4 reveals huge variations in applied tariffs within many countries. A number of formal measures of tariff dispersion could be computed. However, an inspection of the lowest, highest and average tariffs in Annex Table I.4 reveals that, by any measure, the degree of dispersion is higher in all OECD countries (except Australia and New Zealand) than it is in any of the sample ETEs (except China, which is not a WTO member). The main reason for this is the high peak tariffs in sensitive sectors in OECD countries.

The URAA did not stipulate the level of disaggregation at which tariffs should be set, yet this may allow countries to limit tariff reductions on “sensitive” items

OECD countries tend to have the most tariff lines

Specific tariffs are common in OECD and transition countries, but not in emerging countries

Ad valorem tariffs are more transparent from the standpoint of policy analysis

But they present administrative difficulties...

Outstanding issue 4: selection of tariff lines

The URAA did not state formally the level of commodity disaggregation at which commitments on agricultural tariffs should be met. As a consequence, there is considerable variation from one country to the next. The minimum level of disaggregation in any country occurs at the 6-digit level of the harmonised system (HS), while the maximum level of disaggregation possible is at the 12-digit HS level.³³ As an extreme example, this means that the European Union has 88 tariff lines for cheese while India has just one. A potential danger with highly disaggregated tariff lines is that the specification of the product in question may be so narrow that the number of suppliers is effectively very limited. Under these circumstances, disaggregated tariff lines run the risk of undermining the most-favoured-nation principle. However, in the case where specific tariffs are applied, their disaggregation can mitigate some of the bias against low quality imports. More importantly, the selection of disaggregated tariff lines enables countries to use big reductions on unimportant tariff lines to offset lesser reductions on more important (or “sensitive”) product specifications.

Annex Table I.6 reports the number of tariff lines at each 6-digit HS commodity level.³⁴ On average, OECD countries have more tariff lines than the sample ETEs (83 *versus* 75 across the commodity coverage). The six emerging countries have far fewer tariff lines (an average of 34), while the represented transition countries exceed the OECD average with an average of 99. The European Union has by far the greatest number of tariff lines (217) and efforts by a number of transition economies to bring their policies in line with the European Union in anticipation of eventual membership may explain the high average number for transition economies.

Outstanding issue 5: specific versus ad valorem tariffs

Among OECD countries, Australia, Mexico, Turkey, Japan, Korea, New Zealand and Iceland apply predominantly *ad valorem* tariffs to agricultural products. Specific and compound (*i.e.* mixed *ad valorem* and specific) tariffs are dominant in Switzerland and Norway, and common in the European Union and Canada. By contrast, nearly all emerging economies use *ad valorem* tariffs exclusively.

Ad valorem tariffs are more transparent than specific (or compound) tariffs in that they are easier to measure on a basis that is comparable across countries.³⁵ This makes an agreement much easier to monitor. The absences of data in the bound and applied tariff tables attest to the difficult and time-consuming nature of computing *ad valorem* equivalents for all tariffs, and highlight the fact that the comparisons across countries are not complete. One source of difficulty is that the *ad valorem* equivalent of a given specific rate depends on the world price, and this may vary considerably from one reference period to the next.

However, *ad valorem* tariffs may present some administrative problems. In the first place, a change in the tariff regime might enable countries to set new *ad valorem* rates that are higher than the *ad valorem* equivalents of the specific rates in place (a danger that is evident from the experience of “dirty tariffication”). Second, importers

may be able to reduce their duty payments by declaring a traded price that is lower than the actual price paid. This kind of under-invoicing can be difficult to monitor, particularly in the case of intra-firm trade. Together these factors are likely to increase administrative costs.

... and may amplify price instability

Furthermore, if the price of a commodity increases, then so, in absolute terms, does the amount of duty. The tendency for prices and duty payments to move together may therefore contribute to instability in the purchased prices of imports.

Ad valorem tariffs do not discriminate against low quality exports

From the perspective of ETEs, an advantage of *ad valorem* tariffs is that, unlike specific tariffs, they do not discriminate against lower quality exports. This consideration is particularly important for those commodities where prices vary widely according to quality (notably live-stock and horticultural products) and for processed food products.

Possible approaches to tariff reform

The focus of tariff reform will be on the extent of future cuts and the formula used for reductions

The principle concerns with respect to tariff reform are the extent of future reductions and the formula according to which such reductions should take place. The URAA combined a simple average tariff reduction with a minimum reduction on each tariff line. The same approach in the next multilateral trade round would not resolve the outstanding issues described previously.

Cuts that are proportional to existing tariffs would help reduce water in the tariffs

A formula through which further tariff reductions are proportional to existing tariffs would help “squeeze the water” out of existing tariffs, and would reduce the degree of tariff dispersion. It would also reduce the degree of tariff escalation to the extent that the cuts applied to downstream sectors. This approach (which includes the so-called “Swiss formula”) was used in the Tokyo Round for trade in manufactures. Another possibility, which would yield similar benefits (albeit less smoothly) would be to impose ceilings on all tariffs. The two approaches could, of course, be used jointly. However, the experience of URAA implementation indicates that the effect of an agreement will be diluted if minimum reductions can be applied to sensitive sectors, and traded off against bigger reductions elsewhere.

Other approaches do not have this advantage

A further way of reducing tariffs is the “zero-for-zero” approach, which involves all countries eliminating tariffs on a certain list of products. In the Uruguay Round, this approach was used in sectors such as pharmaceuticals, construction equipment, medical equipment, steel, beer, toys and paper. A problem with this approach arises if countries agree to eliminate low tariffs, but do not also sign up to across-the-board reductions. Under such circumstances, the achievements would be limited and the degree of tariff dispersion would increase. There is also a danger that such a strategy could, if successful, facilitate the return of non-tariff barriers (NTBs) – although this would be in violation of Article IV of the URAA. Indeed, NTBs remain in a number of sectors for which zero-for-zero reductions were agreed in the Uruguay Round.

Negotiations are likely to be on bound rather than applied rates...

Tariff reductions are likely to be negotiated on the basis of bound rates rather than applied ones. Cuts in applied tariffs would punish (in negotiating terms) those countries (including many ETEs) that have liberalised unilaterally, and thereby create a disincentive for future unilateral liberalisation.

... as a result of which, emerging economies are not likely to face much pressure for further cuts

Tariff-free access for least developed countries would have little short-term impact

TRQs were introduced to administer the URAA's minimum access requirements

Their administration has offset some of the economic benefits of tariffication

TRQ fill rates are low in most OECD countries

TRQs are less prevalent in emerging economies

Because most emerging economies are already applying tariffs well below their bindings, they will not feel much pressure for further liberalisation unless there are huge cuts of the magnitude that would substantially limit import protection in OECD countries. For most emerging economies, a reform that required a modest lowering of protection in OECD countries would do no more than limit their own scope for reverting to more protectionist trade policies in future.

Some OECD countries have proposed that all industrialised countries provide unlimited tariff-free access to agricultural imports from least developed countries. This would be a politically significant step, although least developed countries would need to improve their export capacities in order to reap the full potential benefits. It would also be important that key sectors (such as sugar or beef) were not excluded from the offer.

Reform: introduction of tariff rate quotas

In many cases, a two-tier TRQ system has been necessary to administer the Agreement's minimum access requirements. Under this system, a limited volume of (within-quota) imports enjoy access at a lower rate, with above quota imports subject to a higher (potentially prohibitive rate). The within quota volume is determined by current access or minimum access provisions. In general, TRQs are applied more in transition countries than in emerging economies. Among the former, Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovenia and the Slovak Republic all maintain TRQ systems. In the latter grouping, South Africa has a TRQ system, while Brazil has one TRQ (for apples and pears).³⁶ China would be expected to institute TRQs on accession to the WTO. Annex Table I.7 indicates the number of agricultural quota-based tariff lines for selected ETEs and OECD countries.

The advantages of tariffication have not been fully realised, because the actual process of tariffication has not involved a straight conversion to simple tariffs, with no limit on imports at these tariffs. The TRQ system used to administer minimum access provisions left scope for discretion in the allocation of within-quota volumes and so retained a number of the drawbacks of quantitative restrictions. The problem with this system derives from the fact that the country has to establish two tariff rates (both of which are subject to the reduction commitments), and decide how to allocate the within-quota volume.

Outstanding issue 6: low TRQ fill rates

Annex Table I.8 reports quota fill rates for agricultural commodities in OECD countries. In most cases the fill rates are well under 100%. This suggests that some countries may be failing to meet the current and minimum access provisions of the URAA. However, it is difficult to establish with any degree of certainty whether a particular case of underfill is due to an effective trade restriction or simply reflects a lack of demand for foreign exports.

Worldwide, TRQs are applied by 14 developing countries.³⁷ The fill rates in these countries, as in OECD countries, tend to be low. However, in most cases, the applied MFN rates are sufficiently low

(often below the in-quota tariff rates) that the TRQ system has no practical relevance. This is the case in Brazil and Romania, the two ETEs to report the use of TRQ systems.

Outstanding issue 7: fairness of TRQ allocations

Low fill rates may be a result of the allocation methods used

Low TRQ fill rates may be a result of the mechanism according to which the right to import is determined. Several methods are used for administering tariff-quota allocations, including: uniform applied tariffs (where the higher over-quota tariffs are not applied); the issuing of import licences on demand; a first-come-first-served system; historical import shares; various types of auction; and purchases by STEs, producer groups or other associations.

In principle, all countries should be interested in transparent and non-discriminatory TRQ allocation mechanisms

In principle, there should be a broad policy interest in systems that are transparent, non-discriminatory, and do not induce rent-seeking or additional costs on the part of exporters. In practice, it is not always clear which method performs this function. For example, auctions are transparent and equitable and should, in theory, minimise the trade distortions inherent in TRQ systems. Yet auctions have one of the lowest fill rates, suggesting that exporters may face additional cost in terms of acquiring information and participating.

In practice, ETEs' concerns are centred on the allocation of quota rents, and possible changes in market shares

However, ETEs' concerns are more direct, and are limited to: *a*) who gets the quota rents; and *b*) whether a change in the system of allocation is likely to increase or reduce their market share. Import licence systems and auctions typically mean that the rents are transferred to the importer, so these systems are generally against the interests of ETE exporters. On the other hand, exporters may oppose systems that allocate the rents to exporters if they are not part of the privileged group. For example, potential exporters will oppose the allocation of tariff quotas according to historical import, and may prefer to forfeit quota rents in order to obtain market access. This is a significant source of conflict among ETEs, because the most valuable tariff-quotas in temperate food products have been administered through bilateral deals between OECD countries.³⁸

The discretionary use of TRQs can be used to exercise market power

Finally, it is important to note that this issue, as with that of state trading importers, overlaps with the broader issue of competition policy. If an importing country has monopsony power on the world market, then it can use TRQ allocations to influence the amount it imports and, with it, the price paid. Since few ETEs have such power, they are likely to press for the dismantling of all mechanisms that enable market power to be exercised.

Possible approaches to TRQ reform

The TRQ issue potentially divides exporting countries

As a group, ETEs have an interest in improved access to OECD country markets. Those countries with preferential market access would probably lose from TRQ reform, and are likely to oppose any change in allocation procedures. In some cases, there may be other sectors in which they would gain, while excessive dependence on one market combined with a lack of competition might allow costs to increase

over time, such that the benefits of preferential access are gradually eroded. Nevertheless, the TRQ issue potentially divides exporting countries that are pressing for greater liberalisation.

The easiest way to reform TRQs is to reduce their economic significance

Given the number of TRQ systems in place, and the mixed experience with their operation, the most progress towards transparent, non-discriminatory trade is likely to be made not through the reform of TRQ systems, but rather through reforms that gradually reduce their significance. This could involve expanding the size of tariff-quotas such that progressively less trade takes place at the over-quota tariff rate, or reducing the difference between in-quota and over-quota tariff rates.

Reform: contingency measures and special treatment

Developing country status is not based on objective economic criteria...

Three-quarters of the WTO's 135 members have been accorded "developing country" or "least developed country" status, and are therefore subject to more moderate market access commitments (described in Box I.2). Among the 29 OECD Members, three (Korea, Mexico and Turkey) receive developing country treatment at the WTO.³⁹ Among the non-OECD members monitored, six: Argentina, Brazil, Chile, India, South Africa and Romania (the only transition country) are classified as developing countries.

... and safeguards are not available evenly to all countries

The Special Safeguard (SSG) can be applied by any member, provided: *a*) non-tariff measures were tariffied at the time of the URAA; and *b*) the right was formally reserved by the member. About 15% of all tariff lines are subject to the SSG.⁴⁰ Since most developing countries used simple tariffs prior to the URAA, few of them have access to the SSG. All WTO members have access to general safeguards set out in the Agreement on Safeguards (Article 19), while developing countries have additional access to the balance of payments exception. In practice, general exemptions are difficult to claim. In the case of the Agreement on Safeguards, the importing country needs to "convince" a trading partner that its domestic industry was "injured" by the surge in imports. In the case of the balance of payments exception, the country has to demonstrate the damage to its trade position done by a surge of imports: typically, it is difficult to attribute this to a particular agricultural commodity.⁴¹ A further problem is the absence in many cases of the requisite national legislation through which safeguards are implemented.

Outstanding issues 8 and 9: eligibility for special treatment, and access to safeguards

There is a strong case for basing contingencies on economic criteria

As with other systems of preferences, those countries that benefit are likely to oppose changes in the status quo. Nevertheless, there is a strong case for linking special treatment to objective measures of economic development, and similarly for safeguards to be accessible for all countries on a consistent basis.

Market access issues that were not addressed by the URAA*Tariff escalation*

There is evidence of tariff escalation in some OECD countries, and for some commodities...

Tariff escalation impedes the development of downstream processing sectors, and is a significant problem for those ETEs that would otherwise have a comparative advantage in semi-processed and processed food products. The extent of the problem varies widely from country to country and across commodities. Overall, however, there is general evidence of tariff escalation in OECD countries, and this stands out in particular product groups, notably, coffee, cocoa, oilseeds, vegetables and fruits and nuts.⁴² In general, tariff reductions on agricultural products exceeded reductions on processed food products in Australia, Canada, the European Union and Mexico. On the other hand, they declined in New Zealand.

... with similarly mixed evidence in ETEs

Among ETEs, the evidence of tariff escalation is also mixed. Owing to policy reforms, tariffs do not increase with the degree of processing in Argentina or Brazil. In India, by contrast, tariffs escalate for virtually all agricultural products, with tariffs on processed products being up to twice those on unprocessed raw materials (the extreme case being tariffs on bread and biscuits as opposed to wheat). In Romania, there is evidence of both tariff escalation (cocoa, sugar and tobacco) and tariff de-escalation (cotton, coffee and wheat).⁴³

The URAA contains no provisions against tariff escalation

Article 11 of the URAA states that an export subsidy on an “incorporated” primary product cannot exceed the subsidy payable on the primary product. ETEs would benefit from a similar rule on tariffs. Similarly, tariff cuts that were proportional to existing tariffs (already commended as a way of removing water from the tariffs and reducing tariff dispersion) would also limit tariff escalation.

The concerns about state-trading importers relate to their ability to restrict imports

State trading importers

From a trade policy standpoint, the concerns about state-trading importers relate to their potential to restrict imports. There are several ways in which they may do this. For example, they may fail to purchase the full volume of a TRQ allocation. Alternatively, they may use their monopoly status on the domestic market to limit internal consumption and – by extension – import demand. They may also be able to exercise monopsony power on world markets. A further possibility is that the STE’s monopoly status or public ownership may lead to inefficiencies that are passed on to consumers in the form of higher prices. In this case, the STE’s activities implicitly tax consumption and imports.

An STE may be the vehicle for government policy

From a legislative standpoint, it is instructive to distinguish the activities of STEs from the policies that they enact on behalf of their governments. In this respect, a situation whereby STE purchases result in TRQ underfill may be no different from other causes of underfill. It may reflect a lack of import demand; equally, it may be due to a deliberate government policy to limit imports. In general, STE purchases exhibit the highest rate of quota fill among all the TRQ allocation mechanisms.

The activities of state trading importers are an issue insofar as they impede market access and limit competition

China's accession to the WTO would focus attention on the activities of state trading importers

A sharp rise in anti-dumping cases has coincided with reductions in other forms of import protection

Whereas ETEs were originally opposed to anti-dumping actions, they are now using them extensively...

... yet ETEs would benefit from tighter restrictions on anti-dumping cases

One major concern for ETEs is that they have not, in general, interpreted their market access commitments as loosely as OECD countries

In general, there is no universal critique that applies to all STEs. For ETEs, as for other countries, the major concerns lie with market access and competition policy. The specific aspects of STE activity are of interest only to the extent that they impede market access and thwart competition.

The major concern about the activities of STEs has hitherto been on the export side, where the issue is one of whether countries compete fairly on world export markets. This concern is motivated by the fact that three of the four biggest exporters on the world wheat market (Australia, Canada and the United States) have notified the WTO that they conduct sales through STE exporters.⁴⁴ The scheduled accession of China to the WTO is likely to focus more attention on the import dimension of STE activities. This is because the China National Cereals, Oils and Foodstuffs Import and Export Corporation (COFECO) dominates the country's imports (as well as exports), and China accounts for an important share of the world markets for cotton, vegetable oil and – potentially – wheat and coarse grains.

Unjustified antidumping duties

The increasing use of anti-dumping duties is an important issue for ETEs. Historically, anti-dumping petitions were filed rarely, and were limited to those OECD countries that had the requisite national legislation in place (Australia, Canada, the European Union, New Zealand and the United States). For example, GATT recorded a total of about 10 petitions per year in the 1960s. The incidence of anti-dumping cases rose sharply in the 1980s, but was still limited to OECD countries. By 1990, these countries were filing over 2 000 cases per year.

During the Uruguay Round negotiations, virtually all ETEs opposed the use of anti-dumping procedures. However, in the 1990s, many ETEs passed legislation that enabled them to bring their own anti-dumping cases. Since then, their use has escalated dramatically, with non-OECD cases accounting for half of all cases worldwide. For example, Argentina and South Africa filed their first cases in the early 1990s, and each now brings about 20 cases per year.

Ostensibly, the rules on anti-dumping were designed to prevent predatory pricing. But in many cases, the countries using anti-dumping actions are the same as those subject to them.⁴⁵ ETEs stand to lose from this development, even if they have been party to it.

Summary

This section on market access issues emphasised two types of concern for ETEs. One is that ETEs have generally been less adept than OECD countries at exploiting the flexibilities that were granted to countries in terms of how they chose to implement their URAA commitments. Insofar as this has led ETEs to undertake greater reforms, the result may have been a general improvement in economic welfare. However, it also means that ETEs have had less access to OECD markets than they would have done if the rules had been less flexible.

Another is that there remain ways in which countries can circumvent their market access commitments

The second type of concern is that there are a number of ways of restricting market access that essentially circumvent URAA provisions. For example, TRQs may be allocated in a non-transparent way, with the result that it is difficult to prove that market access commitments are being violated even if they are. Similarly countries may use anti-dumping actions to replace negotiated reductions in tariff protection.

ETEs would benefit from market access rules that are comprehensive and legally tight

The general policy conclusion is that if a new WTO agreement seeking to expand market access is to have a significant effect, then it needs to be accompanied by measures that limit countries' scope for evading their reform commitments. This means *tightening* the laws, to ensure that countries cannot exploit the various loopholes, and *broadening* them, such that alternative means of restricting market access are closed down. A major threat to further improvements in the conditions of market access is that ETEs will become more adept at imposing limits while staying within the letter of WTO law.

5. Export competition issues

As with market access, each country must balance its domestic concerns, and consider the effects of own reforms relative to those undertaken in other countries

ETEs' concerns about issues pertaining to export competition have the same dimensions as their concerns about market access. All countries must consider both the reforms they are obliged to make and those that are required of their trading partners. Within each country, exporters are concerned with the degree to which they must compete with subsidised exports on the world market, and with whether their own activities are taxed or subsidised. Importers, on the other hand, are interested primarily in low purchase prices, and benefit if they are depressed by export subsidisation. As with market access, there is a domestic trade-off between the interests of consumers and those of farmers who compete with imports.

The costs and benefits of rulings on export competition are unclear in a number of food-importing countries

For net-importing countries, the cost-benefit calculations of rulings on export competition can become complicated. As noted in Section 2, some net food importers may benefit from the reduced prices of import purchases. However, some may be net importers because low world prices make domestic production less competitive (this could be the case with Romania and Ukraine). China and India are both net food importers but their net agricultural balances have been positive on occasions. The impact of subsidised import consumption in these countries depends on the extent to which the adverse impact on farmers is offset by gains to consumers. The implied development question is beyond the scope of this study; but the duality of interests needs to be borne in mind.

A number of export policies were not tackled immediately by the URAA

As with market access, the policy issues relating to export competition can be divided into those resulting from the experience of the Uruguay Round, and other issues that were not tackled comprehensively and immediately in the URAA. The latter include measures

The issues arising from URAA implementation relate overwhelmingly to OECD countries

The URAA's disciplines on export subsidies were generally more binding than commitments on the other two pillars

that may act as implicit subsidies such as export credits, food aid, and other hidden subsidies (*e.g.* through STEs), as well as measures that have the opposite effect, namely export taxes and embargoes.

The export competition issues arising from URAA implementation relate overwhelmingly to OECD countries, since these are by far the dominant users of export subsidies. Few emerging economies provide export subsidies, so the most significant way in which they would be affected by new rules on export competition would be if they were extended to include the taxation of exports. A number of developing countries see export taxes, which retain supply on the domestic market, as a means by which they can address their food security objectives.

Issues arising from the experience of URAA implementation

The URAA imposed meaningful disciplines on agricultural export subsidies for the first time (Box I.3). The disciplines on export subsidies were the most binding of the three groups of reforms. In the first place countries' commitments were more stringent because they were granted less latitude in terms of how they opted to interpret their URAA commitments. A second, and related, point is that countries have approached, or exceeded, their limits more often than has been the case with the other two pillars.

Box I.3. Export competition commitments of the URAA

Rules

- Members agreed not to provide export subsidies except in accordance with the URAA and as specified in members' schedules.
- Limits were defined on the types of export subsidy subject to reduction commitments.
- It was agreed that food aid should not be tied, directly or indirectly, to commercial exports, and that food aid transactions should be carried out in accordance with the FAO "Principles of Surplus Disposal and Consultative Obligations".
- Countries undertook to continue negotiations towards an Agreement disciplining the use of export credits.

Reductions

- Budget expenditures for export subsidies were to be reduced by 36% (24% for developing countries) over a six year implementation period (10 years for developing countries) from a 1986-90 base. No reductions were required for Least Developed Countries.
- Quantities exported with subsidies were to be reduced by 21% (14% for developing countries) over six years (10 years for developing countries) from a 1986-1990 base.
- Reductions were to be made in equal annual instalments on a commodity-specific basis from the 1986-90 base or from 1991-92 levels if higher than the base period.

Exemptions and flexibilities

- Limited flexibility was allowed in phasing in reductions from the second to the fifth year of implementation. The final levels were, nonetheless, required to be in full compliance.
- Developing countries were exempt until 2000 from reduction commitments on subsidies that reduce the marketing costs of agricultural exports, and from subsidies on internal transport and the freight of export shipments.

Source: OECD (1995).

In the first three years of the URAA implementation period (those for which notifications are available), the European Union faced a binding annual commitment on the volume of subsidised exports of cheese, “other milk products”, fresh fruits and vegetables, olive oil, poultry and beef meat. Other countries which have so far found themselves facing a binding constraint on subsidised exports include Norway, Poland, the United States and Switzerland (OECD, 2000a).

Table I.2 summarises the process through which export subsidy cuts were made and highlights some of the outstanding policy issues. The key issues pertain to the timing and scale of future cuts, plus technical questions related to how these commitments should be met. The technical matters include the way in which limits are set (value or volume, commodity-specific or aggregate) as well as slackness in the system (carry-over and delayed notifications).

Table I.2. **Export competition issues arising from URAA implementation**

Instruments	Reforms	Outstanding Policy Issues
Export subsidies	Cuts in export subsidies	Timing and scale of cuts Carry-over of unused subsidies Commodity-specific <i>versus</i> aggregate limits Value <i>versus</i> volume commitments Delayed notifications

Reform: cuts in export subsidies

Annex Table I.9 reports commitments on the values of export subsidies for notifying OECD countries and ETEs, and the reduction commitments by country. Emerging economies account for just 2% of total base period subsidies, while transition economies (including both OECD Members and non-members) account for 7% of the total.

Export subsidies are used rarely in emerging economies...

Export subsidies are used relatively rarely in emerging economies. Such programmes typically evolve as a by-product of domestic support policies and developing countries have often taxed, rather than subsidised, their agricultural sectors. Among the emerging economies covered in this study, Brazil alone makes use of an export subsidy commitment (mostly for sugar), and this commitment is limited to about 1% of the value of its agricultural exports. South Africa was the world's second largest user of agricultural export subsidies in 1995 and 1996 (after the European Union) and exceeded its value commitment for cocoa and its volume commitment for wine in those years. However, the South African government discontinued all export subsidy programmes in 1997.⁴⁶

... although several transition economies have allowances for export subsidies written into their WTO schedules

A number of transition economies maintain positive export subsidy commitments. The Czech Republic, Hungary, Poland, Romania and the Slovak Republic each have an allowance for export subsidies written into their WTO schedules. Estonia and Latvia, both of which have become WTO members since its inception in 1995, have

joined with commitments not to use export subsidies, while negotiations over Lithuania's subsidised exports of meat and dairy products are one of the reasons for its delayed entry to the WTO. Bulgaria is the only transition country to have joined the WTO with a non-zero export subsidy commitment, and it has not used this potential.

The European Union is the dominant user of export subsidies

The European Union is by far the world's dominant user of agricultural export subsidies, accounting for 90% of all export subsidies by WTO members between 1995 and 1997. The next biggest users were Switzerland, with a 5.6% share of the total, and the United States, with a 1.3% share. Note that this order does not correspond to the ranking in terms of commitment levels (Annex Table I.9).

Countries have reduced their use of export subsidies as a result of their URAA commitments

Under the URAA, 25 countries (counting the European Union as one) agreed to reduce their export subsidies; most have done so. Indeed, for the OECD as a whole, export subsidies were lower than permitted, with only 42% of the total limit on budgetary outlays used between 1995 and 1997. This low uptake was largely due to the sharp rise in world cereal prices at the start of the implementation period, which resulted in the European Union actually taxing cereal exports. So far, there have been few notifications for 1998 and 1999, so it is difficult to judge the impact of price declines.

For countries that have the right to use export subsidies but do not, the elimination of export subsidies would lock in the resulting economic benefits

Twenty-four countries have export subsidies commitments written into their WTO schedules, and, as a result, could potentially use them. The list includes the following ETEs: Brazil, Bulgaria, Romania, the Slovak Republic and South Africa. Of these countries, only the Slovak Republic currently uses export subsidies.⁴⁷ For countries that have the right to use export subsidies but do not, the banning of export subsidies would lock in the economic benefits of having reformed. However, it would require substantive policy changes in countries that do use export subsidies.

Outstanding issue 1: the carry-over of unused export subsidies

The ability of countries to carry-over export subsidies from one year to the next has weakened the impact of the URAA

In some cases, countries have reached the limits of their annual commitments, but not been obliged to constrain their support accordingly. Poland exceeded its volume commitment for sugar in 1996, but (as with the European Union) claimed the right to carry over the unused portion of its 1995 commitment. Hungary would have exceeded its commitments in 1995, but obtained a waiver, arguing successfully that they were miscalculated (specifically, that the administrative body responsible for the calculation had underestimated the base by over 50%). The fact that countries have been able to carry over unused export subsidies and count them towards the following year's allowance has clearly weakened the constraint imposed by the URAA's provisions. However, the terms of Article 9 of the URAA imply that countries must meet their annual commitment levels from 2000 onwards.

Aggregated commitments enable higher support for one commodity to be offset by lower support for another

Outstanding issue 2: the level of commodity aggregation

As with market access commitments, the effective constraint on national policies also depends on the level of aggregation at which commitments are made. For example, Switzerland has one overall commitment for dairy products, while the European Union has separate commitments for butter, skim milk powder, cheese and "other dairy products". This means that Switzerland has the scope for staying within its commitment by reallocating support from one category of dairy product to another. In some cases, particularly those where prices within the aggregation do not move together closely, this means that subsidies can be shifted onto those commodities facing the greatest downward price pressure on international markets.

Volume commitments have been more binding than value commitments...

Outstanding issue 3: the use of volume and/or value commitments

In 1995 and 1996, there were 13 cases of countries exceeding their annual volume commitments, compared with 8 instances of them exceeding their annual value commitments. This suggests that further disciplines on volumes may be the most effective way of restraining the use of export subsidies.

... but there is no inherent reason why value commitments should be less strict...

However, if a country is at the limit of its volume commitment and the world price falls, a country can still increase the per unit subsidy it provides in order to maintain domestic prices at the same level. In the case of a binding value limit, by contrast, an increase in the per unit subsidy would have to be offset by a reduction in the subsidised volume. Given that a value commitment is more stringent than a volume one under these circumstances, it would appear that the value commitments have been less strict because the prices used to calculate them were relatively high.

... and value commitments are less likely to exacerbate price instability

Provided that value commitments are set at sufficiently tight levels, countries would have less scope for increasing per unit subsidies – and thereby adding to supply – when world prices already falling. This should limit the tendency of export subsidies to exacerbate price instability.

Delayed notifications make it difficult to monitor the effectiveness of URAA disciplines

Outstanding issue 4: delayed notifications

A final difficulty with export subsidy commitments derives from delayed notifications to the WTO. For a number of OECD countries, notifications for 1997 were not made until the end of 1999. This makes it difficult to monitor the effectiveness of URAA disciplines, and would make legal action difficult in cases where countries were thought to have exceeded their commitments.

Other export competition issues include the use of implicit export subsidies and export-reducing policies

Export competition issues that were not addressed by the URAA

The only export subsidies allowed under WTO rules are those listed under Article 9.1 of the URAA and, for them to be used, they must be declared in the member's WTO schedule. Nevertheless, there are a number of ways in which implicit export subsidies might be provided

and the provisions of the URAA might not effectively be able to limit. The potential sources of implicit export subsidies include food aid and export credits, and trade-distorting actions by state trading enterprises. A further issue not addressed by the URAA concerns export reducing policies, such as export taxes and embargoes.

Food aid

Food aid can have the same economic effect as an export subsidy

Food aid has the potential to act as an implicit export subsidy. Recognising this possibility, Article 10 of the URAA contained three recommendations about the terms under which food aid should be distributed. The first was that it should not be tied to commercial sales of agricultural products. The second was that it should comply with the FAO's "Principles of Surplus Disposal and Consultative Obligations". The third was that it should be provided, "to the extent possible", in fully grant form, or on terms no less concessional than those provided for in the 1986 Food Aid Convention.

As far as possible, food aid should be provided on grant terms

Under the 1999 Food Aid Convention, countries further agreed that grant food aid should represent not less than 80% of each member's total food aid disbursements. The aim of the convention was to make the requirements for donors sufficiently onerous that they would not use them as *de facto* export subsidies.

Export credits

There is no international agreement limiting the use of export credits in agriculture...

Officially supported export credits comprise financial inducements that may effectively lower an importer's costs. They include direct credits or financing, guarantees or insurance for loans, and interest rate support. At present there are no international agreements limiting their use in agriculture. However, signatories to the URAA recognised their potential to act as implicit export subsidies, and agreed to negotiate towards a protocol under the auspices of the OECD.

... which are used predominantly by OECD countries

OECD countries are the chief providers of officially supported export credits. Although a preliminary OECD study indicates that the share of exports covered by export credits is small, their use is increasing. Moreover, estimates suggest that some programmes, though not all, reduce importers' costs by allowing more favourable financing than the private market would offer. Officially supported export credits have the potential to ease liquidity constraints in ETEs, since they allow importers to delay payments. In the short term they may create additional trade. Whether they do so depends on whether export credits do in fact target importers who face liquidity constraints. In any event, such credits still have trade-distorting impacts.

There is a wide variation in the terms on which export credits are provided

There is a wide variation in the terms on which imported agricultural products may be available, from the full world price at one extreme, to grant food aid at the other. With some programmes, the distinction is blurred.⁴⁸ At present, export credits are of a lower order of economic importance than export subsidies. However, as export

subsidies are reined in, there is a danger that the use of export credits could continue to escalate, both in terms of the volume of use and the per unit subsidy provided. ETE exporters are clearly against all forms of implicit export subsidisation. Although the policy interests of ETE importers are less clear, they would nevertheless benefit from the transparency benefits of clear definitions and categorisations.

State trading exporters

The STE exporter case is analogous to that of the STE importer

The issues relating to state trading exporters are analogous to those arising in the case of state trading enterprise (STE) importers. From a trade policy standpoint, there are two main questions. The first is whether an STE's activities lead to distortions of international markets; the second is whether these distortions are a result of government policy or independent action by the STE. From an economic standpoint, the cause of the distortion is less important than its incidence. From a regulatory perspective, however, it is important to discern the source of trade-distorting behaviour.⁴⁹

There are several ways in which state-trading exporters may distort international markets...

As on the import side, there are several potential distortions. One possibility is that the government mandates the STE to pay farmers more than the market price, and covers any losses that may arise from the need to sell the resulting surpluses at a discount on world markets. A similar effect would occur if the STE were provided with credits or tax breaks that were linked to exports, or if it were able to price discriminate between the domestic market and the world market. An alternative possibility is that the STE could effectively tax exports, either by using its monopsony status on the domestic market to pay farmers a lower price, or by exploiting monopoly power on international markets.

... but there are other possible causes of such distortions

It is important to note that such distortions are not limited to STEs. For example, the devices used for discriminating between domestic and international markets, such as domestic price pooling schemes or quality differentiation, can also be applied by producer boards, or by private trading monopolies. Similarly, non-public bodies can also serve as a conduit for government export subsidies. As on the importer side, it is the economic behaviour of an STE that matters, rather than its existence per se. ETEs' concerns are likely to be served best by rulings that recognise this distinction.⁵⁰

Export taxes and embargoes

Some developing countries use export taxes to address domestic policy objectives...

A number of developing countries use export reducing policies to pursue domestic policy objectives, such as stabilising domestic prices; lowering domestic prices for staple products; protecting the domestic food processing industry; and raising financial resources for the public sector. India, for example, despite undertaking major policy reforms in the 1990s, including liberalisation of the rice market, still applies quantitative controls on

... and to promote the development of downstream industries

most agricultural exports, either through export licensing schemes or by channelling exports through parastatals.⁵¹

Some emerging economies tax exports of raw products to encourage the production and export of processed food. Argentina and Brazil, for example, used to impose a system of differential export taxes, whereby soybeans were subject to a higher export tax than the oil or meal components. Sometimes, this is undertaken to offset tariff escalation in importing countries.

Export limiting policies distort international trade

Export taxes, embargoes and other export restricting policies distort international trade. During times of tight supply, the introduction of export restraints reduces food availability on world markets and raises international prices. This reduces the reliability of the world market as a source of food at affordable prices, and provides reinforcing evidence for countries that seek to pursue food security strategies based on relatively high self-sufficiency rates. The URAA did not impose any significant limitations on export restrictions, although under Article 12 countries agreed to “give due consideration” to the impact of new export prohibitions or restrictions on the food security of importing countries.⁵²

However, they may be the best policy available in special circumstances

Any prospective rulings on export-reducing policies will need to account for the special circumstances under which they may be the most effective policy instrument available for developing countries (for example in tackling food security emergencies).⁵³ In the long-term, however, trade policy is an ineffective tool with which to pursue domestic policy objectives.⁵⁴ There may also be special cases in least developed countries, where export taxes are the main source of revenue for the public sector and institutional constraints make alternative sources of public financing are very costly, ineffective or unfeasible. Finally, ETEs that use export taxes may be more able to convince domestic interests of the need for reform if such changes are matched by reductions in tariff escalation in OECD countries.

Summary

Rules on export competition affect ETEs predominantly via their impact on policies in OECD countries

The main impacts that the URAA's provisions on export competition had on all emerging economies and most transition economies were indirect, and resulted from the commitments OECD countries made to curb their use of export subsidies. In the next round of multilateral negotiations, ETEs as a group will again be affected predominantly by the extent to which OECD countries agree on further reductions in export subsidies, and by the degree to which they agree to limit the use of implicit export subsidies. Direct policy changes will be important in those transition economies that continue to use export subsidies, and – if the rules on export competition are extended to include export-reducing policies – in those emerging economies that restrict agricultural exports.

6. Domestic support issues

WTO restrictions on domestic support are unique to agriculture...

The URAA included rules on domestic support in recognition of the potential that domestic policies have to distort trade. This was a unique development in the rules that govern international trade. Although the Uruguay Round's Agreement on Subsidies and Countervailing Measures places some general disciplines on the types of subsidies that are permitted (and the retaliations that are allowed), agriculture is the only sector for which the WTO has extensive rules on internal as well as border policies.

... and may be explained by high support; the impact of that support on trade; and the failure of border measures to limit all trade impacts

Several factors may explain this. One is that agricultural support remains very high relative to support in other sectors, suggesting that a more comprehensive approach may be warranted. A second is that trade-distorting policies are often a residual impact of domestic policies (for example, price support may lead to surpluses that can only be sold on world markets with the aid of an export subsidy). A commitment on domestic support therefore tackles the original source of the problem. A third reason is that rulings on border measures do not fully capture the trade impacts of domestic support. For example, production subsidies may increase supplies onto the world market. These may not need to be financed by export subsidies, but they are nevertheless trade-distorting.

ETEs are concerned with how rulings on domestic support affect world markets, and with their impact on their own agricultural programmes

As with the provisions on market access and export competition, ETEs are concerned with how URAA rulings affect their own policies and how they affect the policies of their trading partners. In the former case, a major concern for ETEs is that their domestic development objectives should not be circumscribed by inappropriate limitations on internal measures. In the latter case, the chief concern is with the extent to which the effects of this support spill over onto international markets, and are not captured by the Agreement's rules on export competition.

In the case of other (OECD) countries' commitments, the majority of support is concentrated in the EU, Japan and the US

In the case of other countries' policies, it is the collective weight of this support on world markets that matters. The European Union, the United States and Japan together account for over 90% of domestic support in OECD countries. Accordingly, the dominant effect on ETEs is likely to derive from the extent to which reform commitments are undertaken in OECD countries.

The key policy question is how the trade-distorting effects of domestic support should be contained

This section discusses how effective the URAA's provisions on domestic support have been in containing trade-distortions, and how ETEs' interests have been served by the categorisation of support measures and reduction commitments. The rules governing domestic support commitments are described in Box I.4.

The "traffic light" system categorised policies on the basis of their potential to distort trade

Under the URAA, domestic policy instruments were placed into "Amber", "Blue", and "Green" boxes, with Amber Box instruments deemed to be the most trade distorting and Green Box instruments the least ("minimally") trade distorting.

Box I.4. **Domestic support commitments of the URAA**

Rules

- Domestic support was measured by the Aggregate Measurement of Support (AMS), aggregated across all commodities.
- Domestic support that is deemed to be “non or minimally trade-distorting” was not included in the AMS (with these policies qualifying for the “Green Box”).
- An exemption from reduction requirements was granted to payments that are based on fixed area and fixed yields (in the case of crops) or fixed livestock numbers, or are based on no more than 85% of the base level of production. Payments in this category qualify for the “Blue Box”, and cannot be challenged until 2003 under the “Peace Clause”. However, they are included in the base level AMS calculation.
- Product-specific support and not product-specific support that would otherwise be subject to reduction is exempted if it does not exceed 5% of the value of production of the product, or of the total value of agricultural production (10% in the case of developing countries). This is referred to as the “De Minimis” exemption.
- Certain domestic investments and input subsidies in developing countries qualified for “Special and Differential” exemptions.
- It was agreed that any modification to a domestic support measure, or introduction of a new measure that does not satisfy the exemption criteria, should be included in the current total AMS.

Reduction Commitments

- The base period for reductions in domestic support was 1986-88.
- For developed countries, the base total AMS was to be reduced by 20% in equal annual instalments over a six-year period.
- For developing countries, the base total AMS was to be reduced by 13% in equal annual instalments over a ten-year period.
- Least Developed Countries were obliged to compute an AMS but had no reduction commitments.

The Amber Box contains the most trade-distorting policies...

The Amber Box contains the Aggregate Measurement of Support (AMS), which is the cornerstone of domestic support commitments. The AMS is measured as the total value of (non-exempt) domestic support (including budgetary outlays and consumer-producer transfers), and is subject to the reductions described in Box I.4.

... the Blue Box contains policies that are less trade-distorting than those in the Amber Box...

Blue Box policies are included in the base AMS calculations, but are not subject to reduction commitments. This category provides a “temporary” exemption for policies that are based on fixed areas and yields in the case of crops, and fixed head numbers in the case of livestock, or are based on no more than 85% of the base level of production. This classification included compensation payments in the European Union and some deficiency payments in the United States. Under the “Peace Clause”, Blue Box policies may be subject to countervailing duties but are exempt from other GATT challenges, provided support does not exceed the level paid in 1992.

... and the Green Box contains policies that are deemed to be “minimally trade-distorting”

Green Box measures are deemed to be “minimally trade-distorting”, and, as such are exempted from reduction commitments. The term “minimally trade distorting” is not defined, except according to the policies that negotiators agreed should qualify for the Green Box. Thus, it includes measures such as government expenditures on

research, disaster relief payments and direct income payments, and excludes measures that are linked to production or input use.

The effectiveness of cuts in support would be reinforced by classifications that correspond to the empirical evidence on the trade distortions caused by alternative policies

The links between the reform commitments that were agreed in the URAA and outstanding policy issues are summarised in Table I.3. The issues mostly pertain to ways in which the trade-distorting impacts of domestic support might be better contained. One way is by developing a classification system that accords with the (unfortunately limited) empirical evidence on the trade effects of different support measures. Another is by limiting countries' flexibility, in terms of their scope for reorganising and restructuring support rather than reducing it. The third is by requiring further cuts in the support measures that are subject to limitations.

Table I.3. **Domestic support issues arising from URAA implementation**

Measures	Reforms	Outstanding Policy Issues
AMS/Amber Box	AMS reductions	Extent of future cuts Potential for "decoupled" support to distort trade and future of the "traffic light" system Effectiveness of AMS limits Alternative interpretations of the rules Delayed notifications
Blue Box	Exempt	Future of the Blue Box and the Peace Clause
Green Box	Exempt	Practicalities of decoupling in developing countries
Contingencies	Weaker rules for developing and least developed countries	Detrmination of country status and timing of commitments

Reform: AMS reductions

Few countries have had problems staying within their limits

No WTO member has yet reported a failure to comply with its AMS commitments. Annex Table I.10 reports the AMS levels of notifying countries as a percentage of their commitments, and so gives an indication of the effective constraint imposed by AMS disciplines. In general, most countries have remained comfortably within their overall limits, although delayed notifications by a number of countries make it difficult to judge the impact of the recent drop in world agricultural prices, particularly in those countries with a relatively large share of Amber Box support.

Does compliance reflect weak commitments or strong commitments that have prompted reforms?

An important policy question is whether such compliance reflects the weakness of commitments undertaken, or rather their strength (with strict commitments leading countries to reform their domestic policies). The history of URAA implementation suggests that there is some truth to both suggestions.

AMS commitments were weak at the start of URAA implementation...

Commitments were relatively weak in the first two years of the URAA implementation period. The prices of most agricultural commodities increased, causing the gap between internal prices and external reference prices to narrow. Given that support

... but became more onerous as world commodity prices fell

Those OECD countries responsible for the bulk of domestic support have responded with increased support...

... however, they have also switched towards less trade-distorting forms of support

A number of ETEs have had tighter AMS commitments

The benefit of more “decoupled” support depends on the extent to which this support continues to distort trade

reductions were based on a 1986-88 base period (when support reached a historical high), countries were able to meet their AMS commitments without having to undertake substantive policy reforms.

Since 1997, the situation has reversed, with depressed market prices tending to increase the AMS in cases where the transmission of world prices onto domestic markets is impeded by policy measures. As pointed out in Section 3, domestic support in OECD countries increased between 1997 and 1999, with the PSE now nearly back to its levels in 1986-88 – the base level from which AMS reductions are made.

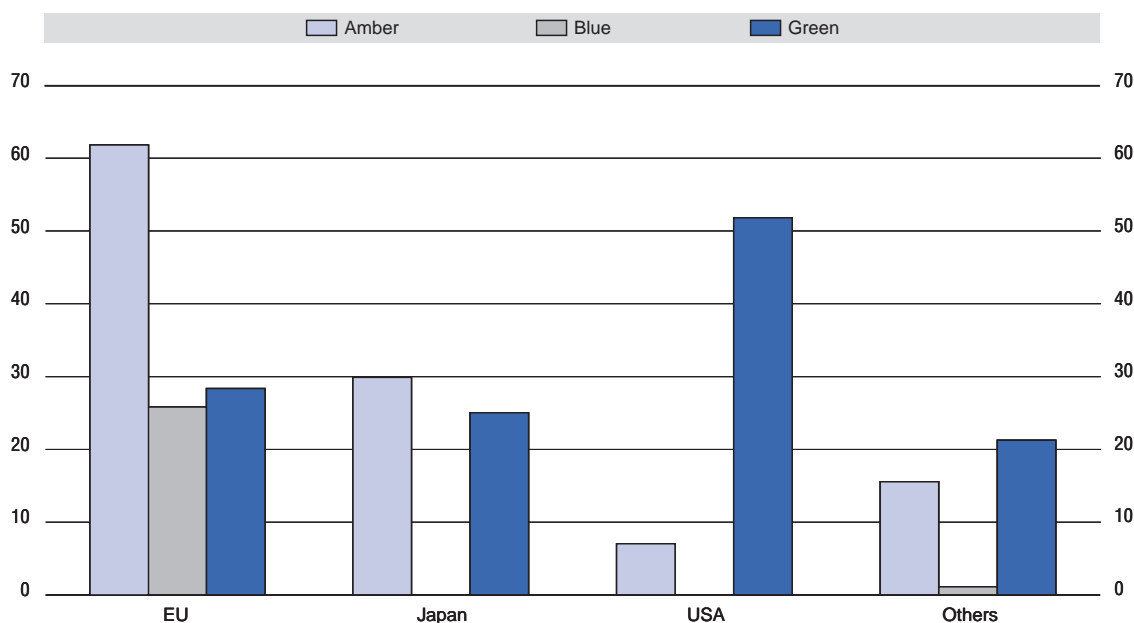
In the absence of reforms, a number of countries might therefore be expected to be approaching their AMS limits. However, a number of OECD countries have changed the structure of their support, such that a greater proportion is notified as Green Box and is exempt from reduction commitments. In the European Union, the share of the PSE provided in the form of market price support fell from 76% to 51% between 1986-88 and 1999, while in the United States the recorded fall was from 47% to 40%.

Since the European Union, Japan, and the United States account for the majority of domestic support it is changes in the policies of these countries that have the most effect on world markets. Annex Table I.11 shows the shares of support falling into each box for OECD countries and those ETEs that are WTO members. The increased use by OECD countries of payments that are notified as Green Box means that less than 40% of support in these countries is subject to reduction commitments (Figure I.5). ETEs standing to benefit from reduced support in OECD countries would naturally favour reductions in Amber Box support. However, the gains would be limited to the extent that these policies were replaced with Green Box measures that continue to distort production and trade.

The situation in OECD countries contrasts with that in a number of ETEs, where limited initial support has resulted in lower absolute AMS commitments. However, the De Minimis exception and (for those countries with developing country status) the Special and Differential exclusion, have also allowed some leeway to these countries. Those countries with the tightest commitments (such as Argentina) often come closest to their commitment level because their base commitments are so low that a modest amount of support in absolute terms still represents a significant percentage of the upper limit.

In short, when AMS commitments are binding, countries can maintain – or even increase – support by switching to Green Box policy measures. How far this should be viewed as a positive development depends on whether these measures are actually “minimally trade distorting”, as the URAA suggests they should be.

Figure I.5. **Domestic support levels, 1996**
Billions of US dollars



Source: WTO.

If future cuts are to be effective, it is important that trade-distorting policies cannot simply be shifted to categories of support that are exempt from reductions

Outstanding issue 1: the extent of future cuts

If restrictions on domestic support are to be included in a forthcoming WTO agreement, then negotiators will again have to agree on the extent of reductions that should be undertaken. However, if the terms of a country's legal obligations are open to alternative interpretations, or if trade-distorting support can be shifted readily from non-exempt to exempt categories, then the extent of commitments becomes secondary to matters of legal definition. The issues highlighted below suggest that this may indeed be the case.

The extent to which "decoupled" support distorts trade is an empirical question

Outstanding issue 2: the potential for "decoupled" support to distort trade

The increased use of "decoupled" Green Box measures has enabled countries to meet their domestic policy objectives while remaining in compliance with WTO rules. However, the traffic light system was a political agreement, rather than one based on economic analysis. In economic terms, it provides a legitimate *ranking* of policies, in that those qualifying for the Green Box are generally less trade-distorting than those in the Blue Box, which in turn are less trade-distorting than those in the Amber Box. However, the question of *how much less* distorting is a critical empirical question.⁵⁵

Theoretically, no specifically agricultural policy is fully decoupled

In theoretical terms, no specifically agricultural policy is fully decoupled from production and therefore without consequences for trade. If, in any way, the terms of a support measure are tied to the process of farming, then that measure is likely to alter the relative incentive to farm production *vis-à-vis* other economic activities. Decoupled policy measures affect production through their impact on other variables, notably income, wealth, expectations and risk. In a number of cases, there may be no incentive to increase production at the margin; however, there is still a production effect insofar as more resources are retained in farming than would otherwise be the case.

The output effect of policies that are decoupled at the margin is not firmly established

A number of empirical studies have examined whether risk-aversion among farmers, and dynamic considerations about whether or not to leave the sector, mean that ostensibly decoupled payments do in fact have an impact on production levels. So far, the results suggest that there is an output effect, but they have not established conclusively how big this effect is.⁵⁶

Insofar as decoupled policies keep resources in agriculture, this harms farmers in ETEs, who have to compete with subsidised production

Any tendency for resources to be retained in agricultural production is a major issue for exporters in ETEs, and for producers competing with imports. Farmers that do not receive income support (Green Box or otherwise) will be competing at a cost disadvantage compared with those that do. The magnitude of this disadvantage depends on the degree to which the value of the payment is a pure "rent" to the farmer; *i.e.* it is not capitalised into the price of land or other purchased inputs.

To the extent that decoupled policies distort trade, most ETEs would benefit from limitations on a broader range of support policies

Outstanding issue 3: the future of the "traffic light" system

What ETEs stand to win or lose from any re-negotiation of the "traffic light" system depends very much on the answers to the above questions. If "decoupled" support has only a very small effect on trade, then the "greening" of support is, in most cases, a positive development. If, on the other hand, its impact on production and trade is large, then the ability to shift support to a category that is exempt from reductions weakens the impact of any prospective agreement. Under such circumstances, most ETEs (*i.e.* net agricultural exporters and those net importers where farmers' incomes are a more important policy issue than consumers' real incomes) would benefit from more limited reductions that imposed limitations on a wider range of support policies.

Negotiations on the Blue Box will be important for CEECs

In preparation for accession to the European Union, some CEECs have introduced partially "decoupled" per hectare and per animal unit direct payments. As a consequence, these countries will be concerned specifically about the future of the Blue Box.

The effectiveness of AMS commitments was limited by the compromises made during the UR negotiations

Outstanding issue 4: the effectiveness of AMS limits

The effectiveness of the URAA's AMS commitments was weakened by a number of compromises made during the negotiations. First, the base period (1986-88) was a time of unusually high domestic support. Second, some trade distorting policy measures were placed in the Blue Box and thereby exempted from reduction

commitments. Third, the AMS was calculated on the basis of total support rather than on a commodity by commodity basis. This meant that support not used on one commodity could be provided to another. A significant policy question is whether these compromises should be retained or dispensed with. An alternative base period, abolition of the Blue Box, and commodity-specific limits would all lead to stricter AMS commitments.

Outstanding issue 5: alternative interpretations of definitions

Some aspects of the domestic support commitments were open to alternative interpretations...

The URAA's domestic support provisions were open to alternative interpretations in a number of areas. With respect to the computation of market support estimates, "eligible production" was defined as that "quantity of production eligible to receive the administered price". Some countries (*e.g.* India) have interpreted this as meaning total production, while others have used marketed amounts or the amount procured by a parastatal.⁵⁷ These differences of interpretation can have major impacts on the AMS calculation, particularly in countries with substantial on-farm consumption. Countries have also taken different approaches in terms of the exchange rates at which they convert reference prices into domestic the currency; and the methods through which they adjust for price inflation.

... and some ETEs imposed stricter limits on themselves than they needed to

Some ETEs were constrained by AMS submissions that were not calculated in such a way as to afford them the maximum amount of leeway. For example, India chose inflated external reference prices for some commodities and so reduced its base AMS level.⁵⁸

Outstanding issue 6: delayed notifications

Several countries have not notified the WTO of their AMS levels since 1995

Annex Table I.11 indicates the date of the latest AMS notification for OECD countries and ETEs. The countries that are furthest behind are OECD Members. Where there have been delays in AMS notifications, or submissions have been incomplete, there has been no effective reprimand from the WTO. Nor, in general, have countries that have had difficulties computing AMS estimates been provided with technical assistance (although the benefits of WTO and other assistance are not starting to feed through). These factors further suggest that the effect of AMS disciplines on domestic policies has generally been small.

Outstanding issue 7: provisions for developing countries

Decoupled support measures may not be practicable in a number of ETEs

There are a number of areas in which ETEs may have unique concerns. First, ETEs at lower levels of development may find it more difficult to shift to decoupled support. In most ETEs, a greater share of the population is engaged in farming, which adds to the budgetary and administrative costs of establishing a system of direct payments. The costs may place a particular burden on ETEs with large fiscal and external deficits. In addition, the prerequisites for establishing a system of direct income support, such as a registry of incomes, are frequently not in place. Faced with

ETEs may also have urgent priorities that they currently target with Amber Box measures

The attribution of developing country status does not always reflect the above concerns

The key issue for ETEs is whether limitations on domestic support measures will be extended to cover policies that are decoupled at the margin

The effects of trade reform on ETEs depend on a number of external and policy-related factors

these difficulties, many ETEs are less likely than OECD countries to be able to comply with AMS commitments by increasing the use of Green Box measures.

Second, the concerns of ETEs are very likely to differ from those of OECD countries. Food security objectives and the desire to forestall rural-urban migration, for example, are likely to be relatively important. Whilst coupled farm level support might be a poor way in which to target these objectives, a number of ETEs may find it difficult to switch policy instruments at short notice.

The above concerns are to some extent addressed by the designation of developing country status. As noted in Section 4, however, the boundaries of which countries qualify for this status are not established according to objective criteria. This means that there are some anomalies in terms of which countries benefit from longer implementation periods, and which do not.

Summary

The largest OECD countries dominate the use of domestic support measures, and ETEs are affected by this support to the extent that it continues to distort trade. The increasing use of Green Box policy measures by OECD countries means that a diminishing share of domestic support is liable for reductions. This is an important issue for ETEs to the extent that this support continues to distort trade. Insofar as it does, those ETEs that stand to benefit from the reform of other countries' domestic support would benefit if limitations on domestic support were extended to cover policies that are decoupled at the margin. Such an approach would also seem more appropriate for those ETEs that currently rely on coupled support, and where direct payments to farmers may be of less benefit than expenditures on health, education and infrastructure.

7. Other issues for ETEs

The focus of this paper has been on the three pillars of the URAA. In this context, the preceding sections have underlined the importance of trade policy reform to ETEs, and identified specific ways in which ETEs would be affected by reforms to each of the three pillars.

The ability of ETEs to reap the potential gains from liberalisation depends on a number of other factors. Important determinants of how much a country stands to benefit from trade reform include the general economic environment; the relative importance of other policy factors, such as domestic policies and regional trade agreements (RTAs); and the limitations imposed by human and institutional resource constraints. Each of these is a major issue in its own right. The purpose of this section is not to provide a detailed

assessment, but rather to gauge the extent to which they qualify the analysis in the earlier sections.

General market conditions

The competitive process

The competitive process means that some farmers are always becoming less profitable at market prices

Real (inflation-adjusted) agricultural prices exhibited a downward trend throughout the last century, and there are no reasons for expecting this broad trend to be reversed in the foreseeable future. The decline in prices reflects – on aggregate – the tendency of agricultural supply growth to outpace increases in the demand for farm products. The productivity and supply gains form part of the competitive cycle through which more innovative and efficient producers earn temporary profits that ultimately drive down prices to the disadvantage of farmers who fail to keep pace. This process is not unique to agriculture; but, as in other sectors, it means that some farmers will become uncompetitive at market prices.

Yet there is no evidence that farm households in OECD countries are, on average, worse off than households in other sectors

The competitive process has been described as a “treadmill”.⁵⁹ It means, in effect, that efficiency gains cause some farmers to become less profitable and to suffer from lower incomes. However, declining prices are often confused with declining real incomes (sometimes identified as the “farm problem”). In OECD countries, there is no evidence that farm households have, on average, lower incomes than households in other sectors (OECD, 1994). Rather, the problems are localised among those farmers that have difficulties adjusting.

Lagging farm incomes are a bigger problem in many ETEs

The competitive process operates somewhat differently in ETEs. This is because the above explanation, which considers the farm as a business like any other, may need to be modified to account for subsistence and semi-subsistence agriculture. The “treadmill” (or competitive process) is still a factor for commercial farms, but declining real prices have less impact on farms that consume a significant amount of what they produce. Overall, the incomes of these farmers are often lower than incomes elsewhere, partly because of the tendency for growth to proceed faster outside the subsistence and semi-subsistence farming sector.⁶⁰

Market based support measures are ineffective in OECD countries, and even less effective in ETEs

In both ETEs and OECD countries, the policy problem arises when farms that become unprofitable have difficulty in adjusting – either by diversifying their income sources, or by exiting the sector. In OECD countries, policies have often aimed at supporting incomes (either indirectly *via* higher prices, or directly but conditional on some aspect of agricultural activity). The evidence is that the transfer efficiency of such support is low.⁶¹ One reason is that support becomes capitalised into the price of land and other purchased inputs. Another is that it does not stop the competitive process that makes less innovative farmers uncompetitive. The policy response in ETEs has been more diverse. Most governments in transition economies aim to support farmers, although there are some cases where the prices received by farmers are

lower than prices on world markets (for example, because of a lack of market integration). Some emerging economies tend to support farmers, and others to tax them.⁶² The “transfer efficiency” losses of market-based support measures are even lower in these countries, because of the large numbers of subsistence and semi-subsistence farms.

Farm sector support does not stop the process of adjustment...

How are these patterns of structural adjustment affected by trade liberalisation? The first point to note is that, although the liberalisation of agricultural trade should provide a stimulus to prices, it will not put a brake on the adjustment process through which real (*i.e.* inflation-adjusted) farm prices tend to decline over time. Accordingly, if there is a “farm problem” then trade reform alone will not solve it.

... and provides only temporary relief from competitive pressures

The reallocation of resources that comes from trade reform may actually increase the dynamism of the farm sector, in effect speeding up the treadmill. Under such circumstances, the farmers that are already under pressure for not being competitive are likely to face even more pressure. This underlines the importance of adopting adjustment policies rather than market-based measures that provide, at most, temporary relief from competitive pressures.

The time taken for the gains from trade to materialise depends on how government responds to the economic effects of liberalisation

Dynamic effects

The gains from trade are often discussed in a static framework, but an important issue for many countries is how long these gains take to materialise. To a large extent, the answer depends on how rapidly the allocation of resources responds to the new trade environment. This, in turn, depends on the policy response – the government can either accelerate the process of structural adjustment or impede it. Some of the effects of trade reform are likely to be felt immediately (*e.g.* tariff reductions should lead to lower domestic prices); others will take longer to be realised (notably, structural impacts at the farm level). The demand-side impacts are likely to be felt more quickly than the supply-side effects. The exact pace of adjustment is an important empirical question, where the results are likely to vary from one country to the next depending on structural factors and the policy and institutional environment.

Economic shocks can overwhelm the impacts of trade liberalisation

Economic shocks

Economic shocks can have a profound effect on incomes throughout the economy. Notwithstanding the importance of trade reform, these shocks can dwarf the effects of trade liberalisation in any given year. Last year’s *Policies Report* examined the impacts of the Asian and Russian crises on ETEs.⁶³ In many cases, the impacts were severe, with declining farm prices aggravated by the withdrawal of capital and a reduced availability of credit.

Many of the problems induced by such shocks are not unique to agriculture

General economic shocks affect all sectors, so many of the policy issues are not unique to agriculture. Agriculture may in fact suffer less than other sectors. One reason is that the exchange rate devaluation associated with an economic crisis raises the costs of imported inputs and these may be relatively more important in the

manufacturing sector. Another factor is that, insofar as price inflation is a problem, low-income farm households with significant on-farm consumption may be affected less adversely than poor urban households are.

The effect on farmers depends on the government's policy response

A key conclusion of last year's Report was that the impact of an economic crisis on farmers depends very much on the government's policy response. A number of ETEs used protectionist measures to buffer their economies against external shocks. How well this worked as a short-term fix is still not clear. Some of the potentially positive effects were not realised. For example, exchange rate devaluations made exportable agricultural products more competitive in international markets. However, last year's report notes several cases where governments withheld exports in order to ensure domestic food supplies. A key conclusion of last year's analysis was that a market environment facilitates structural adjustment, and that sustained – rather than emergency – intervention would jeopardise the consequent economic benefits.

Multilateral trade reform should lead to greater price stability on world markets

Price variability and price transmission

Price stability is important for both exporters and importers, yet the net impact of agricultural trade liberalisation is a complex issue where the price effects vary from one country to the next. Many countries continue to support their agricultural sectors *via* coupled policies such as market price support. For these countries, price instability is in effect exported onto world markets. As noted in Section 6, it is support in the largest OECD economies that has the biggest impact on world markets. In the long-term, trade liberalisation should improve the stability of world agricultural prices. The result should be greater price stability in countries that buy and sell at world prices, but increased price variability in countries that have traditionally supported domestic prices.⁶⁴ At the same time, a number of economies buying at world market prices nevertheless use tariffs and TRQs to inhibit the transmission of those prices onto domestic markets. Thus, while the prices they pay should become more stable, the net effect of trade reform on domestic markets is uncertain.

The release of government stocks could increase price variability in the short-term

A complicating factor is that not all of the excess supply in countries that support domestic markets spills over onto world markets. Indeed, world stocks are currently very high for a number of commodities (especially cereals). These stocks would be expected to decline as policies were reformed, thus amplifying price variability. At the same time, stocks would cease to be a result of concentrated government support, and so should be better distributed. Moreover, as government stockholding declines, the job of smoothing out price swings is more likely to be undertaken by private traders. This should make the release or absorption of stocks more responsive to market signals. In the long term, as markets become larger and more developed, responsiveness to price signals should improve and new mechanisms for absorbing price risk should evolve.

Other “dynamic” factors could also influence price variability

A number of other effects are worthy of investigation. The regional balance of production may change. Countries with a comparative advantage in agricultural production may on balance be located in less temperate climates (*e.g.* South America) that are subject to greater production volatility. Uncertainties surrounding the integration of China, Russia, Ukraine and other NIS into the world trading system may also have implications for price variability, as may commitments to structural and policy adjustments in these countries. Delayed adjustment and a continued lack of systemic integration could continue to mean wide variations in annual purchase volumes, with consequent impacts on world markets.

In the livestock sector, there are also competing effects. Greater vertical integration in the livestock sector may make the demand for feed less responsive to price movements at any one stage of production. This would tend to amplify price variability. On the other hand, advances in feed technology may work the other way, enabling the sector to change its mix of feed ingredients rapidly in response to changes in world prices.

The biggest cause of instability is policies that are unsustainable

Finally, it is important to note that while domestic price support may maintain price stability for a period of time, there is no greater cause of instability than a policy that becomes unsustainable, for example because of its fiscal expense. Because resources are more limited in ETEs, these countries are likely to have greater difficulty using taxpayers’ money to support farm prices for a sustained period of time.

Price transmission runs both ways, with the world market also able to absorb domestic shocks

It is important to note that, for some countries, shocks emanating from the domestic market may be just as important as those originating from world markets. Integration with the world market enables domestic shocks to be absorbed on the world market, and should offset some of the increased variability that would follow from a removal of price support. The country report on China illustrates the implied trade-offs in the context of China’s food security concerns.

Domestic Reforms

There are several ways in which the economic impacts of trade reform depend on the extent to which it is accompanied by domestic reforms.

Market access commitments may have little impact if they are not accompanied by domestic reforms

Market access commitments will have a limited effect if the process through which imported goods are delivered onto domestic markets is impeded (*e.g.* through poor infrastructure or monopolistic marketing chains). This point has been underscored in several OECD analyses, including the analysis of marketing reforms in China in last year’s *Policies Report*.

Trade reform should improve the efficiency of domestic resource use

As noted in Section 2, trade reform should improve the efficiency with which domestic resources are allocated. These gains are more likely to be realised if countries do not find other ways of protecting import-competing sectors once border measures are dismantled.

The links between the farm sector and the macroeconomy run both ways

Macro policies may also have an important impact. For example, exchange rate misalignment could cause more trade distortion than trade barriers. Moreover, the link between agriculture and the macroeconomy runs both ways. The tendency of developing countries to tax their farm sectors has impeded economic growth in a number of cases.⁶⁵

Obstacles to transition and development constrain the ability of ETEs to exploit their pattern of comparative advantage

It was also noted in Section 2 that the ability of ETEs to fully exploit their pattern of comparative advantage is limited by a number of obstacles to development and transition. In general terms, these obstacles comprise all factors that impede the functioning of the market system. The list includes poor infrastructure; incomplete privatisation and land reform; labour market rigidities; weak contract enforcement; underdeveloped credit facilities; and inefficient marketing channels.

These obstacles are a cause of deficient trading capacity

As a general principle, the ability of ETEs to benefit from the global trading system depends on the extent to which they are able to create the necessary trade capacity. The key facilitators of trade are liberal trade and investment regimes, expanded supply-side capacities and improved private sector efficiency. Given the scope for mutual gains from trade, and the broader context of globalisation, improved trade capacity is seen by members of the OECD's Development Assistance Committee as an objective that developing countries should be able to address in co-operation with the aid and trade policy-making communities.⁶⁶

Open trade is conducive to economic growth

Finally there is the general question of the link between openness and growth. These points were also discussed in Section 2. One way of recapitulating the conclusion is to note that, at the domestic level, the story of economic development is one of specialisation and trade, supported by the development of the infrastructure necessary for domestic markets. There is no reason why the potential for these gains should stop at international borders.

Regional trade agreements

Whether RTAs complement the multilateral process depends on whether or not they are outward looking

The general concern about regional trade agreements (RTAs) is whether they complement, or detract from, the multilateral process. In economic terms, the debate is often formulated around the question of whether RTAs lead to trade creation or trade diversion. The economics of the issue are linked inextricably with the politics, since the answer to this question depends upon the terms and the extent to which markets are opened. If an RTA agrees to reduce the rates of protection applied between members, while keeping protection with non-members unchanged, and then negotiates for lower protection outside the RTA, then this would have a very different impact to an RTA that levied higher rates of protection against non-members.

Empirical studies find a modest degree of trade creation

Empirical studies generally find a modest degree of trade creation. The empirical tests typically use "before and after" data. Because policies are constantly changing, they therefore amount to a joint test of the economic and political elements. The studies therefore suggest that, on balance, countries engaging in RTAs use them as a liberalising rather than a protectionist force.⁶⁷

ETEs are concerned about specific impacts rather than the general tendency of RTAs to create trade

For individual ETEs, the trade creation versus trade diversion debate is – like the issue of the gains from trade – an abstract one. Even if there is evidence of trade creation, a particular country may still lose its share of trade once an RTA is concluded. Thus, for example, while South Africa's proposed free trade agreement with the European Union is a liberalising initiative, its terms are nevertheless a source of concern to other members of the South African Customs Union.

Much of the discussion focuses on how RTAs affect the multilateral process. It is also interesting to look at the question the other way, *i.e.* how a multilateral agreement affects the workings of an RTA. Box I.5 does this in the case of CEFTA and the URAA.

Box I.5. **How are Regional Trade Agreements affected by the WTO? The case of CEFTA**

In the past 10 years, several major RTAs have been concluded, including MERCOSUR (1991), CEFTA (1992) and NAFTA (1994). A commonly asked question is whether or not these RTAs are good for the process of global liberalisation. The question is typically examined in terms of whether RTAs serve as a springboard for freer trade with not-members, or whether trade among members is stimulated under the umbrella of protection from other countries. Less attention is generally given to the other direction of causality; *i.e.* the impact that the process of multilateral reform has on the operation of RTAs. CEFTA provides an interesting example of how the multilateral process can also influence the evolution of regional trade.

CEFTA was established at the end of 1992 and came into operation in July 1994. Its original members were Poland, Hungary and the Czech and Slovak republics (then still Czechoslovakia). Slovenia joined in 1996, Romania in 1997 and Bulgaria in 1998. For each country, the conditions of membership included being a member of WTO and having an Association Agreement with the European Union. In practice, EU membership is a priority for all CEFTA members. Yet no precise timetable for EU membership has been established, and CEFTA members cannot afford to match the level of agricultural protection provided in the European Union. Moreover, the European Union is unlikely to be able to extend its current levels of support to all acceding countries. This implies a policy dilemma for CEFTA countries, which stand to benefit from open trade, yet increasingly need to align their policies with those in the European Union. Nevertheless, the precondition of WTO membership affects the manner in which this dilemma is likely to be resolved. If the trade agreement is to be a liberal one, then liberalisation is easily accomplished within WTO rules; if not, then increases in protection must be effected within the constraints of each country's WTO obligations.

Partly reflecting the policy dilemma presented by EU accession, CEFTA's provisions for internal trade in agro-food products were less liberal than its rules for other products. Nevertheless, agriculture was included in CEFTA's original treaty. This meant that CEFTA members could argue that the agreement was in conformance of Article XXIV of the GATT, which requires that "substantially all trade" should be covered by a regional trade agreement. Specifically, it was possible to maintain that CEFTA's provisions for agro-food products represented a transitional arrangement, consistent with the interpretation arrived at in the Uruguay Round; namely, that a transition period of ten years should be permissible for the creation of a WTO-compliant Regional Integration Agreement.

A third way in which the multilateral process may guide the evolution of a regional trade agreement is through the promotion of policy convergence. Each CEFTA member's trading relationships are governed by a number of factors that vary from one country to the next. These factors include the level of MFN tariffs, WTO commitments, other RTA obligations, and agreed timetables for policy convergence (and liberalisation) with the European Union. With rates of protection consequently varying among CEFTA members, there is a tendency for imports to enter through countries with lower MFN tariffs. In principle, "rules of origin" should mitigate the impact on countries with higher rates of domestic support, but these involve high administrative costs and are difficult to enforce for relatively homogeneous agricultural products. The logical solution to these internal pressures is policy harmonisation among CEFTA members, for example by converting the RTA into a Customs Union. A movement towards the lowest common external tariff would be to the mutual benefit of CEFTA and the multilateral system. Unfortunately, there is a greater tendency to employ temporary stop gaps, such as countervailing measures, partly because further liberalisation runs counter to the demands of EU accession.

In terms of direct impacts, RTAs appear to reduce the importance of a multilateral agreement

The direct importance of a multilateral trade agreement to an ETE depends on how much of the ETE's trade is conducted on an MFN basis and how much goes through RTAs. RTAs are more important for transition economies – especially CEECs – than they are for emerging economies where more trade is conducted on an MFN basis, often with OECD countries.

But the indirect impacts of a multilateral agreement may be just as important as the direct ones

When RTAs dominate a country's trading relationships, the importance of the multilateral process is essentially indirect. The operating terms of RTAs are conditioned by WTO rules, and if a country is subject to reform commitments as part of its WTO obligations, this will have important implications for the operation of an RTA. Thus, CEFTA members with EU Accession Agreements would be affected simultaneously by any reform commitments undertaken by the European Union, and by disciplines imposed on the operation of CEFTA. These countries are therefore likely to have as much at stake in the multilateral process as countries like Argentina and Brazil, where more trade takes place on an MFN basis.

Human and Institutional Capital

ETEs often suffer from deficiencies in human capital and institutional resources

The effect that the URAA had on a country's agricultural trade practices depended crucially on the supply of human capital and institutional resources charged with its implementation. To varying degrees, ETEs suffer from deficiencies of the requisite human and institutional resources. This has had an effect both on the way in which they have implemented their own URAA commitments, and on the extent to which they have been able to scrutinise the policies of other countries. Areas where resource deficiencies are apparent include: a weak statistical basis on which policies are measured, implemented and reported; shortcomings in customs procedures; a lack of lawyers and other policy experts; and under-representation at the international level. In addition, there is often weak communication between the private sector and government representatives, while the legal process is more geared to redressing exporters' grievances than the concerns of importers.⁶⁸

This affected the implementation of the URAA in ETEs

Evidence has already been presented of instances where the implementation of URAA was affected by mistakes at the technical level (for example, India's AMS notifications and Hungary's commitments on export subsidies). This does not always harm the country involved: if a country constrains itself to a trade policy regime that is stricter than it need have been, then it may benefit from the domestic liberalisation of resources.

Such resource deficiencies may weaken the effectiveness of a country's participation in the multilateral system

However, an inability to apply the URAA in an informed way cannot be viewed as a desirable situation. First, the effect can work the other way. If policy commitments are not properly implemented, measured or reported, then *ad hoc* trade measures can be adopted more easily. Thus, a lack of human and institutional resources may result in higher protection than otherwise. At the same time, such resource deficiencies may weaken a country's negotiating position

and its ability to scrutinise the policies of other countries and extract reform commitments.

Indeed, a major handicap for ETEs is that deficiencies in human and institutional resources impede their ability to participate effectively in the multilateral system. Many smaller WTO member developing countries have no WTO representation at all, while the average number of officials from OECD countries is just under seven. This lack of participation is illustrated by the fact that an OECD country was the complainant in 140 of the 180 dispute cases brought before the WTO between April 1994 and March 1999 (with the United States and the European Union collectively the source of 97 complaints).⁶⁹

Conclusions

The aim of this section was to place the concerns of ETEs with respect to the three pillars of the URAA in context. The foregoing discussion suggests that, in many cases, other factors can be just as important as a multilateral trade agreement in terms of determining what happens to a country's economic welfare, and, specifically, what farmers stand to gain or lose. These factors included a number of general economic impacts; the extent to which trade reform is accompanied by domestic reforms; the degree to which multilateral liberalisation is complemented or otherwise by regional initiatives; and the quality of a country's human and institutional capital.

A number of qualitative policy implications were drawn. First, targeted policies aimed at facilitating adjustment would enable the gains from trade reform to be realised most effectively. Second, the benefits of trade reform will only be fully felt if these reforms are accompanied by domestic reforms. Third, outward looking regional agreements are not a threat to the multilateral system. Fourth, ETEs would benefit from further developments in their human and institutional capital. Beyond this, each of the topics discussed in this section is a major subject in its own right. Further analysis would be required to move beyond these general prescriptions and find out exactly how individual ETEs are likely to be affected by the factors outlined in this section.

8. Summary and conclusions

This report has sought to move beyond the notion of aggregate gains from trade, and to examine what agricultural trade reform would mean in practice for ETEs. This has meant recognising that some countries may win and some countries may lose, and also that within countries there will be both winners and losers. The underlying premise is that it is important to acknowledge these complexities if there is to be a multilateral trade agreement that is acceptable to all members.

What ETEs stand to gain or lose from trade reform depends on a number of factors that may be as important as the trade reform itself

Further work would be needed to quantify these policy effects

The complexity of ETEs' interests needs to be acknowledged if there is to be a multilateral trade agreement acceptable to all members

Trade growth goes hand in hand with income growth

Section 2 established that agricultural trade liberalisation is important to ETEs. The focus here was on the potential of trade to create growth. Growth is not the only objective that countries pursue, but it is particularly important for ETEs, and potentially allows them to address other development objectives. In particular, whilst income growth does not guarantee a reduction in poverty, it makes it easier to alleviate the problem of low incomes.

But agricultural trade growth has been slow relative to rates in other sectors

A problem for ETEs is that the growth in agricultural trade has lagged behind trade growth in other sectors. This is a particular handicap for ETEs, as many of these have a comparative advantage in agricultural activities. In part, the lack of agricultural trade growth is demand-related, with the demand for food tending to grow more slowly than demand in other sectors. It is also partly supply related, as agricultural productivity has grown more slowly than productivity in manufactures and tradable services. But a major cause is protection. Agricultural protection, predominantly in OECD countries, remains several times higher than industrial protection, and this has impeded the growth in trade.

Moreover, ETEs have been unable to obtain an increased share of world agricultural markets

Moreover, whereas ETEs have increased their penetration of industrial markets in OECD countries, this has not been the case for agricultural products. Not only has ETEs' share of OECD markets declined, but this decline has accelerated during the URAA implementation period. Again, the major reason for this is agricultural protection. Despite the URAA, total support to agriculture in OECD countries is not as high as it was in 1986-88 – the high-water mark for agricultural protection, from which URAA reduction commitments were made. This support is sometimes provided in less trade-distorting ways than before, but it continues to influence production and trade and has prevented ETEs from realising a structural increase in their share of OECD country markets.

Some ETEs may only benefit from a multi-sector trade agreement

Although there is a broad collective interest in trade reform, some countries may lose from a WTO agreement that is limited to reductions in agricultural protection. Net agricultural exporters are likely to gain, but some net importers may lose from having to pay higher prices. Moreover, within all countries (OECD countries and ETEs), there will be both winners and losers, with those who formerly benefited from protection standing to lose. The structural changes induced by trade reform lead to legitimate concerns about income losses and, in the extreme, people being thrown into poverty. For that reason, reform in other sectors is also important, and there may be a need for policies that provide temporary compensation and long term help with the process of adjustment.

The concerns of ETEs are likely to achieve greater prominence in the next round of trade

The URAA was the first time that agriculture has been subject to multilateral rules and disciplines. As policy-makers seek to consolidate the limited gains that resulted from the Agreement, there are a number of reasons why they should focus on the position of ETEs. One is that ETEs are increasingly important to overall trade. These countries will be seeking greater access to OECD agricultural markets, and will be participating more actively in the multilateral process, not least through giving voice to their common concerns.

ETEs interests diverge according to the factors that drive their trading relationships

Section 3 examined where the policy interests of ETEs converge and where they diverge on the 3 pillars of the URAA. The original source of diverse policy interests is different resource endowments and technologies, and basic structural factors (such as geographical location), *i.e.* the basic factors that determine what a country trades in and with whom. Accordingly, there are some general factors that determine a country's position on agricultural trade issues. These include the country's net trade balance in agricultural products; the general importance of agriculture to the national economy; the types of commodity that are traded; the country's ability to take advantage of market access commitments; its other regional trading commitments; and its status at the WTO.

However, there are also important areas where their interests converge

There are, nevertheless, fundamental areas in which the interests of ETEs converge. All ETEs have an interest in being integrated with the world trading system; have an interest in increasing the effectiveness of their participation at the WTO; would benefit from an improvement in the transparency of policy mechanisms; and stand to benefit from broad-based as opposed to sector-by-sector reform.

Each country must balance competing domestic concerns, and consider the effects of own reforms in the context of reforms undertaken in other countries

Sections 4, 5 and 6 considered in detail the issues pertaining to each of the three pillars. For each of the three pillars, all countries have three main interest groups whose concerns they need to consider: exporters, consumers of imports, and producers who face import-competition. Moreover for each topic of reform, a country must balance domestic concerns, and consider the effects of own reforms relative to those undertaken in other countries. For each of the three pillars, a range of specific topics was discussed. Box I.6 below provides a stylised summary of where different groups stand on these issues.

On market access a tightening of the WTO's legal provisions might strengthen the impact of a prospective agreement

Market access issues

The general policy conclusion on market access is that if a new WTO agreement seeking to expand market access is to have a significant effect, then it needs to be accompanied by measures that limit countries' scope for evading their reform commitments. This means *tightening* the laws, to ensure that countries cannot exploit the various loopholes, and *broadening* them, such that alternative means of restricting market access are closed down. A major threat to further improvements in the conditions of market access is that ETEs will become more adept at imposing limits while staying within the letter of WTO law. For this reason, it is important that OECD countries demonstrate their own commitments to clear, transparent and comprehensive rules on market access.

The concerns of ETEs are primarily indirect, and relate to the use of explicit and implicit export subsidies in OECD countries

Export competition issues

Under export competition, the concerns about URAA implementation relate overwhelmingly to OECD countries, since these are the almost exclusive users of export subsidies. Accordingly, the main impacts that the URAA's provisions on export competition had on all emerging economies and most transition economies were indirect, and resulted from the commitments OECD countries made to curb

Box I.6. **Explanatory notes on ETEs' policy interests****Market access**

Tariff reduction:	Exporters in ETEs favour tariff reductions in OECD countries, whereas this is a secondary issue for net importers. Net importing ETEs may favour or oppose tariff reforms, depending on whether the interests of farmers who compete with imports outweigh those of consumers.
TRQ reform:	There is a conflict between the interests of those who hold quotas and those who do not. In terms of own-country reforms, this is more an issue for transition economies than for emerging economies, since the latter seldom apply TRQs. As with tariff reform, the overall interest depends on the relative weights attached to producers' and consumers' concerns.
Tariff escalation:	Reform in OECD countries is an issue for ETE exporters.
Anti-dumping restrictions:	This is primarily an issue for ETEs exporting to OECD markets, although increasingly common between ETEs.
Preferential trade:	The issue is similar to that of TRQ allocations, in that there is a conflict between those who benefit and those who do not.
STE importers:	ETE exporters would favour reform, unless STEs provide the mechanism through which they gain preferential access.

Export competition

Export subsidy reductions:	ETE exporters will favour further reductions. The interest of net importers is again ambiguous. Some transition economies may be obliged to undertake further policy reforms.
Export credits:	With respect to policies in OECD countries, ETEs' interests are the same as for export subsidies. Few ETEs provide export credits themselves.
Food aid:	Low-income importers would gain from legislation that further tightened the terms on which food aid is provided. Countries that benefit from implicit subsidies, on the other hand, would not.
STE exporters:	ETE exporters would benefit from the reform of STE exporters in OECD countries, to the extent that they exercise monopoly power, or provide export subsidies on behalf of their governments. The interests of importers are clear: they may benefit from subsidies; on the other hand they may lose if STE exporters have monopoly power. Those ETEs with exporting STEs may oppose reform.

Domestic support

AMS cuts:	ETE exporters will favour AMS cuts in OECD countries. Net importers, as on other issues, may be either for or against.
Traffic light revision:	ETEs' interests on this issue depend on the extent to which any redefinition ensures that the widest range of trade-distorting measures are subject to reform. Low-income countries will tend to favour provisions that take full account of their development needs, while the positions of higher income ETEs may be more akin to those of OECD countries.
Contingencies:	This is an important issue for low-income ETEs. There may be opposition to reform from ETEs that stand to lose if eligibility is put on an objective footing.

their use of export subsidies. In the next round of multilateral negotiations, ETEs as a group will again be affected predominantly by the extent to which OECD countries agree on further reductions in export subsidies, and by the degree to which they agree to limit the use of implicit export subsidies. Direct policy changes will be important in those transition economies that continue to use export

subsidies, and – if the rules on export competition are extended to include export-reducing policies – in those emerging economies that restrict agricultural exports.

Domestic support issues

The major issue at stake is whether the “boxes” into which support is categorised properly reflect the potential of support to distort trade

The largest OECD countries dominate the use of domestic support measures, and ETEs are affected by this support to the extent that it continues to distort trade. The increasing use of Green Box policy measures by OECD countries means that a diminishing share of domestic support is liable for reductions. Insofar as this support distorts trade, many ETEs would benefit if limitations on domestic support were extended to include policy measures that are decoupled at the margin.

Concluding remarks

Most of the implementation issues that have been raised are a result of flexibilities that were inherent in the URAA

This paper has identified two systemic ways in which ETEs were disadvantaged by the URAA. The first adverse impact derives from the latitude granted to individual countries in terms of the implementation of the agreement. Each country has the right to interpret the unspecific aspects of a legal requirement in the way that best serves its own (perceived) interest. Yet some countries are in a better position to do this than others. Accordingly, some of the extra “concessions” granted to developing countries (such as the scope to set ceiling bindings for tariffs, smaller reductions in support and longer implementation periods) have been at least equalled by the flexibility employed by more developed OECD countries when interpreting their URAA commitments. To some extent, the latitude for interpretation was intentional, with some flexibility needed to obtain an agreement. As a general principle, however, the less ambiguous the legal arrangements, the more even the pattern of implementation is likely to be across ETEs and OECD countries. As new issues are addressed in the next round of multilateral trade negotiations, the formulation of the legal text will be every bit as important as the underlying economic rationale.

The diverse positions and interest of ETEs are not fully accounted for in the distribution of special provisions

The second problem for ETEs derives from the uneven treatment of countries under WTO rules. For example, there are no objective criteria for determining developing country status, and the SSG is not effectively available to all countries. A further problem of “fairness”, which is not limited to ETEs, is that countries undertaking unilateral reforms may restrict their perceived negotiating power. In an environment where trade reforms are often seen as “concessions”, ETEs may thus hold back on policy reforms that would be of greater economic benefit, in relative terms, than similar reforms in OECD countries.

Investments in human and institutional capital could help many ETEs redress some of the imbalances present in world trading relationships

As existing policy concerns are revisited, and new concerns are addressed, ETEs would unquestionably benefit from the development of their human and institutional capital. Many ETEs suffer from deficiencies in the basic flow of information, such as economic statistics and customs data. Often, this institutional weakness is compounded by the fact that ETEs do not have the requisite trained professionals (statisticians, economists and policy analysts). The

problems of a weak domestic human and institutional resource base are further amplified by a lack of international representation, and by weak communication from domestic exporters to international negotiators and representatives. Investment in these areas would lead to more balanced implementation of a multilateral trade agreement, as well as providing broader economic benefits.

NOTES

1. This report addresses the implications of agricultural trade reform for countries outside the OECD membership. The term “emerging and transition” applies to those countries that participate in the OECD’s Forum on Agricultural Policies in Non-Member Economies. This includes Argentina, Brazil, Chile, China, India and South Africa (which are classified as “emerging”) and Albania, Belarus, Bulgaria, Croatia, Estonia, Kazakhstan, Latvia, Lithuania, Romania, Russia, the Slovak Republic, Slovenia and Ukraine (which are classified as “transition”). In addition, the analysis of transition economies covers three OECD countries; namely, the Czech Republic, Hungary and Poland. Some aspects of the analysis apply more broadly.
2. Three sets of issues (“pillars”) were identified in the Uruguay Round discussions and embedded in the URAA: market access, export competition and domestic support. Other issues relating to agriculture were also incorporated in the UR agreement, including rules on sanitary and phyto-sanitary regulations (SPS) and on technical barriers to trade (TBTs).
3. The discussion of a number of these issues draws on a background report submitted to the Secretariat by Anania and Carter (2000).
4. Article 20 of the URAA already requires that negotiations take into account “non-trade concerns”.
5. Using the GTAP model of global trade, Hertel *et al.* (1999) estimate that a 40% cut in market price support and domestic subsidies would yield annual welfare gains of \$70 billion by 2005.
6. The relationship between trade and growth was explored in the OECD study “Open Markets Matter” (OECD, 1998). Krueger (1997) also provides evidence that increased trade has contributed to economic growth.
7. Between 1950 and 1996, world agricultural output increased 3-fold, while agricultural exports grew by a factor of 5. Over the same period, manufacturing output increased by a factor of 8.5 while exports of manufactures rose by a factor of 31. These figures suggest that the slow growth of agriculture trade is only partially attributable to the sector’s reduced economic importance.
8. Formally, agriculture was covered by the 1947 GATT Agreement. However, the rules were weakened by exemptions for import restrictions (Article XI) and export subsidies (Article XVI), and by country-specific exemptions, including the waiver granted to the United States with respect to Article XI. The resolution under the GATT of a number of panel cases (including the United States’ complaint against the EU’s support of oilseed production) indicated that the GATT nevertheless had some impact on agricultural protection.
9. Helpman and Krugman (1985).
10. This point was made in the OECD study “Reaping the Full Benefits of Open Markets,” (OECD, 1999).
11. For example, Rodriguez and Rodrik (1999).
12. These adverse impacts may be modest. For example, the Anderson, Hoekman and Strutt study estimates that the full liberalisation of OECD farm policies would boost global agricultural trade by 50%, but cause real international food prices to rise by only 5%. Valdés and Zietz (1995) similarly found that prices for wheat, maize, and feed grains would rise by only 4-6%. In short, the major impact appears to be on volumes rather than prices.
13. The aggregate Producer Support Estimate (PSE) for OECD countries fell from 41% of the value of agricultural production to 31% between 1987 and 1997. However, the downward trend in support was reversed in 1988 and 1999, with the PSE jumping to 36% and then 40%. The increased use of policies that are decoupled at the margin means that not all of the gains from reduced protection have been reversed.
14. Argentina, Brazil, Chile and South Africa are all members of the Cairns’ Group, which as of April 2000 had 18 members (15 of which are developing countries). Three countries (Bolivia, Costa Rica and Guatemala) joined in 1999.
15. World Bank Development Indicators (1999).
16. Lindland (1997), from FAO data.
17. The countries with tariffs exceeding 200% are Canada (milk and cream, milk powders and butter); India (animal and vegetable oils); Japan (wheat, barley, rice, and most dairy products); Korea (barley); Norway (all products except sugar and tobacco) and Switzerland (wheat, barley, beefmeat, sugar, butter and milk powders). These

rates refer to over-quota tariff rates in cases where a tariff rate quota system is applied, while some are the calculated *ad valorem* equivalents of specific tariffs. For the background methodology, see *Post-Uruguay Round Tariff Regimes: Achievements and Outlook* (OECD, 1999).

18. This grouping includes the countries in North America and Western Europe, plus Australia, Japan and New Zealand.
19. Ingco (1997).
20. For example, the GTAP general equilibrium model, as applied by Hertel *et al.*, translates all policy measures into *ad valorem* tariff restrictions.
21. Valdés, A. and A. McCalla (1999), "Issues, Interests and Options of Developing Countries". Paper prepared for conference on "Agriculture and the New Trade Agenda from a Development Perspective: Interests and Options in the WTO 2000 Negotiations", Geneva, Switzerland, 1-2 October, 1999.
22. Often, these reforms have short-term costs, which may be a source of political and social tensions. In addition, an agreement to lower support can often be seen as the loss of a "bargaining chip" for future negotiations. It is these factors, rather than fundamental benefits at stake, which explain the delicate process of WTO accession.
23. The poorest economies, which are heavily dependent on subsistence farming, are outside the sample of countries in this report. The lack of external trade undertaken by these countries means that the practical implications of a WTO agreement are likely to be limited, irrespective of whether the country is a WTO member or not.
24. WTO members that do not belong to an RTA are nevertheless protected from unfair trading practices by MFN access to the markets of RTA members, and by the WTO requirement that WTO members seeking to modify their market access commitments must compensate adversely affected WTO members.
25. All non-OECD countries that were among the original members of the WTO have claimed developing country status, at least for some aspects of their Uruguay Round commitments. Romania was an original member of the GATT, and this partly explains why it has developing country status and other transition economies do not.
26. Exporter emerging economies are concerned primarily with their access to OECD markets, and with the terms on which they compete with OECD exporters on world markets. Importing emerging economies are affected by reforms to their own policies and by the prices at which they obtain their imports. Non-WTO members (*i.e.* the NIS) are concerned only with the latter effect. For most of the CEECs, the biggest effect of a WTO agreement would be through its impact on trade relations with the European Union.
27. These included the Special Safeguard (SSG) provision, which enables tariff bindings to be exceeded under certain conditions, and the "special treatment" provision, which allows non-tariff measures to be maintained for rice imports in Japan, Korea and the Philippines, and for sheepmeat and dairy products in Israel. Japan has since switched to tariff measures for rice.
28. In some cases, this may not correspond to the HS level at which tariffs are levied. In cases where a number of different tariffs are levied at this level of aggregation, the most commonly applied tariff rate was chosen. The basic data for each commodity are reported in the Appendix I. The data include the minimum tariff applied at that HS level, the maximum tariff, and the number of tariff lines within that 6-digit category.
29. The main advantage of this table is the more extensive transition country coverage. From the standpoint of transition countries, the major drawback is the absence of comparative data for the European Union (where the *ad valorem* equivalent of not *ad valorem* tariffs has not been computed). Because specific tariffs are often excluded, the reported tariffs are frequently lower than is inferred by a comparison of imposed duties with the world price (Table I.3).
30. The simple averages can be misleading. However, they testify to the fact that every sector receives a high rate of protection from at least one OECD country. Indeed, excluding China (which is not a WTO member), the peak tariff in OECD countries exceeds the peak tariff in ETEs for every commodity.
31. Although the data are instructive, the use of different time periods for bound and applied rates means that the numbers need to be interpreted with caution. In particular, an applied tariff in excess of the bound rate does not imply a failure to comply with URAA commitments.
32. This assessment is borne out by other studies. Drawing on a sample of 42 developing countries, Michalopoulos (1999) found that the average bound rate on agricultural commodities was 59%, compared with an average applied rate of 21%. By contrast, the average bound and applied rates on imports of manufactures were 42% and 17% respectively. For agriculture, the spread between bound and applied rates tended to decrease as national income increased. Finger and Schuknecht (1999) similarly found that the average post-Uruguay Round bound and applied tariffs on agricultural products were 60% and 18% respectively in developing countries, compared with average bound and applied rates of 15% and 14% in OECD countries. Using data from the EU's Market Access Database, Kazlauskienė and Meyers (1999) found little evidence of water in the tariffs for a wider group of transition countries. The notable exception was Romania, which has developing country status. Poland's bound rates for sugar and dairy products were also notably higher than its applied rates, although the applied rates have since increased. Kazlauskienė and Meyers also found little water in the tariffs of post-Uruguay Round WTO members (Bulgaria, Estonia and Latvia).

33. Of course, countries can declare the same tariff rate across a number of tariff lines, as is done, for example in Argentina and Brazil.
34. What matters is the number of different tariff rates across the various lines, rather than the number of tariff lines itself. The figures are nevertheless indicative.
35. They are less transparent for traders, since the duty payments depend on the traded price.
36. Brazil's MFN tariff has been reduced to 15%, limiting the significance of these TRQs.
37. Abbott and Morse (1999).
38. Tangermann (1995).
39. There are no formal WTO definitions of "developed" or "developing" countries. Developing countries in the WTO are designated on the basis of self-selection although this is not necessarily automatically accepted in all WTO bodies.
40. Shanahan (1997).
41. India is a rare instance of a country that has used the balance of payments exception to limit imports.
42. OECD (1997).
43. OECD (1999).
44. The Australian Wheat Board was privatised in July 1999, but still retains its status as a single-desk seller.
45. See Finger (1993) and Prusa (1998).
46. China (not a WTO member) has occasionally used export subsidies.
47. Lithuania (not a WTO member) has also used export subsidies during the Uruguay Round implementation period.
48. For example, Title 1 of the United States' PL480 programme is classified as a food aid programme, but operates as an export credit system.
49. The following ETEs have state-trading exporters: Argentina, Brazil, Chile, the Slovak Republic and Slovenia. South Africa has recently reformed its STEs.
50. McCorrison and McClaren (2000).
51. Some OECD countries, including the European Union between 1995 and 1997, have also taxed exports when world prices have risen above domestic support levels.
52. The provisions of this article are not applicable to developing countries, unless the country is a net exporter of the foodstuff in question.
53. The exclusion of food-importing developing countries from the provisions of Article 12 implicitly acknowledges this point.
54. The argument against the use of trade policy rests on the premise that the most efficient way of pursuing an economic objective is to target it directly (Corden, 1974).
55. Whether or not a policy distorts trade is an economic question. However, from the standpoint of trade policy, it is also one that requires a legal answer. So far, the legal solution has been to define "minimally trade-distorting" as those policies that qualify for the Green Box. A benchmark definition of what constitutes a "minimal" distortion, and an agreed method of measurement, are needed if this circularity is to be resolved.
56. Cahill (1997) found that compensatory payments to EU cereal and oilseed farmers did not affect the production of wheat, rapeseed and soybeans; but did affect the output of coarse grains and sunflower. Chavas and Holt (1990) studied acreage supply response for corn and soybeans in the United States, under government programmes and they found that risk and wealth variables play an important role in explaining corn and soybean acreage decisions in the United States. Hennessy (1998) found that the wealth and insurance effects of many US support programmes increased optimal input levels even when that support was supposedly decoupled.
57. In economic terms, the government does not have to purchase the total volume of output in order to maintain the domestic price at a desired level.
58. India compared the domestic prices of seed cotton with the border prices of cotton lint. This mistake had serious consequences for the AMS calculation, as lint prices are several times higher than seed prices.
59. Cochrane (1979).
60. The income situations in nine transition economies are examined in the corresponding OECD country studies. In most cases, the average incomes of farm households are lower than those of non-farm households. Comparative data are often scarce for emerging economies, but the pressures of rural-urban migration suggest a similar pattern.
61. OECD (1994).
62. Farmers are typically taxed in developing countries (Krueger, Schiff and Valdés, 1988).
63. OECD (1999b).
64. This issue is particularly important for small low-income and food import dependent economies.

65. Schiff and Valdés (1998).
66. In this context the Development Assistance Committee is currently working towards the identification of a set of good practices for donors.
67. Recent studies include those by Foroutan (1998), and Sologoa and Winters (1999).
68. The costs of correcting some of these deficiencies are surveyed by Finger and Hall (1999). As an example, the European Union has been assisting the countries of Central and Eastern Europe through its PHARE programme. The total budget allocated for customs modernisation in the ten candidate countries is 90 million ecus for 1990-97, of which 70 million has been contracted.
69. Hoekman and Mavroidis (1999).

Appendix I

A TAXONOMY OF DEVELOPING COUNTRIES

The heterogeneity of ETEs' interests is demonstrated by a taxonomy of country characteristics. The following taxonomy, developed at the World Bank, considers 148 developing and transition economies and includes all the ETEs considered in this study, as well as six OECD countries: the Czech Republic, Hungary, Korea, Mexico, Poland and Turkey. In terms of this analysis, it indicates the extent to which the trading profiles of ETEs conform to those of a broader sample.

Countries are classified according to a number of characteristics:

- **Income level**, using the World Bank's classification system. The categories are Low Income Countries (LIC), Lower Middle Income Countries (LMIC), and Upper Middle Income Countries (UMIC);
- **Net agricultural trade and food trade position**, according to FAO sources (using a three-year average between 1995 and 1997). The categories are Net Food Importing Countries (NFIM), Net Food Exporting Countries (NFEX), Net Agricultural Importing Countries (NAIM), and Net Agricultural Exporting Countries (NAEX);
- **UN classifications**. Least Developed Country (LDC), Low Income Food Deficit Country (LIFDC), Transition Economy (TRANS) and Small Island Developing Economy (SIDC).

In addition, two key indicators relating to a country's agricultural trade position were computed (based on a 1995-97 average):

- **Food Import Capacity (FIC)** – defined as the ratio of food import expenditure to total export revenue; and
- **Agricultural Tradability (AT)** – defined as the ratio of the value of agricultural trade (*i.e.* the sum of agricultural import expenditures and agricultural export revenues) to agricultural GDP.

FIC provides a rough indicator of the demand placed on foreign exchange in order to finance food imports, and of the extent to which the food import bill can increase in years of weak production and higher world prices. AT is a similarly approximate measure of openness of a country's agricultural trade, and reveals the extent to which world market fluctuations can affect agricultural income.

The above classifications and measures provide some revealing insights. Appendix Table 1 cross-references income categories by UN classifications. The main conclusions are as follows:

- Most Low Income Countries are also Low Income Food Dependent Countries;
- A majority of Transition Countries and Small Island Developing Countries qualify as middle income countries, with a majority in the Lower Middle Income category;
- 71% of the 148 countries are net food importers, but 42% are net agricultural exporters, including 33 low-income countries.

Appendix Table 2 sheds further light by cross-referencing the various UN categories:

- Only one of 49 Least Developed Countries is a Net Food Exporter, but one-third are Net Agricultural Exporters;
- 80% of Least Developed Countries are also Low Income Food Dependent Countries;
- 22 Net Food Importers and 25 Low Income Food Dependent Countries are Net Agricultural Exporters;
- Two-thirds of Net Food Importing Countries are both Net Food Importers and Net Agricultural Importers.

Appendix Table 3 considers the extent to which this pattern is represented in the limited sample of ETEs (which includes 6 OECD countries, plus 17 non-OECD members).

- There are no Least Developed Countries among the 23 sample ETEs;
- In addition only two (China and India) are classified as Low Income Countries, compared with 43% of the World Bank's broader sample;
- By contrast, Upper Middle Income Countries are over-represented, accounting for more than half of the ETE sample (compared with less than a quarter of the World Bank sample);
- The Low Income Food Dependent Countries are under-represented, with just three in the sample of 23, compared with more than half of the World Bank's sample;

- None of the 29 Small Island Developing Countries are included; whereas Transition Countries dominate the narrower sample;
- The limited sample has exactly the same mix of Net Agricultural Importers and Net Agricultural Exporters (with shares of 57% and 43% respectively);
- However, net food importers are more prevalent in the broader World Bank sample;
- Agricultural Tradability is lower in the selected ETEs, as is Food Import Capacity. Indeed, the FIC ratio of 0.11 in ETEs is very different from the wider sample ratio of 0.42.
- Low-income countries and net food-importing countries are more prevalent globally than is reflected in a sample that accounts for the most significant players (in terms of size of trade and affected populations). Similarly, openness to agricultural trade (as captured by AT) is not fully captured by a more limited sample, and neither is the ability of foreign exchange to pay for food imports (as captured by FIC).

 Appendix Table I.1. **Developing and transition country income taxonomy**

UN Classification by World Bank income category

		63 LIC	52 LMIC	33 UMIC
58	LIFDC	58	0	0
26	TRANS	6	13	7
29	SIDC	5	15	9
105	NFIM	48	35	22
43	NFEX	15	17	11
85	NAIM	30	32	23
63	NAEX	33	20	10

UN Classifications		World Bank Classifications	
LDC	Least Developed Countries	LIC	Low Income Countries
LIFDC	Low Income Food Deficit Countries	LMIC	Lower Middle Income Countries
TRANS	Transition Countries	UMIC	Upper Middle Income Countries
SIDC	Small Island Developing Countries		

Source: Valdés and McCalla (1999).

 Appendix Table I.2. **Developing and transition country income taxonomy**

Cross-reference of UN Classifications

LDC	LIFDC	TRANS	SIDC	NFIM	NFEX	NAIM	NAEX	
46	38	0	8	45	1	30	16	LDC
	58	5	5	47	11	33	25	LIFDC
		26	0	18	8	16	10	TRANS
			29	20	9	20	9	SIDC
				105	0	83	22	NFIM
					43	2	41	NFEX
						85	0	NAIM
							63	NAEX

UN Classifications		Net trade position (UN-FAO)	
LDC	Least Developed Countries	NFIM	Net Food Importers
LIFDC	Low Income Food Deficit Countries	NFEX	Net Food Exporters
TRANS	Transition Countries	NAIM	Net Agricultural Importers
SIDC	Small Island Developing Countries	NAEX	Net Agricultural Exporters

Source: Valdés and McCalla (1999).

Appendix Table I.3. **Taxonomy of emerging and transition economies**
Country by World Bank and UN Classification

Taxonomy Categories	WTO-M	LDC	LIC	LMIC	UMIC	LIFDC	TRANS	SIDC	NAIM	NAEX	NFIM	NFEX	AT index	FIC index
12 Transition Countries	5	0	0	9	3	1	12	0	8	4	8	4	0.87	0.16
Albania				√		√	√		√		√		0.20	0.92
Belarus				√			√		√		√		0.41	0.09
Bulgaria	√			√			√			√		√	0.76	0.06
Croatia					√		√		√		√		0.76	0.15
Estonia	√				√		√		√		√		3.22	0.18
Kazakhstan				√			√			√		√	0.50	0.04
Latvia	√			√			√		√		√		0.92	0.07
Lithuania				√			√			√			1.19	0.09
Romania	√			√			√		√		√		0.25	0.06
Russian Federation				√			√		√		√		0.46	0.11
Slovak Republic	√				√		√		√		√		1.32	0.05
Ukraine				√			√			√		√	0.44	0.04
5 Emerging Economies	4	0	2	0	3	2	0	0	1	4	1	4	0.39	0.06
Argentina	√				√					√		√	0.59	0.04
Brazil	√				√					√		√	0.39	0.10
Chile	√				√					√		√	0.68	0.05
China			√			√			√		√		0.20	0.04
India	√		√			√				√		√	0.09	0.05
6 OECD Countries	6	0	0	0	6	0	3	0	4	2	3	3	0.76	0.06
Czech Republic	√				√		√		√		√		n.a.	0.05
Hungary	√				√		√			√		√	1.50	0.03
Poland	√				√		√		√			√	0.83	0.08
Turkey	√				√					√		√	0.33	0.09
Korea, Republic of	√				√				√		√		0.41	0.04
Mexico	√				√				√		√		0.71	0.09
12 Transition countries	42%	0%	0%	75%	25%	8%	100%	0%	67%	33%	67%	33%	0.87	0.16
5 Emerging economies	80%	0%	40%	0%	60%	40%	0%	0%	20%	80%	20%	80%	0.39	0.06
6 OECD countries	100%	0%	0%	0%	100%	0%	50%	0%	67%	33%	50%	50%	0.76	0.06
33 Sample ETEs	65%	0%	9%	39%	52%	13%	65%	0%	57%	43%	52%	48%	0.70	0.11
148 ETEs	66%	31%	43%	35%	22%	55%	18%	20%	57%	43%	71%	29%	0.93	0.42

n.a. Not available.

WTO-M: WTO member.

AT: Agricultural Tradability Index.

FIC: Food Import Capacity Index.

Source: World Bank (1999).

Annex I

Annex Table I.1. Extent of tariffication and simple mean bound rates for agriculture and industry

	% of bound lines			Simple mean final bound rates		
	Agriculture	Industry	All	Agriculture	Industry	All
Argentina	100	100	100	32.8	30.6	30.9
Brazil	100	100	100	35.3	29.7	30.3
India	97.5	62	67	124.3	59	67.4
Romania	100	100	100	98.6	34.4	43.4
Czech. Rep.	100	100	100	13.3	4.5	6.4
Hungary	100	96.7	95.9	22.2	6.8	9.8
Poland	97.4	96.1	96.2	52.8	10.6	19.9
Australia	99.9	95.8	96	3.3	10.6	9.7
Canada	100	99.5	99.7	4.6	5.3	5.2
EU-15	100	100	100	19.5	4.1	7.4
Iceland	99.6	93.7	95	48.4	10	17.6
Japan	99.5	98.7	98.9	11.7	3.6	5.1
Korea	96.3	90.5	91.3	62.2	11.4	18.3
Mexico	100	100	100	42.9	34.8	35.5
New Zealand	100	100	100	8.7	13.8	13.1
Norway	100	100	100	123.7	3.4	26
Switzerland	99.1	98.7	98.8	51.1	1.9	8.9
Turkey	100	35	46	63.9	40.7	44.1
US	100	99.9	100	5.5	3.8	4.1

1. Means for agriculture calculated with OOTRs where available.

Means computed on the basis of *ad valorem* equivalents.

Final bound rates refer to commitments at the end of Uruguay Round implementation.

Source: OECD (1999a) from WTO.

Annex Table I.2. **Base and (end of implementation) bound tariffs for selected ETEs**

	Argentina		Brazil		Chile		India		Poland		Hungary		Czech Republic		Slovak Republic	
	Base	Bound	Base	Bound	Base	Bound	Base	Bound	Base	Bound	Base	Bound	Base	Bound	Base	Bound
Wheat	38	38	45	55	35	31.5	0	100	40	25	50	32	25	21.2	30	25.5
Durum wheat	38	38	45	55	35	25	0	100	0	0	50	32	7.3	3	7.3	3
Maize	38	38	37	55	35	25	0	0	20	12.8	50	32	7	3	20	17
Barley	38	38	45	55	35	25	0	100	0	0	41	32.8	25	21.2	25	21.2
Oats	38	38	30	55	35	25	0	100	60	38	50	32	25	21.2	25	21.2
Rice	38	38	45	55	35	25	0	0	15	9.6	99	63.4	0	0	0	0
Soybeans	38	38	35	35	35	31.5	0	100	5	2.5	0	0	0	0	0	0
Rapeseed	38	38	37	35	35	31.5	0	100	45	27	0	0	73	60	72.7	60
Sunflower	38	38	35	35	35	31.5	75	100	15	9	0	0	0	0	48.4	40
Cane Sugar									120 min	96 min						
	n.a.	n.a.	55	35	n.a.	n.a.	75	150	0.53 ECU/kg	0.43 ECU/kg	80	68	80	68	70	59.5
Beet Sugar	n.a.	n.a.	55	35	n.a.	n.a.	100	150	as above	as above	80	68	70	59.5	70	59.5
Refined sugar	n.a.	n.a.	85	35	n.a.	n.a.	100	150	as above	as above	80	68	70	59.5	70	59.5
Milk	38	38	70	55	35	25	0	100	160	102	80	51.2	35	29	35	29
SMP	38	38	50	47	35	31.5	100	0	160	102	80	51.2	49.6	37	49.6	37
Butter	38	38	55	55	35	31.5	100	40	160	102	159	101.8	82	68	81.5	68
Cheese	38	38	70	55	35	31.5	100	40	250	160	105	60	10	9	10	8.5
Live Animals	8	6.8	0	0	35	25	140	100	20	13	47	40	115.2	97.5	115.2	97.5
Beef meat	38	38	25	55	35	25	140	100	30	19	112	71.7	42	34	41.7	34
Pig meat	38	38	25	55	35	25	140	100	120	76	61	51.9	45.8	38.5	45.8	38.5
Poultry	38	29.6	45	35	35	25	140	85	120	76	61	39	18	15	54.1	43
Lamb	38	38	25	35	35	25	20	100	100	64	40	25.6	150	104	151.6	110
Greasy Wool	n.a.	n.a.	20	18	n.a.	n.a.	20	25	60	38	3.8	3	0	0	0	0
Degreased Wool	n.a.	n.a.	20	18	n.a.	n.a.	140	100	60	38	3.8	3	0	0	0	0
Eggs	n.a.	n.a.	55	35	n.a.	n.a.		150	100 min	64 min	30	25.5	20	17	20	17
									164 ECU/ 1000 pces	105 ECU/ 1000 pces						

Source: WTO schedules.

Brazil agreed to ceiling bindings that were, in some cases, higher than the base period calculations. However, it agreed to fix these bindings from 1995 onwards. In these cases, the calculated base figure has not practical significance. In the Czech and Slovak republics, more than one tariff is sometimes applied. The most commonly occurring rate is reported.

Annex Table I.3. **Ad valorem tariffs on staple foods using world prices (1996)**
(Tariffs calculated for quota-based tariff lines using AVEs of OQTRs where these could be calculated)

	Wheat	Barley	Sugar	Beef meat	Pigmeat	Skim milk powder	Whole milk powder	Butter	Rice	Tobacco	Coffee
World Price (US\$/MT)	216	73	293	1 947	2 719	1 860	1 956	1 917	293	4 130	2 249
Argentina	35	35	35	35	35	35	35	35	35	35	35
Australia	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	25	NTQ
Brazil	28	55	35	55	55	47	46	55	55	47	35
Canada	49	58	NTQ	27	–	243	243	299	–	–	–
Czech Republic	NTQ	NTQ	NTQ	34	39	37	37	68	NTQ	NTQ	NTQ
EU	87	162	147	128	–	100	99	73	–	–	–
Hungary	26	27	68	72	52	51	51	102	63	58	51
Iceland	175	175	175	304	457	488	498	573	175	NTQ	NTQ
India	100	100	150	100	100	0	0	150	0	unbound	133
Japan	234	491	NTQ	NTQ	–	217	313	502	–	–	–
Korea	NTQ	359	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	5	NTQ	NTQ
Mexico	67	135	156	NTQ	45	83	81	33	36	45	60
New Zealand	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ	NTQ
Norway	347	318	82	344	363	392	339	343	318	NTQ	318
Poland	64	162	186	19	42	125	119	102	NTQ	105	NTQ
Romania	240	175	180	288	333	248	128	200	120	80	50
Switzerland	210	533	257	737	182	215	632	1 058	91	–	14
United States	NTQ	NTQ	129	26	–	52	62	96	–	–	–

NTQ = no tariff quota.

Source: OECD (1999a).

The world prices have been obtained as follows: for wheat, the price is the 1995/96 average of soft winter wheat no. 2, fob Atlantic ports, USA; for barley, it is the 1994/95 average of barley for feed no. 1, fob Thunder Bay, Canada; the sugar price is the International Sugar Association daily quote for 1995; cocoa is the ICCO daily price for 1996; beef meat is cif Australia, destination United States, 1996; skim milk powder, whole milk powder and butter are 1996 prices, fob Western Europe. Exchange rates used were 1996 daily averages of spot rates. The specific portions of OQTRs were converted using 1996 period average exchange rates and the *ad valorem* parts of mixed tariffs were taken as a per cent of the corresponding world price.

Annex Table I.4. Applied MFN tariffs for OECD countries and selected ETEs

Ad valorem Rates

Market	Wheat	Durum Wheat	Maize	Barley	Oats	Rice	Soybeans	Rapeseed	Sunflower	Cane Sugar	Beet Sugar	Refined Sugar	Milk	SMP	Butter	Cheese	Live Animals	Beef Meat	Pigmeat	Poultry	Lamb	Wool	Eggs	Average	
EMERGING																									
Argentina	13	13	11	13	11	13	11	11	11	23	23	23	17	19	19	19	5	13	13	13	13	11	11	13.71	
Brazil	13	13	11	13	11	13	11	11	11	19	19	19	17	30	19	30	5	13	13	13	13	11	11	14.13	
Chile	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9.58	
China	114	114	114	91	3	114	114	40	15	30	30	30	25	25	50	50	10	45	20	20	23	15	25	46.54	
India	0	0	0	0	0	0	40	40	40	0	0	40	30	0	30	30	40	10	10	10	10	20	30	15.83	
South Africa	n.a.	0	n.a.	0	0	0	n.a.	10	10	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.	0	40	15	0	40	0	0	7.67	
Average	30.0	25.0	29.2	21.2	5.8	25.0	37.2	20.3	16.2	16.4	16.4	24.4	16.5	16.8	25.6	23.2	11.7	21.8	13.5	11.0	18.2	11.2	14.5	18.79	
TRANSITION																									
Albania	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	20	10	10	10	10	10	10	20	10.42	
Belarus	5	5	5	5	5	5	5	5	5	10	10	1	1	25	15	10	20	15	5	15	15	30	15	10.50	
Bulgaria																									
Croatia																									
Estonia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	
Kazakhstan	1	0	1	1	1	1	5	5	0	0	0	25	15	10	20	15	5	15	15	25	15	20	15	8.75	
Latvia	25	25	1	75	75	1	1	1	1	0	0	30	30	45	45	45	30	30	45	30	30	1	30	22.96	
Lithuania	30	0	0	30	30	0	0	0	0	35	35	87	20	20	45	30	20	30	30	25	30	0	30	21.96	
Romania	25	0	30	25	15	10	0	0	30	50	50	50	35	45	45	45	25	40	60	60	19	16	40	29.79	
Russia	5	5	5	5	5	5	5	5	10	1	1	25	15	10	20	15	5	15	15	30	15	20	15	10.50	
Slovak Republic																									
Slovenia	5	5	n.a.	5	25	0	0	0	0	17	17	n.a.	n.a.	n.a.	n.a.	10	10	10	n.a.	12	n.a.	0	5	7.12	
Ukraine	15	15	10	10	10	10	10	5	2	50	50	50	20	30	30	5	10	20	30	30	30	0	20	19.25	
Average	12.1	6.5	6.9	16.6	17.6	4.2	3.6	3.1	6.3	16.4	16.4	30.2	17.8	18.3	26.1	20.0	12.0	18.5	24.4	25.2	18.2	8.7	19.0	14.51	
OECD TRANSITION																									
Czech Republic	27	4	18	23	23	0	0	64	43	72	63	63	31	41	73	9	103	37	41	47	124	0	18	38.50	
Hungary	41	41	41	37	41	10	0	0	74	74	74	66	66	131	86	43	92	57	50	33	3	28	45.33		
Poland	20	20	20	20	20	10	4	15	13	40	40	40	40	70	40	35	20	45	60	60	25	30	25	29.67	
Average	29.3	21.7	26.3	26.7	28.0	6.7	1.3	26.3	18.7	62.0	59.0	59.0	45.7	59.0	81.3	43.3	55.3	58.0	52.7	52.3	60.7	11.0	23.7	37.83	
OTHER OECD																									
Australia	0	0	0	0	0	0	0	0	0	n.a.	n.a.	5	0	0	0	0	0	0	0	0	0	0	0	0.23	
Canada	80	52	0	100	0	0	0	0	0	0	0	n.a.	248	207	316	253	0	27	0	245	0	0	245	77.09	
EU	15	n.a.	n.a.	n.a.	n.a.	9	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9	0	n.a.	1	n.a.	n.a.	0	9	4.30	
Iceland	55	55	55	55	55	0	0	0	0	0	0	0	30	30	30	30	0	30	30	30	30	0	30	22.71	
Japan	20	0	50	0	0	0	0	0	0	n.a.	n.a.	n.a.	25	35	35	31	0	40	4	12	0	0	22	13.05	
Korea	5	5	3	30	3	5	5	29	25	3	3	50	40	20	40	38	20	30	25	20	25	1	29	18.92	
Mexico	67	67	198	118	10	10	15	0	0	0	0	0	10	128	20	125	18	20	20	240	10	3	46	46.88	
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	7	0	0	0	0.71	
Norway	n.a.	n.a.	0	n.a.	n.a.	0	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	427	53.38
Switzerland	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Turkey	35	n.a.	35	20	n.a.	27	0	24	29	135	135	135	130	130	70	83	70	165	200	65	165	0	70	71.79	
United States	3	n.a.	n.a.	n.a.	0	n.a.	0	n.a.	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	25	0	27	0	n.a.	n.a.	0	n.a.	n.a.	
Average	28.0	25.6	37.9	40.4	8.5	4.6	1.8	5.3	4.9	23.0	23.0	31.7	60.4	69.4	63.9	59.4	10.8	37.7	28.5	77.4	28.8	0.4	87.8	31.62	

n.a. Ad valorem rate not applied.

Source: Trade Analysis and Information System (UNCTAD). Latest data: Albania (1997), Argentina (1998), Australia (1998), Brazil (1998), Belarus (1997), Canada (1998), Switzerland (1998), Chile (1998), China (1998), Czech Republic (1996), Estonia (1995), European Union (1998), Hungary (1997), India (1997), Iceland (1996), Japan (1998), Korea (1996), Kazakhstan (1996), Lithuania (1997), Latvia (1997), Mexico (1998), Norway (1998), New Zealand (1998), Poland (1996), Russia (1997), Turkey (1997), Ukraine (1997), United States (1998).

Annex Table I.5. Differences between bound and applied tariffs in selected ETEs

	Argentina			Brazil			Chile			India			Poland			Hungary			Czech Republic		
	Bound	Max	Difference	Bound	Max	Difference	Bound	Max	Difference	Bound	Max	Difference	Bound	Max	Difference	Bound	Max	Difference	Bound	Max	Difference
Wheat	38	13	25	55	13	42	31.5	10	21.5	100	0	100	25	20	5	32	41	-9	21.2	27	-5.8
Durum Wheat	38	13	25	55	13	42	25	10	15	100	0	100	0	20	-20	32	41	-9	3	4	-1
Maize	38	11	27	55	11	44	25	10	15	0	0	0	12.8	20	-7.2	32	41	-9	3	18	-15
Barley	38	13	25	55	13	42	25	10	15	100	0	100	0	20	-20	32.8	37	-4.2	21.2	23	-1.8
Oats	38	11	27	55	11	44	25	10	15	100	0	100	38	20	18	32	41	-9	21.2	23	-1.8
Rice	38	13	25	55	13	42	25	10	15	0	0	0	9.6	10	-0.4	63.4	10	53.4	0	0	0
Soybeans	38	11	27	35	11	24	31.5	10	21.5	100	40	60	2.5	4	-1.5	0	0	0	0	0	0
Rapeseed	38	11	27	35	11	24	31.5	10	21.5	100	40	60	27	15	12	0	0	0	60	64	-4
Sunflower	38	11	27	35	11	24	31.5	10	21.5	100	40	60	9	13	-4	0	0	0	0	43	-43
Cane Sugar	n.a.	23	n.a.	35	19	16	n.a.	10	n.a.	150	0	150	96 min	40	n.a.	68	74	-6	68	72	-4
Beet Sugar	n.a.	23	n.a.	35	19	16	n.a.	10	n.a.	150	0	150	0.43 ECU/ kg	40	n.a.	68	74	-6	59.5	63	-3.5
Refined Sugar	n.a.	23	n.a.	35	19	16	n.a.	10	n.a.	150	40	110	as above	40	n.a.	68	74	-6	59.5	63	-3.5
Milk	38	17	21	55	17	38	25	10	15	100	30	70	102	40	62	51.2	66	-14.8	29	31	-2
SMP	38	19	19	47	30	17	31.5	10	21.5	0	0	0	102	70	32	51.2	66	-14.8	37	41	-4
Butter	38	19	19	55	19	36	31.5	10	21.5	40	30	10	102	40	62	101.8	131	-29.2	68	73	n.a.
Cheese	38	19	19	55	30	25	31.5	10	21.5	40	30	10	160	35	125	60	86	-26	9	9	0
Live Animals	6.8	5	1.8	0	5	-5	25	10	15	100	40	60	13	20	-7	40	43	-3	97.5	103	-5.5
Beef Meat	38	13	25	55	13	42	25	10	15	100	10	90	19	45	-26	71.7	92	-20.3	34	37	-3
Pig meat	38	13	25	55	13	42	25	10	15	100	10	90	76	60	16	51.9	57	-5.1	38.5	41	-2.5
Poultry	29.6	13	16.6	35	13	22	25	10	15	85	10	75	76	60	16	39	50	-11	15	47	n.a.
Lamb	38	13	25	35	13	22	25	10	15	100	10	90	64	25	39	25.6	33	-7.4	104	124	-20
Wool	n.a.	11	n.a.	18	11	7	n.a.	10	n.a.	100	20	80	38	30	8	3	3	0	0	0	0
Eggs	n.a.	11	n.a.	35	11	24	n.a.	10	n.a.	150	30	120	64 min	25	n.a.	25.5	28	-2.5	17	18	-1
													105 ECU/ 1000 pces								

n.a. Not available.

Data derived from Annex Tables I.2 and I.4.

Bound rates refer to commitments at the end of Uruguay Round implementation.

Annex Table I.6. Number of tariff lines reported at the HS 6-digit level

Country	Year	Wheat	Durum	Maize	Barley	Oats	Rice	Soybeans	Rapeseed	Sunflower	Cane sugar	Beet sugar	Ref. Sugar	Milk	SMP	Butter	Cheese	Animals	Beef	Pigmeat	Poultry	Lamb	Wool	Eggs	TOTAL
EMERGING ECONOMIES																									
Argentina	1999	2	2	2	4	2	3	2	2	2	1	1	1	2	2	1	4	3	1	1	1	1	3	3	46
Brazil	1999	2	2	2	4	2	3	2	2	2	1	1	1	2	2	1	4	3	1	1	1	1	3	3	46
Chile	1999	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	24
China	1998	2	1	1	2	2	2	2	2	2	1	1	3	1	1	1	1	1	1	2	1	1	2	8	41
India	1999	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	24
South Africa	1999	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	25
TRANSITION ECONOMIES																									
Albania	1997	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	24
Belarus	1997	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
Estonia	1995	3	1	1	2	1	9	2	2	3	2	2	2	4	4	3	33	12	1	2	11	1	2	4	107
Kazakhstan	1996	3	1	1	2	1	9	2	2	3	2	2	2	4	4	3	33	12	1	2	11	1	2	4	107
Latvia	1997	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
Lithuania	1997	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
Romania	1999	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
Russian Federation	1997	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
Slovenia	1999	3	2	1	3	3	9	2	2	3	2	2	2	4	4	5	39	12	2	2	3	1	2	6	114
Ukraine	1997	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
OECD CEECS																									
Czech Republic	1999	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	39	12	1	2	3	1	2	4	107
Hungary	1997	3	2	1	2	2	9	2	2	3	2	2	2	4	4	5	51	12	1	2	3	1	2	10	127
Poland	1996	4	1	1	2	1	9	2	2	3	2	2	2	4	4	5	42	12	1	2	3	1	4	4	113
OTHER OECD COUNTRIES																									
Australia	1999	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	2	1	26
Canada	1999	2	2	1	4	1	1	1	1	1	6	2	1	2	2	2	24	1	2	1	3	1	2	5	68
European Union	1999	12	8	2	5	1	11	2	2	3	2	2	3	4	4	9	88	43	3	2	3	2	2	4	217
Iceland	1996	2	2	2	2	1	2	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	2	1	36
Japan	1999	6	2	7	4	2	2	1	1	1	3	2	2	3	10	6	2	3	1	4	1	1	2	3	69
Korea	1999	2	1	3	2	2	1	3	1	1	1	1	1	1	1	1	1	3	1	1	1	1	2	3	35
Mexico	1999	1	1	3	3	2	1	3	2	2	2	2	2	2	2	2	7	4	1	1	1	1	4	3	52
New Zealand	1999	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	25
Norway	1998	1	1	2	1	1	2	2	2	2	2	2	4	1	1	1	1	1	1	1	1	1	2	4	37
Switzerland	1999	7	7	6	9	7	3	8	16	16	1	1	2	2	1	4	10	4	4	3	2	2	2	2	119
Turkey	1997	3	1	1	2	1	9	2	2	3	2	2	2	4	4	5	44	12	1	2	3	1	5	8	119
United States	1999	2	1	2	2	1	1	1	1	1	4	3	3	2	3	3	50	2	3	1	1	1	12	1	101

Source: Trade Analysis and Information System (UNCTAD).

Annex Table I.7. Agricultural quota-based tariff lines

	No. of lines with tariff quotas		Mean tariffs (1996) ³	
	IQTRs	OQTRs ²	IQTR	OQTR
Argentina	0	0	–	–
Brazil	1	1	15	15
India	0	0	–	–
Romania	51	47	105	270
Czech Republic	63	63	27	49
Hungary	308	375	21	39
Poland	512	486	25	56
Australia	8	8	7	27
Canada	83	88	8	203
EU	77	181	8	45
Iceland	247	335	51	223
Japan	58	58	20	274
Korea	118	64	21	366
Mexico	50	221	49	41
New Zealand	4	4	0	7
Norway	272	421	216	239
Switzerland	157	382	36	81
Turkey	0	0	–	–
United States	173	58	10	29

2. This refers to both OQTRs and SSGs where applicable.

3. Means computed on the basis of *ad valorem* rates only.

Source: OECD (1999a).

Annex Table I.8. Simple mean quota fill rates by major product groups, 1996

	Australia	Canada	Czech Republic	European Union	Hungary	Iceland	Japan	Korea	Mexico	New-Zealand	Norway	Poland	Switzerland	United States
Cereals			53	46	33	60	92	92	100			42	94	18
Oilseeds		1	39		40	73	55	80				2		100
Sugar			100		46	100		50						8
Dairy products	95	94	43	73	36	67	56	70	100		1	0	59	64
Meat		99	53	91	33	24		99	100		47	60	93	59
Eggs		95			0	100		0			13	57	81	
Beverages			41		47	100		98				50	96	
Fruit and vegetables			52	65	66	82	96	76	100	54	44	39	95	
Tobacco	100				50							12		31
Agricultural fibres							100	67						
Processed products					44	76		59	100			77		
Other products			100			62	73	41		11		56	100	
Total (1996)	98	89	50	64	51	67	69	76	100	40	42	48	91	56
Total (1997)	90	82	47	68	45	70	70	76		33	63	37	84	55
Total (1998)	91	79	45	66	43		67			27			90	70

Source: WTO Secretariat for 1996 figures; OECD for 1997 and 1998 averages.

Annex Table I.9. **Export subsidies and reduction commitments by country**

	Value of base period outlays	Share of agric. exports in base period	Final year outlays	Change	
	US dollar million	%	US dollar million	%	
EU (12)	13 274	36.5	8 496	-36	Bovine meat (19%), wheat (17%), coarse grains (13%), butter (13%), other milk products (10%)
Austria	1 235	107.4	790	-36	Live animals (45%), wheat (14%), bovine meat (13%), cheese (12%)
United States	929	2.5	594	-36	Wheat (61%), skim milk powder (14%)
Poland	774	57.1	493	-36	Meat preparations (39%), fruit and vegetables (21%)
Mexico	748	29.1	553	-26	Sugar (76%), cereal preparations (21%)
Finland	708	98.3	453	-36	Butter (25%), coarse grains (22%), other milk products (13%)
Sweden	572	54.8	366	-36	Pigmeat (21%), wheat (21%), coarse grains (17%)
Canada	567	7.2	363	-36	Wheat (47%), coarse grains (18%)
Switzerland	487	30.4	312	-36	Other dairy products (65%)
South Africa	319	21	204	-36	Fruit and vegetables (24%), cereal preparations (14%), wheat (13%), sugar (10%)
Hungary	312	14.9	200	-36	Poultry meat (30%), pigmeat (26%), wheat (11%), fruit and vegetables (19%)
Czech Republic	164	35.8	105	-36	Other milk products (38%), fruit and vegetables (10%)
Turkey	157	5.6	98	-37	Fruit and vegetables (36%), wheat (23%)
New Zealand	133	3	0	-100	Not available
Norway	112	31.1	72	-36	Cheese (54%), pigmeat (19%), butter (12%)
Australia	107	1.1	69	-36	Other milk products (32%), skim milk powder (27%), cheese (25%), butter (16%)
Brazil	96	1.1	73	-24	Sugar (65%), fruit and vegetables (30%)
Slovak Republic	76	35.8	49	-36	Other dairy products (19%), cereal preparations (13%), bovine meat (13%)
Romania	59	9.5	45	-24	Cereal preparations (22%), sugar (19%), bovine meat (18%), fruit and vegetables (11%)
Iceland	25	75.8	16	-36	Sheepmeat (78%), other dairy products (22%)

1. Commitments converted to US dollars using 1990-91 average exchange rates.

2. As the value of agricultural exports from the Czech Republic and the Slovak Republic are not available individually for the base period, the respective shares have been derived by dividing their aggregate export subsidies by their aggregate agricultural exports.

Source: GATT (1994) and FAO AGROSTAT. Taken from FAO (1997).

Annex Table I.10. **AMS as a percentage of commitment level**
 (Average from 1995 to latest available year)

Per cent	Countries
0 to 19	Canada (1996), Czech Republic (1998), Hungary (1995), Mexico (1995), New Zealand (1998), Poland (1998)
20 to 39	Australia (1997), Brazil (1997) Slovenia (1998), United States (1997)
40 to 59	EU (1996), Japan (1996)
60 to 79	Norway (1997), Slovak Republic (1998), Switzerland (1997)
80 to 100	Argentina (1997), Iceland (1998), Korea (1997), South Africa (1997)

Source: Latest available year in parentheses.

Brazil (1997) and India (1996) each reported an AMS below the "de minimis" level.

Source: OECD, WTO.

 Annex Table I.11. **Shares of support for notifying countries**

	AMS %	Green Box %	Blue Box %	S&D %	De Minimis %
Emerging					
Argentina (1996-97)	26	74	0	0	0
Brazil (1997)	6	81	0	7	7
South Africa (1997)	44	50	0	0	6
Transition					
Czech Republic (1995-98)	21	79	0	0	0
Hungary (1995)	0	39	0	0	61
Poland (1995-98)	11	89	0	0	0
Slovak Republic (1998)	95	5	1	0	0
Slovenia (1998)	39	61	0	0	0
OECD non-transition					
Australia (1995-97)	12	88	0	0	0
Canada (1995-96)	18	52	0	0	30
EU (1995-97)	54	22	23	0	1
Iceland (1995-98)	82	16	2	0	0
Japan (1995-96)	53	46	0	0	1
Korea (1995-97)	26	67	0	0	1
Mexico (1995)	17	60	0	24	0
New Zealand (1995-98)	0	100	0	0	0
Norway (1995-97)	48	18	34	0	0
Switzerland (1995-97)	11	89	0	0	0
United States (1995-97)	10	84	4	0	2

Source: OECD, WTO.

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Part II

**WATCH ON AGRICULTURAL SUPPORT
IN NON-MEMBER TRANSITION ECONOMIES IN 1999**

WATCH ON AGRICULTURAL SUPPORT IN NON-MEMBER TRANSITION ECONOMIES IN 1999

Part II focuses on the evolution of agricultural support in Estonia, Latvia, Lithuania, Slovakia, Russia and Romania. These are six non-member transition economies for which the OECD has carried out agricultural policy reviews, including the calculation of estimates of support to agriculture. These estimates are based on the OECD methodology and include the Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE), Total Support Estimate (TSE) and producer Nominal Assistance Coefficient (NAC) (see Box II.1). This part of the report begins with a brief outline of the macroeconomic and agricultural situation in the six countries; then it presents the main agricultural policy developments in 1999 with special focus on those having particular impact on the evolution of support; and finally, it introduces the main support estimates for 1999.

For all monitored countries, producer support declined in monetary terms in 1999. Producers in non-member transition economies felt the effect of declining world prices, as their governments' scope for reducing the impact on domestic markets was limited by macroeconomic constraints and trade policy commitments. In Russia, Romania and Slovakia, decline in measured support also reflected substantial currency depreciations – which inflated external prices, when expressed in national currency. The falling monetary value of support led to a reduction in the percentage PSEs in most countries, except for Lithuania and Latvia. The growth in percentage PSEs in these two countries was due to a strong decline in agricultural production, so that support was spread over a smaller volume of output.

What was the situation in world agricultural markets?

The 1998 depression of world agricultural markets was carried into 1999

World commodity markets experienced a marked depression in 1998. Robust prices in 1997 and high support provided by some of the major exporting countries, resulted in ample supplies of many agricultural products. At the same time, the economic and financial crises in Asia, Russia and Latin America put a brake on demand and led to a serious price slump in 1998. For certain commodities, international prices fell to new historical lows. Despite some improvements in demand, world markets continued to witness falling prices in 1999. Cereal and oilseed prices were dampened also due to abundant crops in some major exporting countries. Beef, poultrymeat and particularly pigmeat prices registered strong declines as well. However, in contrast to the previous year, milk product prices generally improved in 1999.

Box II.1. Measurement and definitions of the OECD indicators of support

In 1998, the OECD method of measuring support to agriculture was revised. There are now four indicators of support: the Producer Support Estimate (PSE), the Consumer Support Estimate (CSE), the General Services Support Estimate (GSSE) and the Total Support Estimate (TSE). In addition, producer and consumer Nominal Assistance Coefficients (NAC) are calculated from the PSE and CSE.

Producer Support Estimate (PSE): an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm-gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on farm production or income. The PSE measures support to farmers, from consumers through higher commodity prices and from taxpayers through budgetary transfers. The overall monetary value of this support is, of course, dependent on the size and structure of a country's agricultural sector, as well as on the monetary unit used. Support (PSE) expressed in relation to the number of farmers or area of farmland is influenced by differences among countries in factor endowment and the number, type, and size of farm holdings. By contrast, support expressed as a percentage of gross farm receipts (%PSE) shows the amount of support to farmers, irrespective of the sectoral structure of a given country. For this reason, the %PSE is the most appropriate indicator for comparisons of support across countries, commodities, and time.

Consumer Support Estimate (CSE): an indicator of the annual monetary value of gross transfers to (from) consumers of agricultural commodities, measured at the farm-gate level, arising from policy instruments that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. If negative, the CSE measures the implicit burden placed on consumers by agricultural policies, from higher prices and consumer charges or subsidies that lower prices to consumers. The %CSE measures the implicit tax (or subsidy, if CSE is positive) on consumers due to agricultural policy as a share of total food expenditure.

General Services Support Estimate (GSSE): an indicator of the annual monetary value of gross transfers to general services provided to agriculture collectively, arising from policy measures which support agriculture regardless of their nature, objectives and impacts on farm production, income, or consumption of farm products. Examples of GSSE-measures include public expenditure on research, marketing and promotion, and infrastructure used by agriculture.

Total Support Estimate (TSE): an indicator of the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of the associated budgetary receipts, regardless of their objectives and impacts on farm production and income, or consumption of farm products. When expressed as a percentage of GDP (the %TSE), it gives an indication of the burden this overall support represents for the economy.

Producer Nominal Assistance Coefficient (NAC): is a ratio of PSE expressed in monetary terms to the value of total gross farm receipts valued at world market prices, and without budgetary support.

As is shown in the above definitions, the support estimates reflect the cost of support measuring the aggregate transfers from consumers and taxpayers to producers (or the agricultural sector). The extent to which support would increase farmers' incomes depends on the transfer efficiency of various support measures (the share of transfers retained by farmers). The bigger the leakages of the subsidies in the system, the less producers would retain of the support.

Variations in support are the result of a wide range of factors, including the developments in world markets (through external reference prices); macroeconomic situation in the country concerned (through exchange rate levels and the overall budgetary situation); evolution of the domestic price levels (reflecting, in part, the degree of price transmission from international to domestic markets); changes in budgetary support; also weather factors (affecting the quantities produced), *etc.*

As in OECD countries, support estimates for transition economies should be considered in the overall macroeconomic and institutional context. Recognising the need for careful interpretation of support estimates, it is important at the same time to underline that they represent a useful indicator of the need for reform and an instrument for monitoring the transition countries' progress over time towards more market-oriented economies.

What was the overall macroeconomic context?

Although improvement is likely in 2000, economic slow-down and recession reigned in most countries in 1999

Following the 1997 peak, economic growth slowed considerably in the Baltic region. The 1998 Russian crisis hit the region's exports and prompted a decline in industrial output. These impacts continued in 1999. As a result, the 1999 GDP fell by 1.4% in Estonia, 4.1% in Lithuania and increased only slightly in Latvia (by 0.1%). In Slovakia, after a period of relatively stable GDP growth, stagnating domestic consumption led to a considerable slow-down in 1998 and 1999. Recession continued in Romania for the third consecutive year since the government put in place the "shock therapy" package in 1997. Against earlier expectations, Russian GDP recovered in 1999 (by 3.2%), largely on the basis of marked industrial growth.

All six countries felt fiscal pressures, some growing inflation, and several, rises in unemployment rates

All three Baltic States experienced increased budgetary pressures in 1999, while austerity measures implemented in Romania, Slovakia and Russia, helped to reduce budgetary deficits. According to preliminary estimates, the current account position improved in all countries in 1999. This was due to different factors for each country; however restrained imports were a common feature. The registered unemployment rate grew in most countries, including Estonia, Lithuania, Romania and the Slovak Republic. Inflation rates (CPI) slowed in the Baltic region (except in Latvia), reflecting the impact of the dampened demand. Prudent macroeconomic policies helped to bring price growth under control in Russia. On the other hand, inflation rates grew in Romania and Slovakia, partly as a result of currency depreciations. In Slovakia inflation was further increased by the deregulation of controlled prices (fuel, electricity, gas, housing) and increases in VAT and excise tax for a number of products.

While the Baltic States maintained fixed exchange rate regimes, the Slovak Republic, Romania and Russia experienced currency depreciations

The Baltic States maintained fixed exchange rate regimes in 1999 with the Estonian Kroon pegged to the Euro, the Latvian Lat to the SDR and the Lithuanian Lita to the US dollar. The Slovak Koruna was floated in September 1998 and declined up to mid-1999. Although it strengthened towards the end of the year, the annual depreciation in the nominal exchange rate was considerable. A strong fall in the exchange rate also took place in Romania. The Russian Rouble plunged heavily immediately after the August 1998 crisis. Although the Russian government managed to limit the fall in the exchange rate, the 1999 Rouble was considerably depreciated compared to the previous year.

1999 was an unfavourable agricultural year in most of the countries...

How have domestic agricultural sectors performed?

Agricultural output contracted in most countries reviewed. Decline rates reached about 4% in Slovakia, 9% in Estonia, 12% in Lithuania, and 19% in Latvia. This was mainly in response to depressed domestic and foreign demand. The economic slow-down in these countries was driving down domestic consumption. The Baltic

States were further affected by the very slow recovery in the Russian market. Difficult market conditions were compounded by adverse weather in Lithuania and in Slovakia (where the lowest grain harvest since 1989 was registered). In contrast to other countries, Russian agricultural output grew by 2.4%, albeit from a low 1998 base, when Russia recorded an exceptionally poor grain harvest.¹

... with domestic prices continuing to decline...

Domestic producer prices in Estonia, Latvia and Slovakia fell for almost all PSE products. Crop prices (grains, oilseeds and sugar beet) declined in these three countries for the second and in some cases for the third consecutive year. Beef and pigmeat prices contracted in all three Baltic States and Slovakia in 1999 (while in the previous year they grew in some of these countries). Changes in poultry and egg prices were mixed. Milk prices continued to slide in all countries reviewed. It is important to note, that at the same time the external reference price for milk, in contrast to 1998, moved upwards in 1999. This divergence in trends for domestic and external milk reference prices in 1999 had important implications for the evolution of agricultural support in the Baltic States. Domestic prices in Russia and Romania also exhibited a considerable drop in 1999, particularly for livestock products.

... the cost-price squeeze tightening and farm incomes declining

Growth in oil prices contributed to the tightening of the cost-price squeeze. Robust input prices combined with weak product prices caused a sharp decline in farm incomes and cash flows in the Baltic States, Romania and Slovakia. In contrast, there were some positive developments in Russia: the import substitution effect contributed to a rise in demand for domestically produced agricultural products, which in turn helped to improve agricultural terms of trade and reduce the share of loss-making large farms.

What were the main agricultural policy developments?

Most policy developments in 1999 were the reaction to a difficult market situation

Developments in domestic support and particularly in trade policies in the Baltic States, Slovakia and Romania largely reflected the governments' attempts to counter adverse impacts from domestic and foreign markets. Increased border protection for some products and export subsidies, combined in some countries with *ad hoc* producer aids, set the policy scene in 1999. Also, prospective EU accession shaped agricultural policies in the candidate countries. The shift towards more EU compatible policy frameworks was pronounced in the Baltic States, Romania, and Slovakia. In Russia, following the August 1998 financial crisis, no major developments in agricultural policies occurred.

i) Domestic support

In addition to regular price supports...

Lithuania continued to set minimum guaranteed prices for wheat, rapeseed, flax, buckwheat and milk and maintained the supplementary payments for these products. Since 1998, **Latvia**

has implemented price interventions for wheat and rye; apart from this, per tonne subsidies were in place for potatoes and malt barley. **Slovakia** implemented price interventions for wheat, maize, and pigmeat. In **Russia**, output subsidies were paid for all livestock products. **Romania** had stopped price regulations since radical economic liberalisation in 1997, while **Estonia** has maintained a free price regime throughout the whole transition period. However, according to a draft law on Agricultural Market Regulation, prepared in 1999 as part of the process for the EU accession, market price interventions are foreseen within Estonia's prospective agricultural policy framework.

... some countries resorted to extra interventions

Continued market pressures prompted additional **price supports**. **Slovakia** made extra-intervention purchases of pigmeat at the end of 1998, and the beginning of 1999. **Latvia** implemented temporary price support payments for pork during the first half of 1999; later pigmeat producers were supported through a higher import tariff (see next section on trade policies). **Lithuania** introduced extra price supports for grains and sugarbeets in 1999.

Acreage and headage payments increased...

The importance of **per hectare** and **per head payments** increased in some CEECs, a trend indicating gradual transformation of their policies in line with the Common Agricultural Policy. In 1999, the related budgetary allocations grew in **Slovakia** and **Estonia**. **Estonia** and **Latvia** introduced new types of payments in this category. In **Slovakia** some previous input subsidies were diverted into per hectare payments; and previous milk quality premia were transformed into headage payments as well. This type of support is still marginal in **Romania**, consisting of relatively small disbursements for beef cattle, and is practically non-existent in **Russia**.

... with no major changes in input support...

Input subsidies in all monitored countries were predominantly allocated for capital grants and variable inputs (fertilisers, fuel and water), as well as for interest rate compensations. In general, with very few changes, these policies were carried over from 1998. Input subsidies are particularly important in **Romania**, representing about 65% of total budgetary outlays for the agro-food sector in 1999. The bulk of input subsidies in Romania is allocated to producers via the voucher programme.

... and a wide range of credit aids was maintained

All countries continued previous **credit support** programmes, including interest rate subsidies and credit guarantees. Special funds were allocated for state credit guarantees in the Baltic States, including the Rural Life Credit Guarantee Fund in **Estonia**, the Credit Guarantee Fund in **Latvia**, and the Agricultural Loan Guarantee Fund in **Lithuania**. In 1998, **Slovakia** launched a new credit mechanism based on a system of public warehouse receipts. In 1999 this scheme was complemented by subsidies on interest rates payable on such loans. The governments in **Romania** and **Russia**, provided credit funds to private banks engaged in agricultural lending. Preferential state credit schemes to the agro-food sector were radically cut in Romania in 1997,

which was an important component of the general macroeconomic stabilisation programme, with the Revolving Fund for short-term preferential agricultural credit replacing previous large-scale disbursements. Due to low repayment rates, the Revolving Fund was somewhat reduced in 1999. On the other hand, the Romanian government renewed preferential medium and long-term loans, for the first time since 1996. **Russia** has maintained various programmes of large-scale preferential credit to agriculture since the start of economic reform. The repayment rates for such loans have been extremely low, creating the problem of chronic and rapidly accumulating farm debt. Since the start of reform, large farms have been able to benefit from several rounds of debt rescheduling, the last time in 1996. At the end of 1999, it was decided to grant another concession. Soft loans worth USD 120 million given to large-scale farms between 1991 and 1996 are scheduled to be written off.

Support to general services is expected to rise in most countries

In 1999, allocations to **general services** in Estonia, Latvia and Romania, comprised around 40% of that part of budgetary support which was channelled directly to producers (60% on average for OECD countries); this share was substantially lower in Slovakia (19%) and substantially higher in Lithuania (90%), as well as in Russia (73%).² Agricultural research and extension, education, and land reclamation in all countries were the major activities supported from state budgets. Starting from 2000, the three **Baltic States, Slovakia** and **Romania** are to receive considerable pre-accession funds under the EU Special Accession Programme for Agriculture and Rural Development (SAPARD). In this context, some shifts from producer support to provision of services for the agricultural sector can be expected. In particular, the SAPARD framework makes it possible to increase outlays on extension, infrastructure, marketing and promotion. Currently, however, the start of the programme in most countries is complicated by deficiencies in institutional and human resource capacities.

ii) Trade policies

Multilateral and regional agreements provide an impetus towards freer trade in the long-run...

Romania, Slovakia, Latvia and **Estonia** are WTO members (the latter two joined the Organisation in October 1998 and April 1999 respectively), while **Lithuania** and **Russia** are in the process of accession.³ The three **Baltic States, Romania** and **Slovakia** have Association Agreements with the European Union. Currently, all acceding countries and the European Union are in the process of negotiations on further liberalisation of trade in agro-food products. The BAFTA and CEFTA agreements set an additional framework for trade policies in these countries. As a member of the Commonwealth of Independent States (CIS), **Russia** has Free Trade Agreements with all other CIS countries and is a member of the Customs Union which includes Belarus, Kazakhstan, Kyrgyzstan and Tajikistan. Russia has a Partnership and Co-operation Agreement with the European Union, under which the

parties grant each other MFN treatment. The Agreement also foresees the possibility of creating a Free Trade Area between the parties.

... but in the short-run, protectionist tendencies in some countries prevail...

Being generally committed by multilateral and regional agreements to trade liberalisation, many countries used available room for *manœuvre* to protect domestic producers from current market pressures. As in 1998, they once again resorted to various types of temporary increases in border protection. In June 1999, **Latvia** took recourse to a safeguard clause and on top of the previously applied 30% tariff on imported pigmeat introduced an additional 70% duty. This was a temporary measure applied for a period of two hundred days. However, in December 1999 Latvia introduced a minimum import price for pigmeat (of about US\$1 750 per tonne) effective for two years. This new measure was soon abolished (as from 1 June 2000) largely due to protests from Lithuania and Estonia. At the beginning of 1999, **Lithuania** increased reference prices for the calculation of import duties on a range of food imports from all countries,⁴ including meats, dairy products and eggs. A year earlier, Lithuania increased tariffs on agro-food imports from the European Union. Only **Estonia** maintained a completely open agro-food trade regime in 1999. But a major change occurred at the beginning of 2000, when, for the first time since the transition, Estonia introduced tariffs on agro-food imports. This is seen as part of the harmonisation process for Estonia's accession to the European Union. Tariffs are imposed on a range of agro-food products, first of all for those competing with domestic production. Most of the applied tariffs are within the range of 20-50%, with the highest rates set for cereals and meats (but 10% for frozen pork and poultry). Tariffs, however, are not applied to imports originating from countries with which Estonia has Free Trade Agreements, including the European Union, Latvia, Lithuania and Ukraine. In 1999, as safeguard measures, **Slovakia** imposed a temporary quota on imports of Hungarian wheat, as well as higher duties on imported pork and white and raw sugar from Poland. The situation in **Romania** differed somewhat, as two successive cuts in tariffs on agro-food products were implemented in 1999.⁵ However, Romania maintained minimum import prices for poultry and pork, as well as a surcharge on all imports, both measures introduced in 1998 (the latter was imposed for balance of payments reasons and is to be phased out by January 2001). No major changes occurred in **Russia's** import regime in 1999. Import pressures were reduced considerably with the sharp fall of the Rouble in 1998.

... and subsidies to sensitive exports continue

Export subsidies were continued in 1999. Thus, **Lithuania** supported exports of dairy products,⁶ and to a lesser degree, of meat products. **Romania** enlarged the scope of subsidised commodities from maize only in 1998 also to wheat, pork and poultry. **Slovakia** maintained export subsidies for milk products (accounting for over two thirds of the total amount of agricultural export subsidies paid in 1999), and continued traditional support to malt exports.

How did support levels change in 1999?

In contrast to OECD countries, producer support decreased in 1999...

The monetary value of the PSEs fell in all non-member transition economies for which support is monitored. This led to a reduction in the relative support levels in most countries in 1999, with the percentage PSEs decreasing in Estonia, Slovakia, Romania, and Russia. However, in Latvia and Lithuania the percentage PSEs grew, but this was due to a strong fall in the total value of agricultural output, against which the relative level of support is measured (Table II.1 and Figure II.1). This generally contrasts with the situation in OECD member countries, where producer support continued to rise for the second consecutive year, with the average OECD percentage PSE increasing from 36% in 1998 to 40% in 1999.

... leading to contraction of total support to agriculture

Total support to agriculture (TSE), comprising support to agricultural producers, expenditure for general services (GSSE) and budgetary subsidies to consumers, contracted in most countries, both in monetary terms and as a percentage of GDP (percentage TSE grew only in Lithuania). The fall in TSE reflected largely the reduction in producer support, but for most countries, also decreased GSSE. The impact of consumer subsidies was not important, as these subsidies were practically non-existent in 1999 in the analysed countries. However, the percentage TSE in all monitored non-member countries (except for Russia) remained at levels above the OECD average of 1.4%, and ranged from 5.3% in Romania to 1.3% in Estonia in 1999

Figure II.1. Percentage PSEs by country and OECD average, 1986-1999

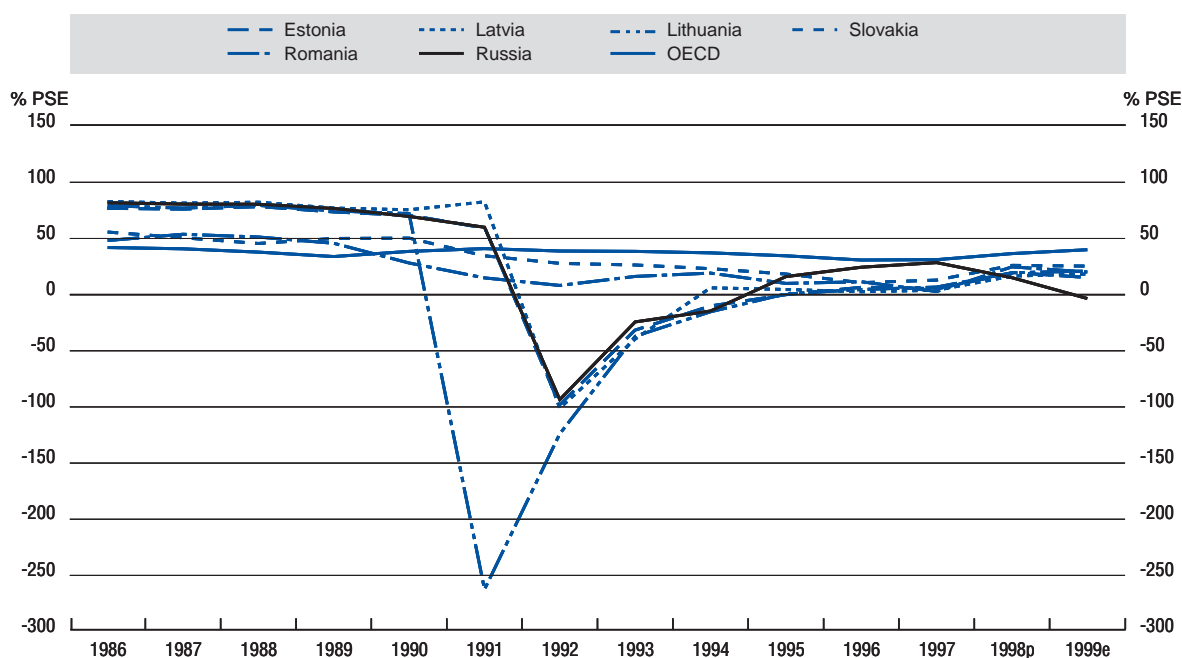


Table II.1. Estimates of support to agriculture by country, 1986-1999

	Units	1986-90	1991	1992	1993	1994	1995	1996	1997	1998p	1999e
Estonia											
Total PSE	mn LC	1 697	2 977	-3 472	-1 504	-552	-19	504	350	1 380	782
	mn US\$	2 721	1 707	-274	-114	-43	-2	42	25	98	53
GSSE	mn US\$	25	34	6	10	10	18	13	11	14	12
Total Support Estimate	mn US\$	3 829	1 790	-265	-104	-32	16	55	36	112	66
	% GDP	n.c.	n.c.	-25.4	-6.2	-1.4	0.4	1.3	0.8	2.2	1.3
Percentage PSE	%	75	59	-97	-32	-10	0	7	5	19	15
Producer NAC		4.00	2.42	0.51	0.76	0.91	1.00	1.07	1.05	1.24	1.17
Latvia											
Total PSE	mn LC	3 095	7 706	-66 066	-150	22	21	12	18	62	56
	mn US\$	4 972	13 286	-486	-223	40	40	21	30	106	95
GSSE	mn US\$	261	1 666	7	6	10	16	11	10	14	8
Total Support Estimate	mn US\$	6 676	15 611	-479	-217	49	56	32	40	120	103
	% GDP	n.c.	n.c.	n.c.	-10.0	1.4	1.3	0.6	0.7	1.9	1.6
Percentage PSE	%	80	83	-101	-40	6	5	3	4	17	18
Producer NAC		4.96	5.74	0.50	0.72	1.07	1.05	1.03	1.04	1.20	1.23
Lithuania											
Total PSE	mn LC	4 026	-31 937	-120 631	-1 456	-609	2	282	512	1 451	1 375
	mn US\$	6 484	-918	-733	-335	-153	1	71	128	363	344
GSSE	mn US\$	479	10	13	18	40	43	52	60	54	55
Total Support Estimate	mn US\$	8 840	-907	-720	-317	-113	43	122	188	416	398
	% GDP	n.c.	n.c.	-37.4	-11.9	-2.7	0.7	1.6	2.0	4.0	5.1
Percentage PSE	%	77	-262	-124	-37	-15	1	5	7	20	21
Producer NAC		4.26	0.28	0.45	0.73	0.87	1.00	1.04	1.07	1.24	1.27
Slovakia											
Total PSE	mn LC	31 698	20 825	14 895	13 715	13 517	11 366	7 173	9 328	17 723	16 404
	mn US\$	1 887	959	585	477	422	383	234	277	503	388
GSSE	mn US\$	133	121	79	54	62	67	59	55	56	40
Total Support Estimate	mn US\$	2 348	1 081	664	531	484	450	293	332	559	428
	% GDP	n.c.	n.c.	n.c.	4.1	3.5	2.6	1.6	1.7	2.8	2.3
Percentage PSE	%	50	35	28	26	23	18	11	13	26	25
Producer NAC		2.02	1.53	1.39	1.36	1.30	1.22	1.12	1.15	1.35	1.34
Romania											
Total PSE	bn Lei	86	114	184	1 234	3 427	2 486	4 360	2 343	25 653	25 745
Total PSE	mn US\$	5 419	1 490	598	1 624	2 070	1 223	1 414	327	2 890	1 679
GSSE	mn US\$	289	212	105	148	157	178	88	103	137	88
Total Support Estimate	mn US\$	5 709	1 853	1 218	2 163	2 412	1 775	1 892	502	3 040	1 781
	% GDP	n.c.	6.4	6.2	8.2	8.0	5.0	5.4	1.4	8.0	5.3
Percentage PSE	%	45	15	8	16	19	10	12	3	25	20
Producer NAC		1.83	1.18	1.09	1.19	1.24	1.11	1.13	1.03	1.33	1.26
Russia¹											
Total PSE	bn Rb	108	153	-2 785	-5 220	-8 057	28 204	59 212	73 018	40	-16
Total PSE	mn US\$	171 527	87 759	-14 467	-5 601	-3 656	6 193	11 556	12 622	4 114	-661
GSSE	mn US\$	7 606	4 768	362	591	1 002	787	758	2 973	293	444
Total Support Estimate	mn US\$	242 859	124 547	-13 721	-4 594	-2 455	6 981	12 314	15 595	4 407	-218
	% GDP	n.c.	n.c.	-13.9	-2.5	-0.9	2.0	2.9	3.5	1.6	-0.1
Percentage PSE	%	78	60	-93	-24	-15	16	24	29	15	-3
Producer NAC		4.52	2.50	0.52	0.80	0.87	1.19	1.32	1.40	1.18	0.97

p Provisional.

e Estimate.

n.c. Not calculated.

LC Local currency.

1. Starting from 1998, all rouble values are given in denominated roubles (denominated by a factor of 1 000).

Source: OECD, PSE/CSE database.

Table II.1. Estimates of support to agriculture by country, 1986-1999 (cont.)

	Units	1986-90	1991	1992	1993	1994	1995	1996	1997	1998	1999p
Czech Republic											
Total PSE	mn LC	67 786	68 570	37 471	34 939	23 141	14 860	17 368	11 719	28 359	31 793
	mn US\$	4 864	2 326	1 326	1 198	804	560	640	370	879	919
GSSE	mn US\$	69	36	35	35	116	119	124	110	106	98
Total Support Estimate	mn US\$	5 848	2 362	1 361	1 234	920	679	764	480	984	1 017
	% GDP	3.6	3.1	2.8	2.9	2.7	2.6	2.4	2.4	2.4	2.4
Percentage PSE	%	57	52	31	28	20	12	13	9	21	25
Producer NAC		2.31	2.07	1.45	1.38	1.24	1.14	1.15	1.10	1.26	1.33
Hungary											
Total PSE	mn LC	118 226	53 445	67 499	94 707	138 565	101 185	95 672	73 498	148 376	212 804
	mn US\$	2 601	715	855	1 030	1 318	805	627	394	692	898
GSSE	mn US\$	81	73	84	87	90	95	122	92	171	202
Total Support Estimate	mn US\$	2 895	835	938	1 118	1 408	900	749	486	864	1 100
	% GDP	6.8	2.5	2.5	2.9	3.4	2.0	1.7	1.1	1.8	2.2
Percentage PSE	%	32	11	16	20	24	14	9	7	13	20
Producer NAC		1.48	1.13	1.19	1.26	1.32	1.16	1.10	1.08	1.15	1.24
Poland											
Total PSE	mn LC	-63	126	3 309	3 774	5 581	7 919	11 870	11 492	13 131	13 067
	mn US\$	n.c.	119	2 428	2 081	2 455	3 266	4 404	3 507	3 760	3 296
GSSE	mn US\$	n.c.	488	383	330	428	458	533	507	482	340
Total Support Estimate	mn US\$	n.c.	610	2 813	2 413	2 886	3 725	4 939	4 016	4 245	3 639
	% GDP	3.3	0.8	3.3	2.8	2.9	2.9	3.5	2.8	2.7	2.4
Percentage PSE	%	-4	1	18	15	18	18	23	22	23	25
Producer NAC		0.97	1.01	1.23	1.18	1.23	1.21	1.29	1.28	1.30	1.33
EU-15											
Total PSE	mn ECU	86 162	115 853	97 976	100 610	99 911	100 238	93 248	99 056	109 929	107 416
	mn US\$	98 298	143 195	126 799	117 847	118 508	131 038	118 367	112 260	122 946	114 450
GSSE	mn US\$	10 757	17 392	17 947	14 616	8 043	7 677	9 230	8 208	8 282	7 495
Total Support Estimate	mn US\$	113 831	166 461	151 308	138 897	131 927	144 125	131 818	124 965	135 570	125 873
	% GDP	2.4	2.5	2.1	2.1	1.9	1.7	1.5	1.5	1.6	1.5
Percentage PSE	%	43	51	44	44	42	41	35	38	45	49
Producer NAC		1.76	2.02	1.79	1.79	1.71	1.68	1.55	1.61	1.82	1.95
OECD-24¹											
Total PSE	mn US\$	221 461	271 562	259 306	251 888	257 942	253 952	230 634	216 003	248 338	252 249
GSSE	mn US\$	40 184	59 393	61 675	62 922	55 828	62 479	54 343	49 032	50 336	47 979
Total Support Estimate	mn US\$	279 643	354 276	347 009	342 016	340 180	343 680	311 423	291 268	323 962	325 997
	% GDP	2.0	1.9	1.8	1.8	1.6	1.5	1.3	1.3	1.4	1.3
Percentage PSE	%	38	41	38	38	36	34	30	31	37	40
Producer NAC		1.62	1.69	1.62	1.61	1.57	1.52	1.43	1.44	1.59	1.66
OECD											
Total PSE	mn US\$	249 643	304 129	294 777	287 270	294 351	286 079	263 274	246 167	270 869	282 780
GSSE	mn US\$	44 179	64 798	67 187	68 712	61 605	68 290	60 518	54 773	54 585	52 267
Total Support Estimate	mn US\$	315 326	393 711	389 877	385 110	384 036	382 803	351 802	328 762	352 058	361 493
	% GDP	2.2	2.1	1.9	1.9	1.8	1.6	1.4	1.4	1.5	1.4
Percentage PSE	%	39	41	39	38	37	35	31	31	36	40
Producer NAC		1.63	1.69	1.64	1.63	1.59	1.53	1.44	1.45	1.57	1.66

p Provisional.

n.c. Not calculated.

LC Local currency.

1. OECD-24 does not include most recent Member countries: Czech Republic, Hungary, Korea, Mexico, and Poland.

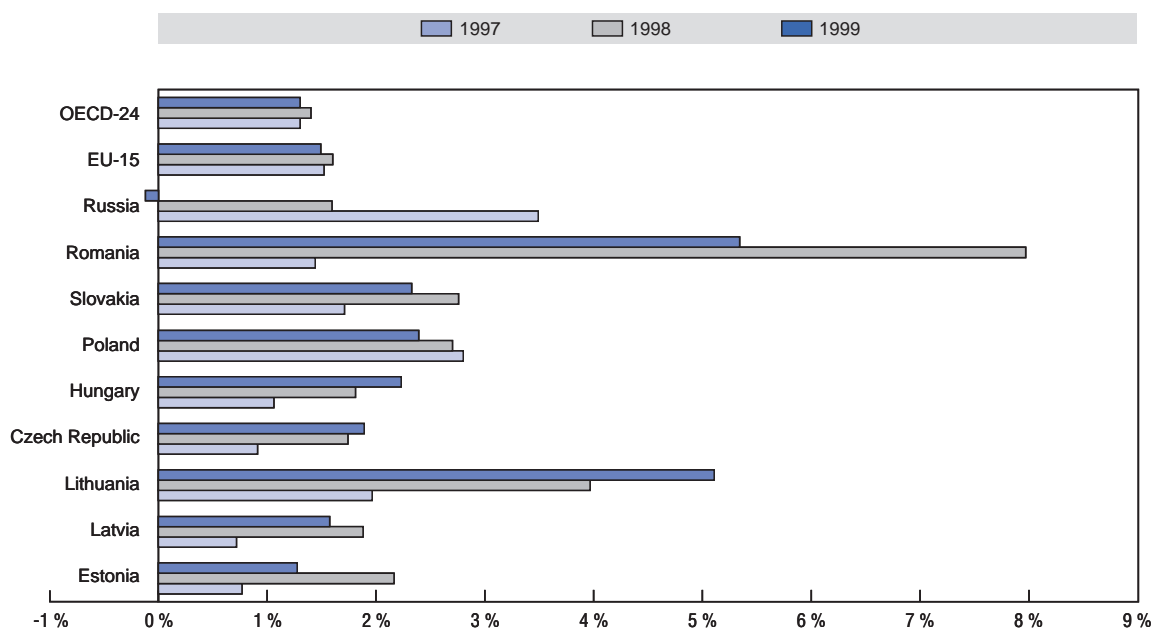
Source: OECD, PSE/CSE database.

(Figure II.2). This largely reflects the lower level of general economic development in transition countries, as measured by GDP, and a relatively high share of agriculture in GDP.

Policies increased producers' gross receipts, but less than in OECD countries

As indicated by the producer Nominal Assistance Coefficient (NAC), farmers' gross receipts (including support) were higher than they would have been without any support. This addition to farmer receipts accounted for less than 20% in Estonia, for about one quarter in Latvia, Lithuania and Romania, and one third in Slovakia.

Figure II.2. **Total Support Estimate by country, EU and OECD average, in per cent of GDP**



Source: OECD PSE/CSE database.

Nonetheless, these imputed extra gains are significantly lower than in OECD countries, where policies inflated farmers' receipts by 66% on average. In Russia, producers lost 3% of potential gross farm receipts in 1999 (compared to an 18% gain in 1998).

Less support is provided to producers in transition countries, but at higher cost to their economies

Comparison of the support levels in non-member transition economies and in OECD countries suggests that non-member countries provide less support to producers, as indicated in particular, by lower levels of percentage PSEs in these countries. But at the same time, higher shares of total support in relation to GDP mean that this support places a heavier burden on non-member economies than in many OECD countries. The burden on the overall economy grows with the share of agriculture in the GDP. Romania, a country with one of the largest shares of agriculture in GDP among the CEECs (16% in 1999), is a case in point. The producer support level, roughly equal in 1999 to that in other non-members, costs the Romanian economy more than in other CEECs, and far more than in OECD countries on average.

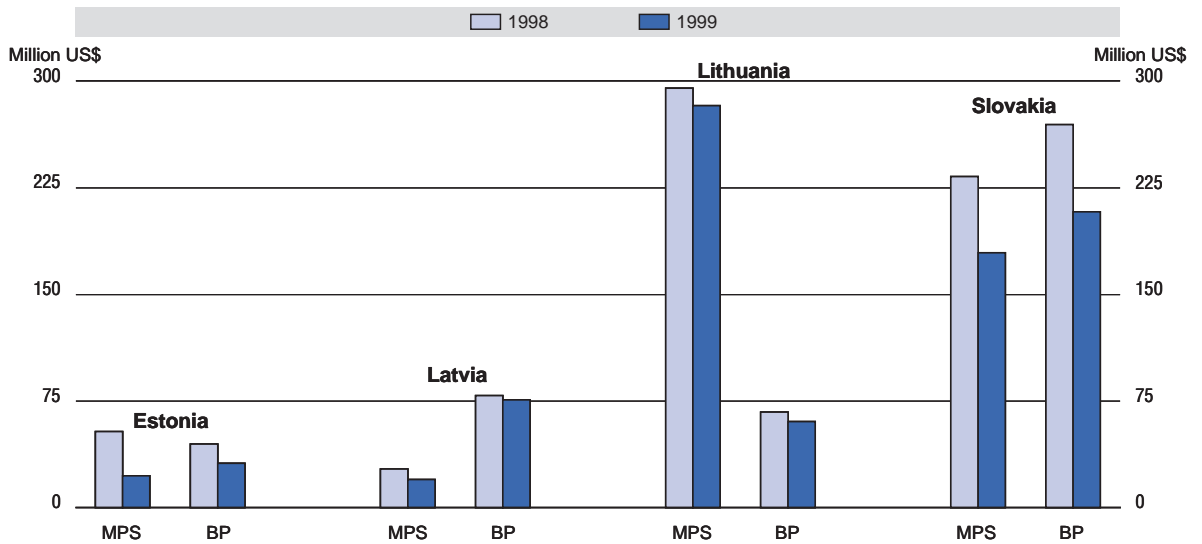
Why did PSEs decline in 1999?

Producer support fell due to a decline in both MPS and budgetary payments

In all monitored countries, reduction in total PSE was due to a fall in both MPS and budgetary support (Figures II.3a and II.3b). The budgetary support to producers fell by about 25% in Estonia and Latvia and by about 10% in Lithuania and Slovakia. Budgetary payments to producers decreased in nominal terms in Romania and Russia even with high inflation rates in these countries.

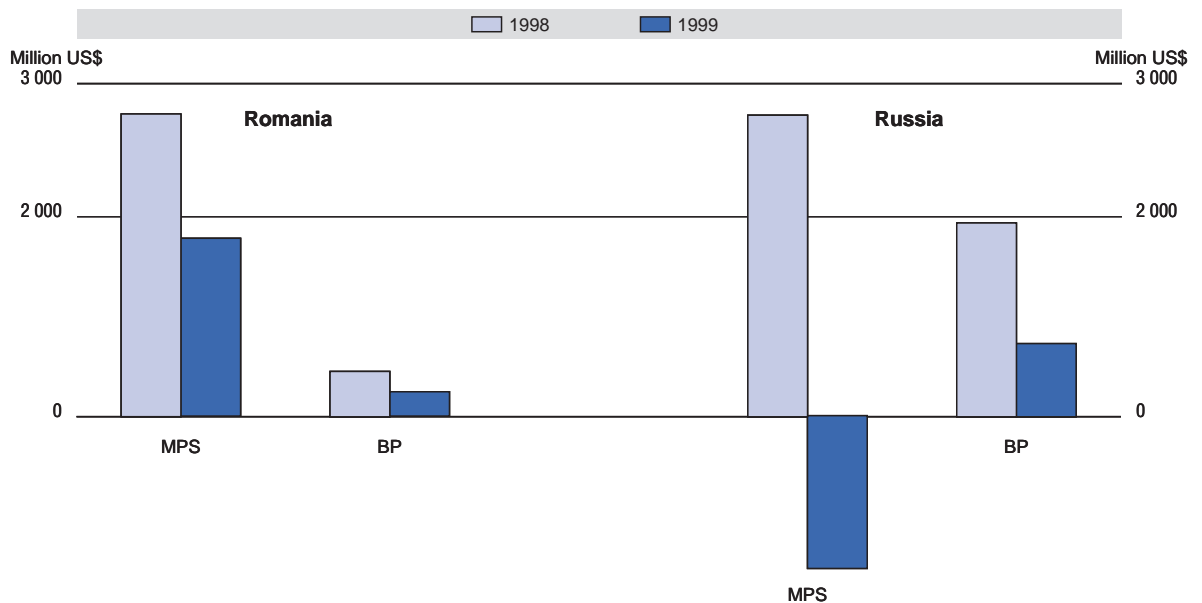
Figure II.3. Change in Market Price Support and Budgetary Payments

Figure II.3a. The Baltic States and Slovakia



Note: MPS – Market Price Support; BP – Budgetary Payments.
Source: OECD, PSE/CSE database.

Figure II.3b. Romania and Russia



Note: MPS – Market Price Support; BP – Budgetary Payments.
Source: OECD PSE/CSE database.

In Russia and Romania the decrease in MPS was mostly due to the weakened national currencies...

Different factors explain the fall in MPS across the countries. In **Russia**, the fall in the exchange rate was the most important contributor to the decline in market price support. Due to the depreciated exchange rate, the Rouble equivalents of international prices were significantly inflated (even with these prices falling in US dollar terms). This turned total market price support negative in 1999. The exchange rate factor was also important for **Romania**, where the Leu depreciated significantly in 1999.

... in the Baltic States, to reduced price support for milk...

In **Estonia**, **Latvia** and **Lithuania**, countries with rather stable exchange rates, declining market price support was mostly due to relative changes in domestic and reference prices as such. It should be noted that MPS increased for most PSE commodities in Estonia and Latvia. This occurred because the reductions in domestic prices were generally smaller than in external reference prices for similar commodities. However, the major impact on the overall level of price support stemmed from the fall in MPS for milk. The importance of milk to aggregate production meant that reduced MPS for this one product had the dominant effect. In **Lithuania**, the decrease in the aggregate Market Price Support was partly led by developments in milk prices, but also by the reduction in MPS for some other important products, such as beef and poultry.

... and to a set of various factors in Slovakia

Similarly to Russia and Romania, exchange rate depreciation had an impact on the reduction of the aggregate Market Price Support in **Slovakia**. And, as in the Baltic region, the "milk price" factor played its role in Slovakia. In addition to milk, the reduced MPS for barley, one of the most important agricultural products in Slovakia, contributed to the fall in the aggregate market price support.

While cross-country changes in the crop sector PSEs were mixed, livestock sector PSEs decreased in most countries

The changes in percentage PSEs for the crop sector were mixed across the countries, while for livestock sectors they fell in the majority of cases (Table II.2 and Table II.3). In 1999, producer support was concentrated in the livestock sector in **Slovakia** and **Romania**, with livestock producers receiving over 70% of total transfers in these countries. In the **Baltic States**, support was roughly equally distributed between the livestock and crop sectors. In **Russia** livestock farmers were implicitly subsidised, while negative transfers were observed in the crop sector. Milk, pigmeat, grains and sugar are the most supported commodities across the countries (Figure II.4).

Table II.2. Percentage PSEs for crop products

	1991	1992	1993	1994	1995	1996	1997	1998p	1999e
Wheat									
Estonia	90	3	-8	-1	1	1	14	33	33
Latvia	95	-36	-34	-13	-4	1	6	18	22
Lithuania	-211	-66	-39	-44	-7	-1	1	8	29
Slovakia	33	12	24	20	-13	-25	0	22	11
Romania	42	29	36	40	-5	17	-5	15	23
Russia	81	-89	-25	-37	-21	5	7	-25	-20
Maize									
Estonia	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.
Latvia	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.
Lithuania	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.
Slovakia	30	34	29	16	14	1	12	2	-5
Romania	20	15	43	15	-12	1	6	10	21
Russia	85	-55	-3	38	27	39	31	39	41
Coarse grains									
Estonia	83	-28	-21	-15	16	12	15	42	37
Latvia	95	-32	-47	-10	-19	-4	4	21	25
Lithuania	-166	-52	-18	-30	-6	9	14	26	26
Slovakia	22	10	35	29	1	-19	5	34	11
Romania	22	-24	44	30	-12	17	0	27	30
Russia	74	-15	-28	-35	-40	12	9	-28	-59
Oilseeds									
Estonia	n.c.	19	-4	-22	16	-2	-3	10	38
Latvia	77	9	-20	-45	-33	-25	-8	63	20
Lithuania	-171	49	-106	-48	-12	7	-11	-5	-5
Slovakia	34	20	5	-21	7	3	3	-4	7
Romania	-10	-15	5	-9	-17	-4	-28	-29	-47
Russia	59	-71	-105	-56	-5	-15	-32	-61	-49
Sugar (refined equivalent)									
Estonia	nc	4	15	35	-49	-110	n.c.	n.c.	n.c.
Latvia	96	39	44	49	43	39	49	58	67
Lithuania	-86	52	43	28	40	43	50	60	75
Slovakia	68	60	47	34	29	35	44	54	46
Romania	70	56	63	61	50	55	53	57	73
Russia	70	12	49	26	34	48	52	49	35
Crop products									
Estonia	84	-21	-18	-12	13	10	14	38	36
Latvia	95	-24	-36	-3	-4	1	10	28	32
Lithuania	-169	-40	-16	-28	0	8	13	23	35
Slovakia	35	21	28	20	0	-9	8	22	10
Romania	28	14	39	26	-8	7	1	9	15
Russia	77	-42	-20	-30	-16	10	9	-21	-28

p Provisional.

n.c. Not calculated.

Source: OECD, PSE/CSE database.

Table II.3. Percentage PSEs for livestock products

	1991	1992	1993	1994	1995	1996	1997	1998p	1999e
Milk									
Estonia	60	-80	-29	-12	8	20	20	29	9
Latvia	84	-133	-43	-10	-3	-4	-3	14	-5
Lithuania	-568	-195	-82	-71	-20	-18	-11	8	-9
Slovakia	48	42	47	40	40	37	43	52	39
Romania	22	-8	10	36	42	40	37	57	45
Russia	63	-133	-38	-22	36	38	42	37	10
Beef and Veal									
Estonia	57	-243	-56	-40	-60	-42	-64	-49	-29
Latvia	88	-241	-188	-46	-32	-22	-41	-24	-1
Lithuania	-177	-232	-87	-40	-31	-24	-15	4	-4
Slovakia	49	40	1	4	12	6	2	10	17
Romania	-19	30	-51	-49	-27	-44	-58	2	-41
Russia	64	-169	-55	-60	-26	0	28	-20	-39
Pigmeat									
Estonia	30	-169	-34	19	-4	-9	-20	5	21
Latvia	68	-92	27	53	28	14	6	0	36
Lithuania	-215	-110	22	51	36	33	28	39	50
Slovakia	20	17	20	23	21	15	-5	14	34
Romania	-4	-2	7	22	20	12	-40	13	-16
Russia	26	-205	7	24	34	33	24	20	19
Poultry									
Estonia	37	-86	10	32	43	40	33	29	43
Latvia	53	-207	29	52	50	39	43	43	54
Lithuania	-215	-67	30	60	57	52	55	57	55
Slovakia	26	28	24	21	32	28	22	25	23
Romania	15	27	-8	34	36	29	23	41	42
Russia	34	-157	25	45	62	56	59	53	41
Eggs									
Estonia	61	-105	-59	-18	12	10	20	21	35
Latvia	73	-95	17	31	48	32	43	46	48
Lithuania	-363	-87	-26	5	25	15	23	17	27
Slovakia	18	29	20	19	31	18	25	29	32
Romania	6	7	-3	29	48	32	39	52	30
Russia	35	-185	-25	24	52	46	53	42	26
Livestock products									
Estonia	51	-123	-38	-9	-3	6	2	15	11
Latvia	79	-141	-41	9	7	4	2	13	13
Lithuania	-309	-169	-47	-11	2	3	6	20	17
Slovakia	35	30	25	25	27	22	16	28	32
Romania	4	8	-3	21	28	22	4	36	23
Russia	52	-161	-25	-8	28	32	38	25	7

p Provisional.

n.c. Not calculated.

Source: OECD, PSE/CSE database.

Figure II.4a. PSEs by commodity, 1999

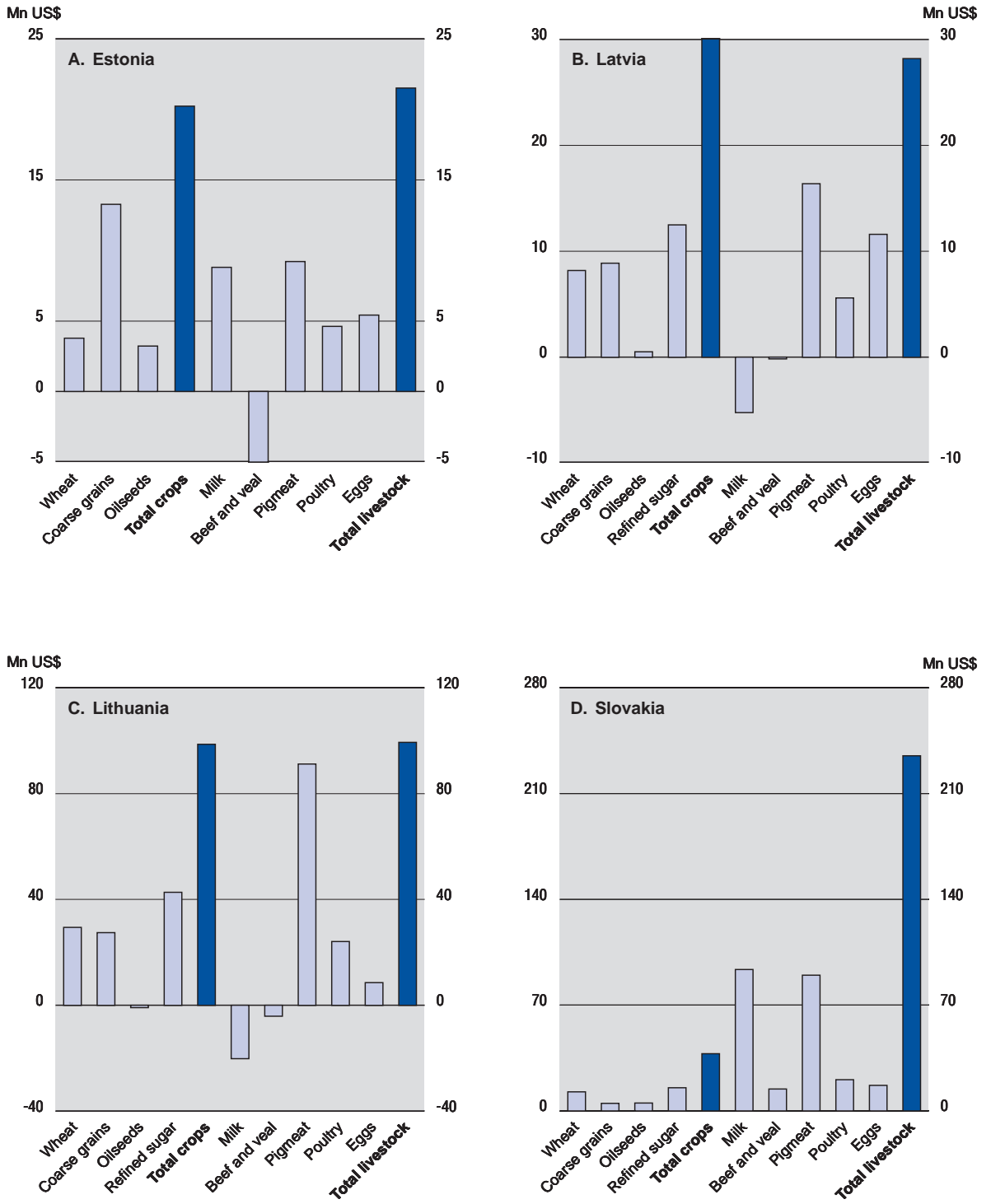
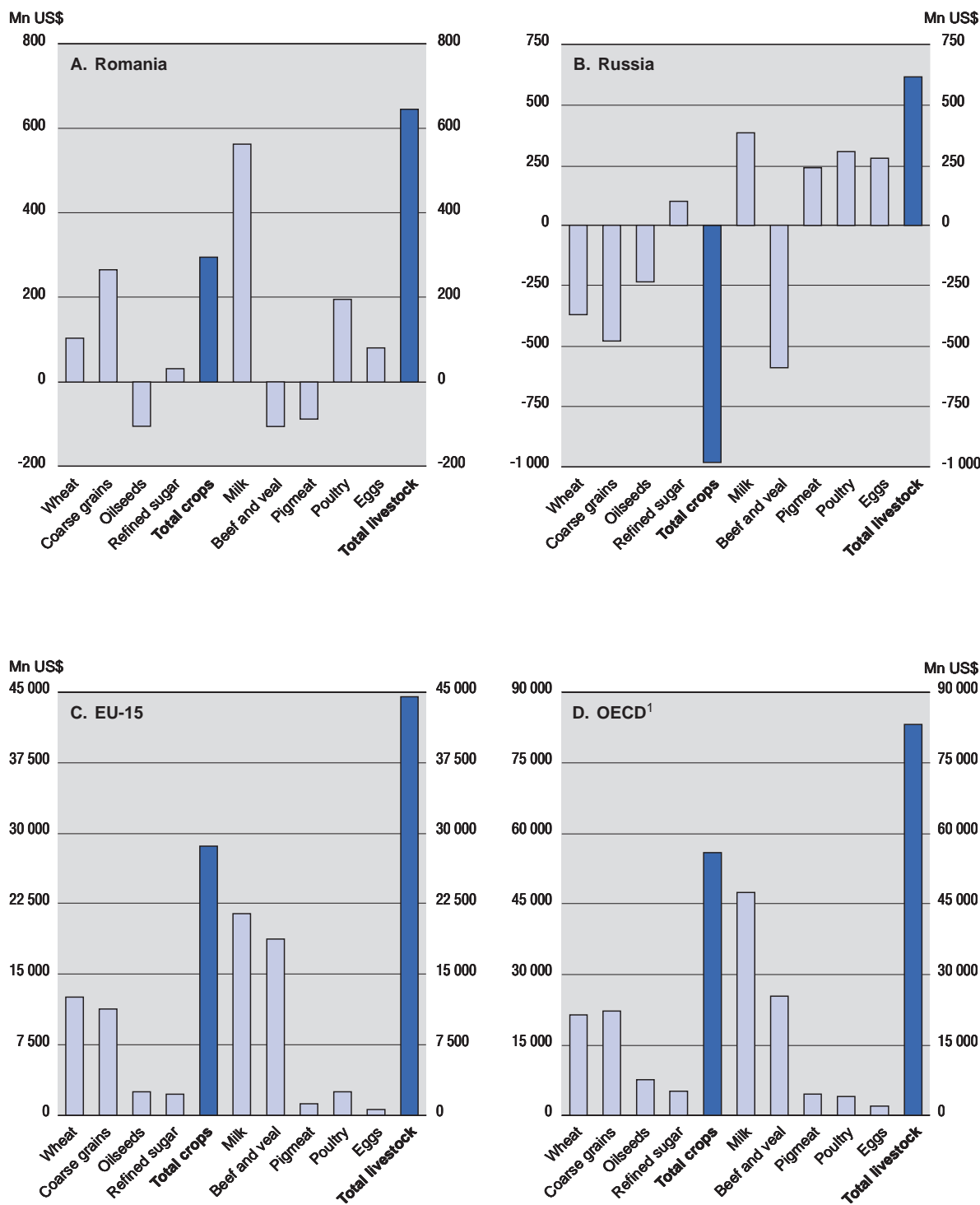


Figure II.4b. PSEs by commodity, 1999



1. OECD-24, excluding Mexico, Korea, Poland, Hungary and the Czech Republic.
Source: OECD PSE/CSE database.

Notes

1. A more detailed overview of the situation in Russia follows in Part III.
2. This share varied significantly from year to year in Russia.
3. See Part I.
4. Originally, this procedure was also applied to Estonia and Latvia, but following strong protests from these countries, they were exempted from the new reference price calculation mechanism.
5. This was the next stage of tariff reductions that started in 1997, in accordance with Romania's obligations to the World Bank under the Agricultural Structural Adjustment Loan.
6. Due to budgetary constraints in Lithuania, these subsidies were discontinued in the last quarter of 1999.

Part III

AGRICULTURAL POLICY DEVELOPMENTS BY COUNTRY

AGRICULTURAL POLICY DEVELOPMENTS BY COUNTRY

1. Brazil

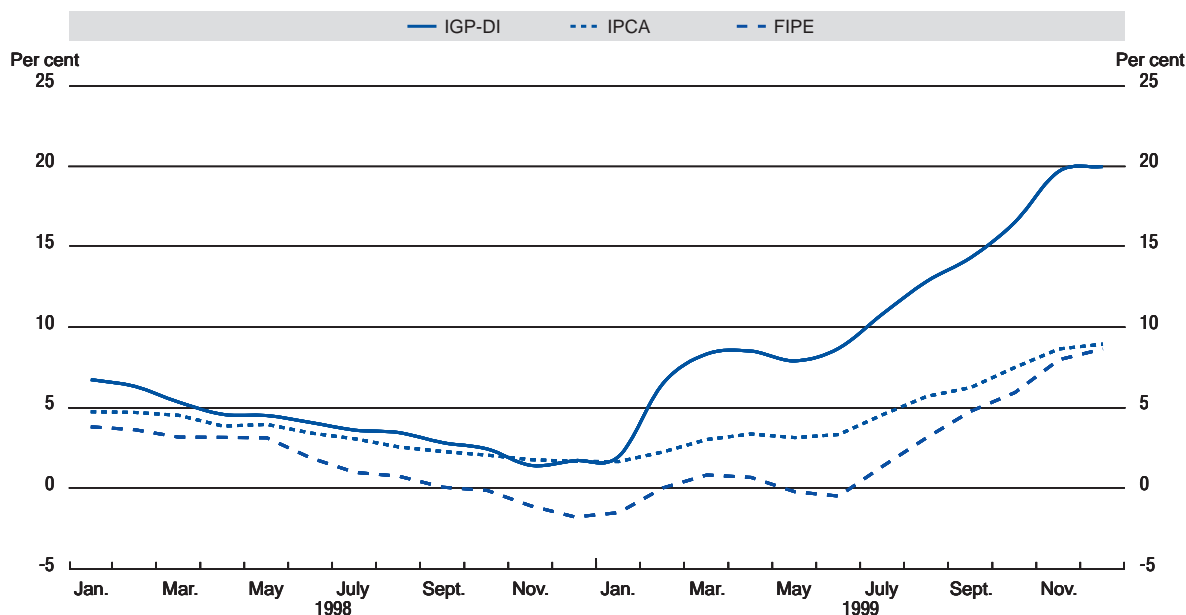
Macroeconomic situation

The sharp devaluation of the *real* was the most important event for Brazil's economy in 1999. On 15 January the Central Bank decided to discontinue the fixed exchange rate system and accepted a free float of the *real*, *i.e.* shifted to a system in which the exchange rate is largely determined by market forces. However drastic this step was for Brazil's economy, the devaluation was the logical consequence of a series of domestic and international pressures. On the domestic front, the state of Minas Gerais announced in December 1998 a moratorium on its debt to the federal government. On the international front, Brazil was particularly hard hit by the crises in Asia and Russia given its dual deficit in both the current account and the fiscal balance. As a result, the economy experienced a typical "credibility crisis" with sharply rising net outflows of capital and growing pressure on the exchange rate. To defend the exchange rate, interest rates were raised to 40% and more in real terms but capital outflows continued to accelerate. As investors noticed that capital outflows became immune to rising interest rates, a classic speculative attack started against the *real*. After losses of up to USD 1 billion a day in foreign exchange reserves, the Central Bank decided on 15 January 1999 to widen the band for fluctuations of the *real* and, eventually, had to accept the free float of the *real*.

The year 1999 brought about a drastic change in Brazil's macroeconomic environment. For much of 1998, the high interest rate environment kept a lid on domestic growth which remained below 1% for the year as a whole. At the same time high interest rates kept inflation rates in check at a level of 3.8%. The sharp devaluation on 15 January 1999 drastically changed the macroeconomic situation. Interest rates came down and growth picked up again. But inflation rates rose in parallel and increased particularly strongly in the second half of 1999. For 1999 as a whole, inflation as measured by the IPCA increased to 8.94%, still remaining within the government's inflation target of 6-10%. The IPC-FIPE and IGP-DI indices closed the year up 8.64% and 19.98%, respectively (Figure III.1.1). The average annual inflation rate for 1999 (as the arithmetic mean of these three indices) reached a level of 12.52%. The inflation forecast for 2000 is for lower rates. The outlook for lower inflation is based on the expectation that the inflationary pressures experienced in 1999 are unlikely to reoccur in 2000. On the contrary, a likely appreciation of the *real* could help dampen import prices and put downward pressure on inflation. At the same time, however, domestic consumer prices could be fuelled through a potential increase in international commodity prices, particularly petrol prices.

Overall economic performance was above expectations, particularly compared with the pessimistic outlook immediately after the financial and economic crisis in early 1999. Growth in GDP for instance was expected to contract by 2% on average for 1998, but an increase of 0.8% was accomplished. Unemployment remained at about 7.6% for the year as a whole, a remarkable achievement in view of the subdued economic performance. Unemployment even declined towards the end of 1999 and was, according to the Brazilian Institute for Statistics (IBGE), down to 6.3% in December compared with 7.3% in November 1999.

Figure III.1.1. Inflation has picked up towards the end of 1999



Note: IGP-DI: General Price Index – Domestic Supply. IPCA: Consumer's Wholesale Price Index. FIPE: Economic Research Institute Foundation.
Source: BNDES (Banco Nacional de Desenvolvimento Econômico e Social).

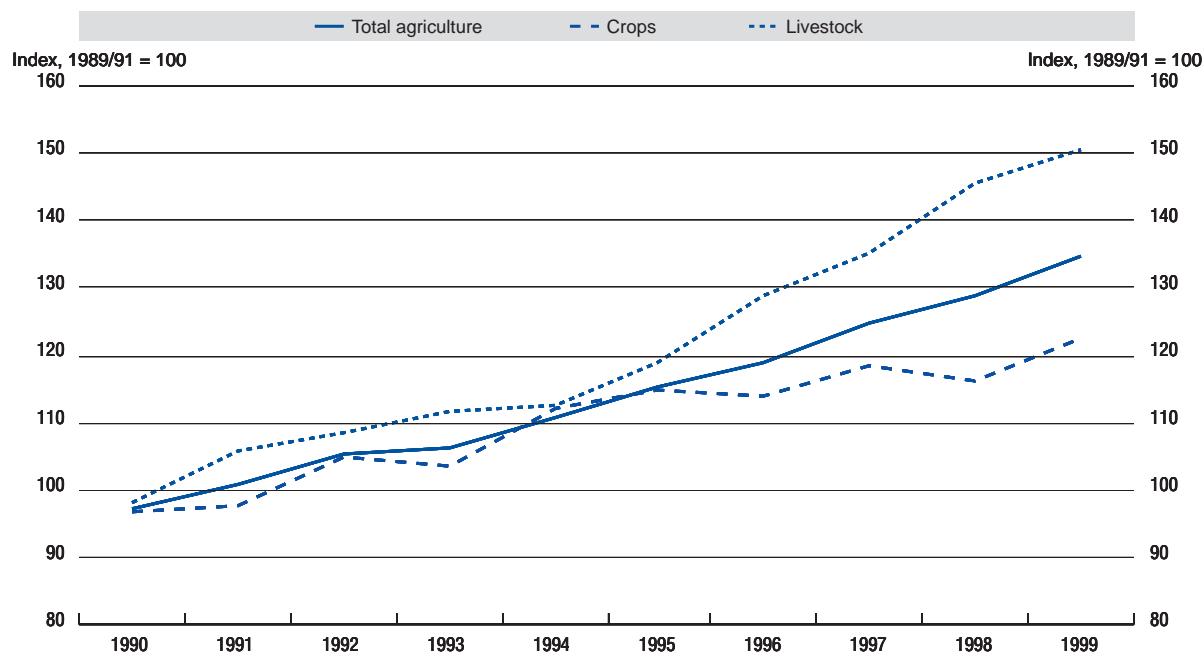
The overall trade balance remained in deficit for the fifth consecutive year. The size of the trade deficit, however, shrank considerably buttressed by the sharp devaluation of the *real*. For 1999, the trade deficit was down to USD 1.2 billion compared with USD 6.5 billion in 1998. The reduction in the deficit resulted from a 6% increase in exports that was more than offset by an almost 15% decrease in imports. In tandem with the declining trade deficit, the current account deficit decreased and was fully financed by an FDI inflow of USD 29 billion. The fiscal balance has also improved. For 1999, Brazil managed to achieve a primary surplus of BRL 21.5 billion, equivalent to 2.1% of GDP. The overall fiscal balance, however, remained negative at an estimated BRL 96.1 billion, equivalent to 10.1% of GDP. Without the effects of the devaluation, the fiscal balance would have been BRL 56.3 billion or 5.6% of GDP.

Agricultural and agro-food situation

Agriculture remained an important contributor to total GDP in 1999. Primary agriculture accounted for about 11% of GDP and 25% of the total labour force. If upstream and downstream industries are included, the sector accounts for as much as 35% of total GDP. In 1989/91 prices, total agricultural output increased by 5.7% relative to the previous year, largely due to robust growth in the livestock sector and bumper crops for grains (particularly rice) and oranges. Over the 1990s, total agricultural output increased by nearly 40% in 1989/91 prices. The expansion was largely driven by a booming livestock sector which at the end of the 1990s had almost doubled in size since the beginning of the decade (Figure III.1.2).

According to the IBGE, total grain production reached 82.5 million tonnes in 1999 as against 75.1 million tonnes in 1998 (9.8% increase). In particular, rice production leaped by more than 50%. This increase must be evaluated against the small crop in 1998, which was caused by poor growing conditions. Scarce supplies in 1998 brought about a hike in producer prices and a massive incentive to increase acreage and inputs for the 1999 crop. The effects of a larger acreage and higher inputs were compounded by excellent climatic conditions and resulted in a bumper rice crop for 1999.

Figure III.1.2. Agricultural production grew rapidly over the 1990s



Source: Based on FAO estimates.

Table III.1.1. Brazil: Crop Production

Main Crops, 1997-1999

	1997	1998	1999*
	1 000 tonnes		
Cotton	832	1 217	1 166
Rice	9 290	7 796	11 762
Coffee	2 341	3 380	3 252
Beans	2 991	2 184	2 615
Maize	34 601	29 297	32 178
Soyabeans	26 431	31 357	30 906
Wheat	2 441	2 222	2 363
Sugarcane	337 195	338 348	333 318
Tobacco	620	510	623
Oranges	19 517	19 539	20 688
Cocoa	285	282	207
Total	436 544	436 132	439 078

* Preliminary data.

Source: IBGE/CEPAGRO – LSPA.
Development: Ministry of Agriculture/Secretariat for Agricultural Policies.

Agricultural exports increased to new records in terms of both volumes and values. This was a particularly remarkable result in view of the low commodity prices that prevailed in international markets in 1999. Agricultural exports increased by 3.5% in dollar terms, reaching USD 17.7 billion compared with USD 17.1 billion in 1998. At the same time, agricultural imports fell by 27.8% to USD 4.7 billion (from

USD 6.5 billion in 1998) and generated a record in the agricultural trade surplus of USD 13.0 billion, representing a 22.6% increase from 1998 (USD 10.6 billion surplus).

The composition of exports also changed. Although soyabeans and soyabean products remained the most important export crops, their export revenues fell by about USD 1 billion in 1999 to USD 3.7 billion, down from USD 4.7 billion in 1998. While export volumes remained largely the same, the decline was the result of depressed international prices for soyabeans and soyabean meal prevailing for much of 1999. Coffee exports were also hit by the downward move in commodity prices. The significant increase in volumes both for beans (plus 28%) and soluble coffee (plus 17%) was more than offset by the effects of low export prices. The net result was a small decline in export revenues from USD 2.5 billion in 1998 to USD 2.4 billion in 1999.

While the export performance of the crop sector remained subdued, export revenues from the livestock sector increased substantially. Meat in particular exports contributed to the record trade surplus in 1999, increasing from USD 1.58 billion in 1998 to USD 1.9 billion in 1999. Exports of non-processed beef increased by 86% in volume terms or 60% in US dollars. Like all tradables, meat exports benefited from the devaluation effect. More importantly, however, meat exports were boosted by improvements in sanitary standards. Beef exports benefited particularly from the approval of new foot and mouth disease-free zones in the southern states of Brazil. The FMD free status made it possible to enter new markets such as Egypt, Iran, and Israel. Exports of poultry also increased although less than those for beef. 1999 poultry exports reached USD 893 million compared to USD 753 million in 1998. In volume terms the increase was even more impressive (plus 30%). As for beef, poultry exports went into a number of new markets like Canada. In addition, exports to traditional markets like Egypt and Iran, where Brazilian exporters had failed for the last 10 years, increased again.

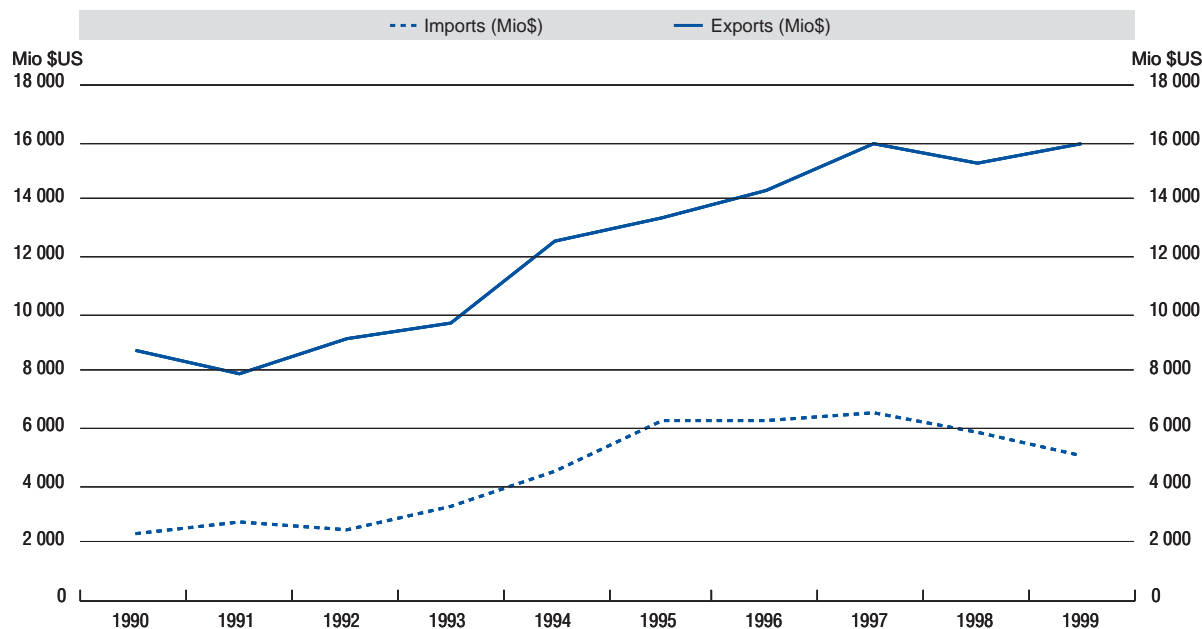
The sugar and alcohol sector was one of the hardest hit by low international commodity prices in the aftermath of the Asian and Russian crisis. While Brazil's own devaluation allowed sales of a greater share of its rising sugar production, the larger quantities were largely offset by lower prices. In 1999 export volumes for sugar increased by 45%, but revenues remained largely unchanged at USD 1.9 billion, the same level as in 1998. The boost in export quantities was brought about by higher purchases by a few new customers. Russia and the Near East alone absorbed over 70% of Brazil's raw sugar exports.

While the real devaluation of the currency boosted agricultural exports, total agricultural imports declined or stagnated for the less elastic import items. Wheat remained the single largest import item. Domestic wheat prices have fallen in tandem with international ones and there was no extra incentive for importers to increase quantities (Figure III.1.3).

Also sales of agricultural implements remained largely unchanged in 1999. The domestic industry sold 24 047 units of agricultural machines compared with 24 157 units in 1998. Wheel tractors accounted for 78% of the overall market volume.

Land Reform Policies

The government remained committed to continuing its land reform programmes in 1999. Current policies rest on two major pillars. The first pillar is the new land tax system, promoting release of, and access to, farmland for new settlements. The tax system was revised in 1997 to address more effectively the problems associated with speculation and the concentration of agricultural land in the hands of a few landed proprietors. High tax rates on large unproductive units of land push proprietors to farm or to sell the land. The second pillar consists of a number of credit schemes. These credits provide farmers with subsidised loans to build up the necessary farm infrastructure in order to make new settlements economically viable. They help finance the construction of homes, roads, warehouses, schools, health centres, and the creation of co-operatives. PROCERA, the most important scheme, was discontinued in 1999 and was merged with PRONAF (National Programme to Strengthen Family Farming). This so-called New Rural World initiative tries to bring together new settlers of the PRONAF programme with already settled farmers under the INCRA programme. In addition, the target groups of PRONAF were divided up into 4 different groups. An important feature of this classification exercise was to identify a

Figure III.1.3. **Agricultural trade surplus boosted by the strong devaluation of the *real***

Source: Ministry of Agriculture of Brazil.

group (Group A) that was made eligible for highly concessional loans. But all other groups have been granted access to investment credits that allow them to borrow under more favourable conditions than under the previous PRONAF credit scheme.

Another important policy change was introduced by Decree 3027 of 13 April 1999. This decree regulated the “Land Bank” and established a credit line to farmers from the Federal Government to finance the acquisition of rural properties and to promote the creation of communal facilities (infrastructure) essential to the development of rural areas. Loans are limited to BRL 40 000 per family, the repayment term is 20 years, including a 3 year grace period at subsidised interest rates. Only very poor families are eligible for the loan. In 1999 a total of BRL 182 million was allocated to this programme. The volume is expected to grow rapidly over the next few years and is expected to reach a total of BRL 350 million in 2000.

Domestic support policies

Rural credit programmes

Subsidised rural credit schemes constitute a main element of Brazil's domestic support policies. PRONAF is the most important of these schemes (see Box III.1.1). It provides loans at subsidised interest rates to small family farmers – owners, tenants and sharecroppers. Small production co-operatives and associations are included in the programme. Loans can be used both to finance variable costs (particularly planting and harvesting) as well as for investments in machinery and infrastructure. In 1999, PRONAF was transferred to the responsibility of the Ministry of Land Reform. The objective of this transfer was to improve the programme's efficiency and flexibility in assisting small farmers who recently benefited through the allocation of a new property in the land reform programme. Until the beginning of November 1999, BRL 1.72 billion in loans had been disbursed benefiting 718 000 families.

Box III.1.1. Key elements of Domestic Support Programmes in Brazil

1. Government Commodity Loan Program (EGF): this programme facilitates access to commercial credits for farmers and co-operatives. Farm products stored in accredited warehouses function as collateral for these credits. The maximum credit volume is limited to 70% of the value of the products offered, calculated at the relevant minimum price for the various products. The annual interest rate for EGF farm loans is currently fixed at 8.75%

2. EGF-Industry Commodity Loan Program: the EGF-industry programme is similar to the EGF farm programme but access is limited to processors of agricultural commodities under the Minimum Support Price Programme. Financing is limited to 50% of the production capacity of the processors, and processors are obliged to meet at least the minimum commodity price set by the government. Like for the EGF farm programme, credits are currently available at 8.75% p.a.

3. Rural Promissory Note (CPR): the CPR presents an extra source of finance for the agro-business industry. It is of particular importance, as the EGF for the agro-industry and co-operatives [No. 2 above] is limited to 50% of the production capacity of the processors. Technically, the CPR is a promissory note connected to a commitment of product delivery by farmer/co-operative. It is only available for rice, cotton, wheat and maize. In addition, processors must prove they have paid at least the minimum price to the producer. Like for the EGF programme, credits are currently available at an annual rate of 8.75%.

4. Government Commodity Acquisition Program (AGF): the AGF programme provides access to credits for farmers who sell their produce directly to the federal government. Eligible products are cotton, rice, beans, maize and cassava. Products must be stored in accredited warehouses, cleaned, dried and graded. The National Food Supply Company (CONAB), an entity of the Ministry of Agriculture (similar to the CCC in the US) purchases products offered at the relevant minimum price.

5. Subsidy Auction Program (PEP): in principle, the PEP works like the loan deficiency programme (LDP) in the US. As described in previous reports, the government aims to support farm prices through an intervention "at the margin", *e.g.* by paying to wholesalers and processors the difference between the prevailing market price and the minimum price of a given product. Only wheat, maize, and rubber have been eligible for PEP support. The government conducts public auctions to establish the premium for buyers of a given product. These buyers then contact producers interested in selling their produce at the relevant minimum support price. Possible transportation costs to the final destination have to be born by the buyer.

6. Options Contracts: the federal government offers through CONAB a price for the next harvesting season, at which eligible products (wheat, corn, rice, and cotton) product can be sold to the government. These contracts are launched at the beginning of a harvest and are due at the time of the next harvest. So when the supply is becoming short again and prices are supposed to be high again then it's time for repayment. The strike price of this contract is fixed above the corresponding minimum price. The possible difference to the actual futures price is covered by CONAB.

7. Product Equivalence: under the Programme to Strengthen Family Farms (PRONAF), small producers are granted access to credits based on the equivalence concept, *i.e.* farmers pay their back loans by delivering an equivalent amount of the produce. The value of the products is calculated on the basis of the government minimum price. Like the PEP, this scheme is limited to only a few commodities, notably cotton, rice, maize and wheat. Interest rates for small family farms are currently as low as 5.75%, carrying a substantive subsidy element even though credit volumes are limited.

8. The BNDES system: all long-term support to producers and processors of agricultural products is centralised under the auspices of the BNDES (Brazilian Bank for Economic and Social Development) and the Special Agency for Industrial Financing (FINAME). The two agencies form the so-called BNDES system. The BNDES system is no. agriculture-specific: it aims to promote overall economic and social development by encouraging long-term investments in industry, infrastructure, agriculture, commerce and services.

Market price support

The massive devaluation of the *real* boosted domestic prices and there was no need for direct market intervention for most commodities. Traditionally, price support was channelled through the so-called PEP programme ("Premio de Escoamento da Produção"), an auctioning system for price support. As a result, only cotton and rice benefited from the programme in 1999. For cotton, there were some operations involving auctions aimed at selling and buying back option contracts. Overall,

contracts for 131 000 tonnes of cotton were issued but the buy-back operations meant that the net benefits were limited to an auction volume of only 3 491 tonnes. For rice, a basic product in the Brazilian diet, government intervention was much stronger. Very low prices in response to the 1999 bumper crop made it necessary to subsidise larger quantities in order to support domestic prices. From the 19 218 contracts issued, the Government had to honour 14 267, equivalent to around 120 000 tonnes of rice.

Assessment and outlook

In 2000, the Brazilian economy is expected to recover from the 1998-1999 economic crisis and 1999 currency devaluation which was not as severe as had been initially expected. GDP growth is forecast at about 3.0-3.5% and inflation is expected to stabilise at around 6.0-7.0%. On the agricultural front, the government announced a programme that is destined to address more effectively the chronic problems of Brazilian farms: adequate availability of affordable credits. This programme is known as the "Brazil Rural Entrepreneur Programme" ("Programa Brasil Empreendedor Rural") and was launched on 19 January 2000. It aims to increase private sector and foreign interest in the financing of the agricultural sector to improve and modernise Brazil's marketing, storage, and agricultural insurance situation. It includes 15 specific new measures, *inter alia*, the creation of a Land Bank, the inclusion of Co-operative Banks in the group of institutions that have access to subsidised credits from the National Treasury, or enhanced credit facilities under PRONAF. There are also numerous measures to promote and foster investments in transportation and marketing infrastructure. Examples are a new and improved product classification scheme (grading) for crops, an improved storage law, measures to reduce port costs and speed up the exports, as well as the so-called "Cedula de Produto Rural Exportação" (CPR-E), which promotes the development of risk management instruments, *e.g.* forward sales by producers and co-operatives directly to buyers in an external market.

2. China

Macroeconomic situation

China's overall economic growth slowed for the fourth successive year in 1999. Real GDP growth declined to 6.6% after 7.6% in 1998, 8.8% in 1997, and 9.9% in 1996. The slow-down in growth was, however, essentially limited to the first half of 1999. It was largely a reflection of the waning impact of the 1998 fiscal stimulus, a drop in net exports, and continued subdued growth in private consumption and non-state investment. The turnaround in the second half of 1999 was sparked by rising net merchandise exports and higher industrial production resulting from an additional fiscal spending package. Both consumer and retail prices continued to fall on a year-on-year basis and, although the decline seems to have moderated in recent months, deflationary pressures continue to be a drag on economic activity, particularly in the non-state sector.

The trade surplus fell sharply in the first half of 1999 as imports rose substantially and exports remained weak. Higher imports largely reflect increased reporting to customs authorities caused by the crackdown on smuggling. Exports have started to pick up since July driven by higher demand from OECD countries and from other Asian economies. As many other Asian economies rapidly recover from the 1998 crisis, exports should remain buoyant in 2000. Exports should also benefit from various policy measures including higher rebates on the value added tax (VAT). This suggests that the current account balance should remain positive in 1999, although the surplus is expected to be smaller than in 1998. Foreign direct investment also fell by about 10% in the first half of 1999. This is not substantially changing China's comfortable external payment position as underlined by the country's total foreign reserves of about USD 150 billion.

On the policy front, the problem is to find the right mix of expansionary and restraining policy measures. The main challenge has been arising from the need to reflate the economy while remaining committed to

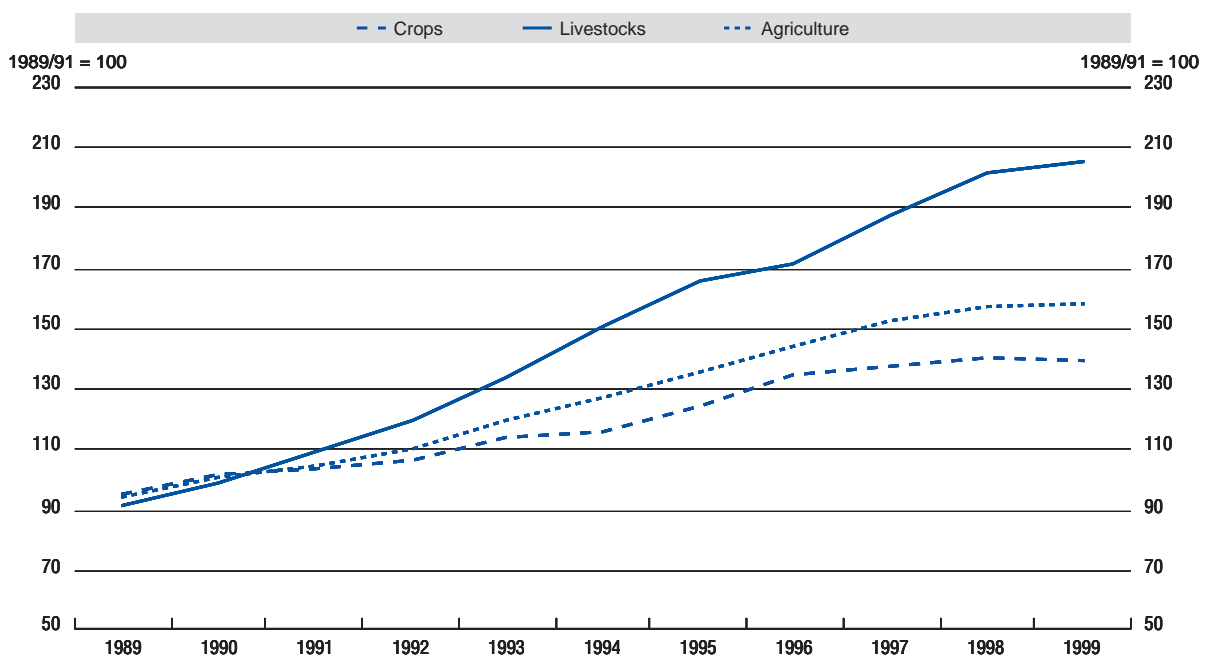
the reforms of the state-owned enterprise (SOE) sector that are necessary to sustain the country's longer-term growth potential. In response to these problems, the government endorsed a number of expansionary fiscal and monetary measures, notably higher salaries for civil servants, large infrastructure projects, and lower interest rates. So far, these measures largely failed to achieve their stated objectives. In particular consumer spending and non-state investment remained low. At the same time, SOE reforms have resulted in higher unemployment and growing social problems. This means that a continuous commitment to structural and SOE reforms without compromising the high growth/high employment objectives will remain the main challenge for 2000.

Agricultural and agro-food situation

After strong growth for more than two decades, total output in agriculture has started to level-off. The slow-down in output growth is largely a reflection of lower crop production. Particularly grain production declined, which was largely due to lower grain prices. With the decision to cut guaranteed prices and to reduce stocks, area sown for grains is expected to continue to decline. In fact, first estimates suggest that wheat acreage will be down by about 6% for the year 2000. This suggests a further reduction in grain output for 2000, unless yields would benefit from extraordinarily positive weather conditions.

While crop production is declining, livestock production is becoming increasingly important. Livestock output almost doubled during the 1990s (Figure III.2.1) and there are reasons to assume that the shift from crop to livestock production is likely to continue. First, demand for grains, the single most important crop, is characterised by small or even negative income elasticities, while consumers continue to spend a sizeable share of their additional incomes on livestock products. In tandem, real prices for grain have been falling and the structural problems in the grain sector (small, fragmented farms, inefficiencies in the storage and distribution system, and an obsolete processing industry) have made it difficult to offset lower prices through higher productivity. The livestock sector on the other hand is likely

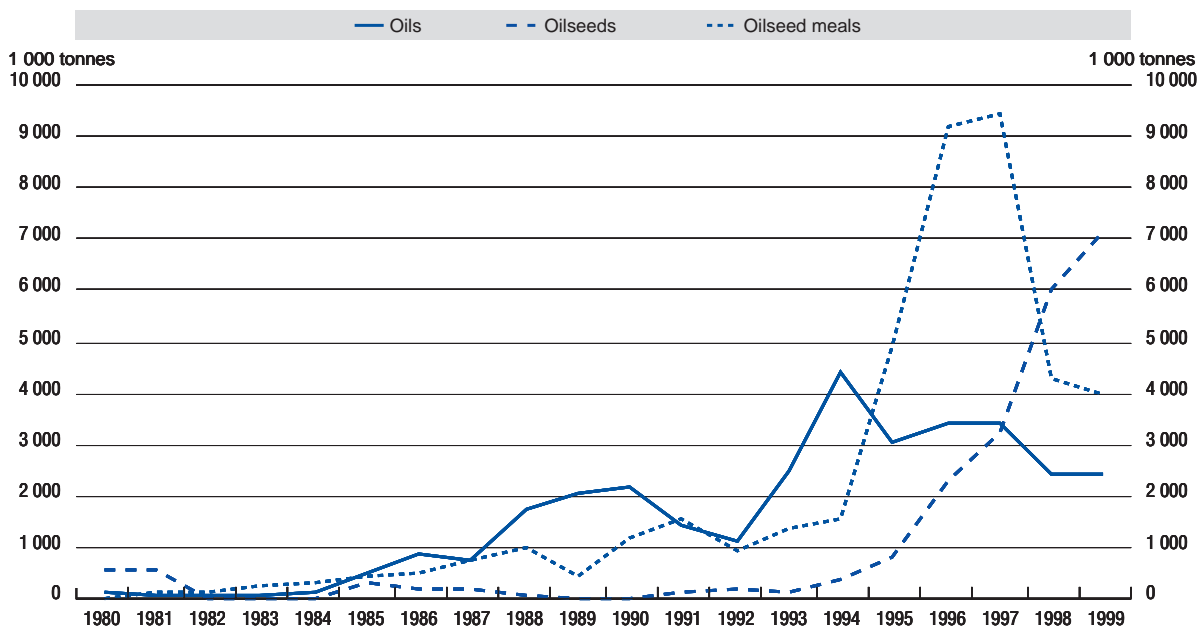
Figure III.2.1. Growth in overall agricultural output began to level off in 1999



to benefit from the ongoing change towards larger and more efficient production units, particularly for pork production. Finally, the anticipated WTO membership will make it increasingly difficult for the government to maintain its current import substitution policies for grains. Gradually, this should lead to less administrative pressure and fewer economic incentives to further promote grain production.

China's oilseeds economy is changing dynamically. In only five years, China has become the largest importer of oilseeds in the world. Imports of oilseeds have risen from 0.8 million tonnes in 1995/96 to an estimated 8.2 million tonnes in 1999/2000. Higher oilseeds imports come at the expense of meal and oil imports. Soyaoil imports, for instance, are forecast to decline from 1.65 million tonnes in 1997/98 to 0.7 million tonnes in 1999/2000. Soyabean meal imports are forecast to drop even more precipitously to only 500 000 tonnes, compared with 4.2 million in 1997/98 (Figure III.2.2). The shift in imports from oilseed products to oilseeds is largely policy-driven and caused by measures that aim to protect the domestic crushing industry. Soybean meal imports were restricted starting in early 1999 by the implementation of a 13% VAT. China also sought to ward-off edible oil imports by limiting the amount of import licenses, and cracking down on illegal smuggling of edible oils. At the same time, China is expected to import 5.0 million tonnes of soybeans in the 1999/2000 marketing year, up by over 24% from last year. Cuts in trade barriers and commitments taken on market access with WTO membership could further stimulate imports of beans, but also imports of oil. Imports of meals, however, are unlikely to benefit from freer trade for a number of reasons. First, tariffs on meals are already low and no additional cuts are envisaged. Second, higher imports of beans will result in higher domestic crush and thus higher availability of oilseed meals. Third, domestic grain reforms and lower grain prices could replace – at the margin – some of the energy content in the feed rations currently provided by relatively inexpensive oil meals.

Figure III.2.2. Oilseed imports continue to rise, while policy measures restrain meal and oil imports



Source: USDA.

The basic features of China's livestock sector remained unchanged in 1999. Pork remains the preferred meat, accounting for about 80% of total meat consumption. On the supply side, the shift towards larger and more efficient units for pork production gathered strength. A growing share of output is coming from specialised households or industrial operations, which benefit from scale economies and modern production techniques. But this shift may also mean that China's pork industry could be exposed to greater cyclical price swings, particularly as less intervention in the grain market may allow feed grain prices to fluctuate more freely. The shift towards large-scale pork production units will also be accompanied by an increase in compound feed use. This is likely to increase overall grain and soyabean meal requirements. Additional demand could be met through higher domestic production and rising imports. The speed and magnitude of reforms of trade policies versus domestic support policies will determine the relative importance of the two sources, *i.e.* whether additional needs will come from imports of grain or domestic production.

Structural Adjustment Policies

An important structural change is likely to emerge from the need to reform the so-called Township and Village Enterprises (TVEs). They have played a central role for China's rural development for more than 20 years. They developed out of the rural co-operatives and were one of the most important innovations in the early stage of the reform when markets were undeveloped and private ownership was ideologically unacceptable. They are still a key source of revenues for local governments and are major contributors to non-farm employment in rural areas. By 1993, TVEs still accounted for 27% of the national industrial output.

There are a number of indications that TVEs have been adversely affected by the rapid structural changes in rural China. Their contribution to growth has slowed, their number declined, and their role in absorbing the rural labour surplus diminished. Various factors have contributed to the difficulties faced by TVEs: *i)* TVEs predominantly produce low quality consumer goods and their response to a changing consumption structure in an increasingly affluent consumer environment was often too late and too little; *ii)* Their corporate governance and management structures have proven increasingly inadequate to react sufficiently flexibly to technological innovations and related investment decisions; *iii)* At the same time, competition from the non-public urban sector has increased as the pressure from SOE reforms intensified; *iv)* There is also an institutional bias against TVEs which made it difficult for them to maintain access to adequate finance. For example, while TVEs are still estimated to contribute some 28% to total GDP, they only account for 8% of bank loans. Nonetheless, TVEs will become increasingly more important in the future: their social role, particularly as a buffer for excess rural labour, is likely to grow as structural change in agriculture and SOE reform gathers pace. The policy challenge will be to enhance the economic viability of TVEs while maintaining and promoting their non-economic functions.

An additional policy change could emerge from a reform of the rural tax system. Currently, farmers face four categories of taxes, levies and fees. They add up to a considerable overall burden on farm households and, as not all of them are directly linked to income levels, they have significantly added to the downward pressure on incomes. The four major categories include:

1. *The state or federal tax.* This part of the overall tax burden is relatively small, at least relative to farm incomes.
2. *The township levies.* These levies are to be paid under the so-called "Five Unified Plans" (*Five Tongchou*): Education, social expenses, family planning, public (collective) transportation, and military expenses.
3. *The village levies.* These levies are to be paid under the so-called "three contributions" (*Three Tiliu*): contributions to the public accumulation fund, the public welfare fund and other administration fees.
4. *Miscellaneous fees, levies and fines.* They are to be paid to other government institutions at different hierarchical levels.

As the various taxes, fees, and levies have presented a considerable and growing burden for farmers (*“peasant burden”*), the government declared already in 1991 that the combined levies of categories 2 and 3 (*“Five Tongchou”* and *“Three Tiliu”*) should not exceed a level of 5%. As the measure was limited to only two of the four categories, the effect on controlling the overall tax burden proved to be very limited in practice. To circumvent the 5% limit, fees in category four were increased or items of the tax base in categories 2 and 3 were shifted to category 4. As a result, the effective burden on farmers increased while the proportion paid under the *“Five Tongchou”* and *“Three Tiliu”* fell.

Domestic Support Policies

Since 1994, the so-called *“governors grain responsibility system”* has been the dominant policy package for China’s grain economy. This policy package includes both economic incentives and administrative pressure to push farmers to grow more grain and use more fertiliser than they would under free market conditions. It has brought about widespread overuse of inputs (particularly nitrogen fertiliser), aggravated existing environmental problems, and added to administrative problems in China’s grain storage and distribution system. It has contributed to record grain production levels and allowed China to shift from a major net importer of grain in the mid 1990s towards a net exporter of grain by the end of the decade. The policy focus on grain production and procurement also brought about a number of problems in China’s grain storage and distribution system. Grain stocks kept rising to levels that became burdensome to maintain while the low quality of grain in stocks made it increasingly difficult to bring grain back into the consumption cycle. It also made it necessary to maintain an ever-increasing administrative apparatus, characterised by low efficiency, and accused of fraud and misuse of subsidies.

China launched a first attempt to reform its grain economy in 1998 known as the *“four separations and one perfection”*. As pointed out in previous reports, these reforms largely failed and indeed were bound to fail. They tried to cure the symptoms without seriously addressing the fundamental problems of China’s grain economy (overproduction, inefficiencies in the storage and distribution system) introduced by previous policy packages. On the contrary, the early reform proposals even foresaw measures which were likely to strengthen state control over the national grain system. Such measures included the re-monopolisation of the grain stations and tighter controls on private grain traders.

While the *“governors’ grain responsibility system”* remains the main policy framework, a new attempt to reform China’s grain economy has been launched in 1999. The new reform package could bring about broader and deeper change than reform efforts in previous rounds. Most importantly, the reforms aim to address the fundamental disequilibria in China’s grain economy. The new measures include reductions in government support and purchasing prices for lower-quality rice, wheat, and corn produced under fixed quotas. Beginning in 2000, government support prices and procurement purchases will be eliminated for spring wheat produced in some of the northern provinces. The elimination of public support prices also holds for some provinces south of the Yangtze River. In addition, China has started to reduce its large grain stocks by selling wheat and coarse grains domestically and exporting maize to the international market. If successfully implemented, these reforms would also present an important preparatory step for China towards WTO membership.

The reforms are also likely to affect China’s net trade position for grains over the medium-term. There are factors suggesting that China will remain a net exporter of grain but also reasons to assume that China is likely to return towards a net import position comparable to that of the mid-1990s. The main reasons to assume that China will remain a major net exporter include:

- Food consumption of grain is gradually reaching a level of saturation. An increasing part of the population has ample access to basic food staples like rice and grain products and demand for these goods will continue to decline as a growing share of China’s consumers is reaching higher income levels.
- The envisaged drawdown in grain stocks is likely to offset the expected decline in grain output. Given the sheer size of China’s grain stocks, this would reduce the need for imports and could – in years with good crops – increase grain exports. This effect may in fact last for more than a decade.

- Investments in agricultural research and irrigation infrastructure have created a momentum towards higher grain production that is unlikely to dissipate rapidly even if direct and production-coupled support to grain producers declines. Given the long-time lag between such investments and their output-raising impact, many of the benefits of past investments are likely to materialise when the current policy reforms try to curb an increase in production.

There are, however, also reasons to believe that the 1999 reforms are likely to lift China's import needs or even reverse its net export position for grains. These include:

- A substantial drawdown of grain stocks may turn out difficult in practice. First, a large part of these stocks is of low quality as farmers only had to meet quantity targets for quota deliveries without the need to observe stringent quality requirements. Much of the rice stocks is composed of low-quality, early varieties for which there is no or only very limited commercial demand. In addition, the lion's share of grain stocks was from very early interventions and is indeed so old that even a recycling into the feed chain will prove difficult. Second, there is great reluctance on behalf of the public grain stations to bear the financial losses that would result from an unsubsidised reduction of stocks. Given the reduction in grain prices, current stocks would need to be sold below book values and the stations would have to write-off a significant share of current assets. Third, given the low quality of grain in stocks, a drawdown of stocks is likely to trigger simultaneous imports of high-quality grain to achieve an acceptable blend for feed mills and food processors.
- Despite the longer-term investments in high-yield varieties and infrastructure, farmers will respond to new incentive system brought about by the 1999 reforms. Lower prices for grain, lower support, and no need to meet procurement quotas should reduce area planted with grains. Indeed, plantings for winter wheat are already down by 6% for the year 2000. Maize and rice acreage is also expected to fall. Over the longer term, the limited water reserves in the northern plains of the country are likely to pose a binding constraint for a further expansion of production.
- Less government interference in the grain market in conjunction with the need to reduce grain stocks could provide an important impetus towards structural change in China's livestock industry. The need to push grain reserves accumulated in the past back into the grain economy at lower prices could accelerate the shift towards grain-based pork production. The potential for higher feed grain use is enormous. Currently, almost 80% of total pork production still comes from "backyard systems" where pigs are grown on the basis of table scraps from private households. A shift towards a compound feed based pork production system would boost demand for feed grains, and could thus contribute to higher coarse grain imports.

The assessment of the net effect of these policy changes requires a quantitative analysis that includes both short-term and longer-term effects, as well as the likely impacts of the anticipated WTO membership. Such an analysis has been undertaken with the OECD Aglink model and the results are summarised in Appendix II.

International policy environment

China's anticipated accession to the WTO is likely to create the most important change in the international policy environment for agriculture. While the negotiations on bilateral protocols with China's most important trading partners have been successfully concluded, the exact timing and terms under which China will enter the WTO are yet unknown. It is, however, likely that the final agreement will be signed in the second half of 2000 and that the terms of accession will be close to those negotiated in the US China accord in November 1999. This accord includes the following provisions:

- *Trading Rights*: for many goods, the right to import will be expanded beyond the government to include any non-government entity. China has agreed to phase in these trading rights over three years. Trade in some goods, including wheat, corn, rice, cotton and soybean oil, will continue to be channelled through state trading enterprises (STEs). But there will be commitments to end STE monopolies by allocating minimum amounts of the import quotas to non-STEs.

- *Tariff Bindings*: China commits to elimination of all non-tariff barriers, leaving tariffs as the only measure affecting imports. Other measures, such as inspection, testing, and domestic taxes will comply with WTO rules. All tariffs are bound at current levels, with reduced tariffs for many products. There will be annual tariff reductions starting in 2000 and continuing, for most commodities, through 2004, when the average agricultural tariff will fall to 17%.
- *Tariff Rate Quota Administration*: Tariff-rate quotas (TRQs) are established for major bulk commodities, including wheat, corn, rice, cotton, and soybean oil. For these goods, a specified quantity of imports will enter at a low duty (not to exceed 10%), with additional imports assessed a higher duty. The TRQ quantities are assumed to begin in 2000 and increase annually through 2004. There is no minimum purchase requirement, but the TRQs are subject to specific disciplines that base import decisions on commercial, not political, factors. A share of the TRQ is reserved for import by non-STEs.
- *Export Subsidies*: China commits not to use export subsidies for farm products.
- *Domestic Support*: China commits to cap and reduce trade-distorting domestic subsidies.

Assessment and outlook

After years of double-digit growth rates, China's economy has started to slow over the past four years. With the economic slowdown, the government faces the dual challenge of maintaining the momentum for reforms of the state-owned sector while avoiding a surge in unemployment. The main response to this challenge was a massive increase in public investments and a reduction in interest rates. These public investments focus on improvements in infrastructure and have a broader regional coverage that includes investments in China's underdeveloped hinterland. This shift is deemed to herald a new overall development strategy, away from an outward-looking/export-oriented growth pattern focusing on the coastal areas, towards a broader development of the whole domestic market.

A new round of grain policy reforms has been launched in 1999. The main objective is to re-instate the role of prices in providing a balance between supply and demand and prepare China's agricultural economy for the anticipated WTO membership. The main policy measures include lower administrative prices and a gradual reduction of grain stocks. Whether and to what extent grain stocks will be reduced over the coming years is difficult to gauge. On the policy front, it is important to note that high grain stocks have been a main pillar of China's food security strategy. This suggests the extent to which stock will be reduced is largely a political decision. On the economic front, a reduction of stocks would be eased by higher world prices. This would allow China to load off a part of current grain stocks onto the world markets, as witnessed for maize exports in 1999. Overall, the low quality of grain stocks suggests that current reserves can be recycled only partially and domestically. Domestic qualities are unlikely to meet the requirements of international customers.

Appendix II

China's anticipated entry into the multilateral trading system: Implications for cereal and oilseed markets

Introduction

China is in the process of growing integration into the international trading system. The OECD *Aglink* model was used to analyse the key issues arising from China's integration into global agricultural markets with more specific detail on implications for cereal and oilseed trade. The following analysis also provides a brief overview of China's current trade and domestic policy regime, sketches-out policy changes likely to occur as China is gradually integrated into the multilateral trading system, and assesses the effects of these policy changes on cereal and oilseed markets in China and in OECD countries.

The current policy environment

China has changed from net importer to net exporter of cereals

The past four years have seen China change from a net importer to a net exporter of cereals. One of the main factors behind this rise in self-sufficiency was the introduction in 1994 of a comprehensive policy package to boost domestic production, known as the "*governors' grain responsibility system*". Despite reforms of grain storage and distribution systems in April 1998, this remains the dominant policy influencing China's grain economy. It officially encourages and provides incentives to farmers to grow more cereals, using more fertiliser than they would under free market conditions. It has succeeded in concentrating production on grains and oilseeds – "land-intensive" crops for which China has no comparative advantage – while discouraging development of more labour-intensive horticultural crops (for which a comparative advantage does exist). The policy not only tilted production away from sound economical considerations but has caused or aggravated environmental problems by encouraging over-use of inputs (particularly nitrogen fertiliser), depleting ground water resources and causing soil erosion (OECD, 1999a).

There is less government intervention in the Chinese oilseed market

There is less direct government intervention in the Chinese oilseed market. The "*governors' grain responsibility system*" does not cover oilseeds or their products which enjoy a relatively liberal policy regime. Over the last five years, this has combined with freer trade to promote rapidly rising imports of oilseeds, oilmeals and vegetable oils, especially soybeans, soya products, rapeseed and palm oil.

China employs a whole raft of controls on cereal and oilseed import trade, headed by quantitative restrictions (QRs), tariffs, value added taxes (VAT) and VAT rebates as well as sanitary and phytosanitary measures (SPS). State Trading Enterprises (STEs) dominate internal movement in cereals (and, to a lesser extent, oilseeds and their products). As monopoly buyers and sellers, they decide both the direction and volumes of grain traded domestically and cover a large part of external grain trade too. The role of STEs and the allocation of trading rights will therefore be an important issue for negotiation in any future trade agreement with China, particularly in terms of allowing private traders to benefit from lower tariffs or import quota allocation (TROs). Unless the role of the STEs is reduced, lowering trade barriers is unlikely to be effective in practice in freeing trade flows. Box III.2.1.1 provides an overview of the role of STEs in grain trade, the institutions involved and the problems encountered.

Freeing trade will require a smaller role for STEs

On 1 April 1996, China introduced tariff rate quotas (TROs) for wheat, maize and rice. However, no rules covering their administration or actual quota volumes have been revealed publicly. All quotas and licences for imports of cere-

Box III.2.1.1 State trading in China: Institutions, processes and problems

The institutions

China's central State Planning and Development Commission (SPDC) devises an annual plan for exports and imports of cereals (wheat, rice, and maize), in consultation with the State Council (the highest administrative body) and the Ministry of Foreign Trade and Economic Co-operation (MOFTEC). The Commission also seeks opinion from related government organisations including the Ministries of Agriculture and Internal Commerce and the State Administration of Grain Reserves (SAGR) before submitting final proposals to the State Council. After approval by the State Council, import and export targets are notified to MOFTEC which delegates the actual trading process to COFCO. So while highly visible in the market, COFCO is actually only a trade agent, implementing import or export orders from MOFTEC and transferring grain to and from the Grain Bureaux.*

The process

MOFTEC authorises COFCO to buy cereal imports and transfer them to the Grain Bureaux at fixed prices. These are unrelated to the actual import prices and generally based on average procurement prices for the same type of grain in nine major cities (Crook, *et. al.* 1999). COFCO negotiates contracts with foreign suppliers and arranges shipment, delivery to a designated port, customs clearance and health/quarantine inspection. SAGR and the local Grain Bureaux then transport the grain to storage and flour mills. A similar procedure governs cereal exports. MOFTEC is responsible for selling a quantity of grain prescribed in the annual plan. The provincial Grain Bureaux acquire supplies at a predetermined export price, based on the fixed procurement price of the exporting province, handling costs and quality differentials. Once approved by the State Council, SAGR decides how to allocate the export quotas to the Grain Bureaux. The latter handle the logistics while approval is forwarded to MOFTEC, which, in turn, directs COFCO to negotiate the price with foreign buyers.

The problems

This hierarchical system's main purpose is to exercise full control over cereal export trade and especially, to insulate the domestic grain economy from price swings in international markets. On the whole, it enables China to control domestic and international trade in cereals and to secure food supplies for its people. But it has many disadvantages.

- The sheer number of agencies involved in grain trade and their complicated matrix of responsibilities make the system far too slow to deal efficiently with swift changes in international markets. For example, when world prices for maize increased and the domestic price declined in May and June 1996, the north-eastern provinces could have reaped large windfall profits by exporting to world markets. In the event it took months for all the ministries and agencies to agree to change the annual export plan. By the time consensus was achieved, world prices had dropped back below domestic prices and the opportunity was missed.
- Lack of integration between domestic grain marketing and trading agencies creates other problems too, for example, when COFCO acquires cereals for export from Grain Bureaux at provincial procurement prices far below actual local market prices. In the past this has meant COFCO continuing to export grain even when domestic market prices were well above world prices. A good example, was in second-half 1994, when 9 million tonnes of maize were exported at the world price of USD 85 per tonne compared with domestic prices of USD 120 per tonne and the approximate USD 65 per tonne at which the grain was actually procured (Tuan and Cheng, 1999).

These examples underline a number of problems that have emerged in China's state trading system for cereals: *i)* STEs are too slow to be able to exploit opportunities created by movement in international markets; *ii)* inappropriate timing of STE market intervention is more likely to destabilise than stabilise domestic markets and prices; and *iii)* it will be difficult to maintain a state trading system that controls import/export trade flows without limiting the benefits of freer trade/more open markets. Yet if China were prepared to end restrictions on trading rights, open TRQs to non-state agencies and lower tariff barriers, the current state trading system would become redundant anyway.

* The Grain Bureaux manage the domestic marketing of grains at the provincial, prefecture, and country level. Through the local grain stations, the bureaux purchase fixed quantities of grain (procurement quantities) at predetermined prices (procurement prices).

als are determined by the State Council. The orders of the State Council are executed by COFCO (China Cereals, Oils and Foodstuff Import and Export Company, formerly known as CEROILS). Exports are regulated by licenses through the same channels. In 1996, China also announced it was introducing TRQs for oilseeds but failed to implement these and instead relied on readily available import licences to regulate trade flows. Soyabean imports are subject to a 3% tariff and 13% VAT, the latter calculated using a CIF value for the soyabeans, tariff included. Soyabean meal imports incur a 5% tariff plus 13% VAT. Although there is no active quota system for these, importers need a license to bring in meal. Soyabean oil, in contrast, is subject to a quota system, a 13% tariff and 13% VAT. In addition to COFCO, only five other trading companies are authorised to import.

Cereal exports can still benefit from indirect export subsidies

Direct export subsidies and VAT rebates for exporters formed the main elements of China's past export promotion policies. Direct subsidies were abolished on 1 January 1991 and in 1997 China assured a WTO working party it would not resurrect them. However cereal exports can still benefit from indirect export subsidies. For example, STEs can buy low-price 'quota grain' from the domestic procurement system and sell it on world markets at prices below the domestic market. The subsidy element is financed by grain producers who must deliver a percentage of their production quota at lower procurement prices.

In 1994, the government also began to broaden its use of VAT to all domestic and imported goods. Varying VAT levels ranging from 13% to 17% are increasingly used to 'manage' imports and exports. VAT rebates and exemptions are also used to control imports, by providing incentives or disincentives for certain products and even for individual provinces.

Envisaged changes in China's domestic and trade policy regime

Comprehensive reforms with tariff cuts, domestic policy reform, and higher GDP growth...

China's integration into international grain and oilseed markets could radically change the terms of access to its vast domestic market. Tariff reductions, larger import quotas and more transparent/challengeable sanitary and phytosanitary regulations would be complemented by curbing the previously dominant role of STEs and allowing private traders access to tariff rate quotas (TRQs). In addition, as China's overall economic performance is likely to improve, more money will be in the hands of consumers and this should further stimulate consumption of food and feed stuffs. Finally, open borders are likely to render domestic import substitution policies (*e.g.* the governors' grain responsibility system) untenable and bring about additional import needs.

We have used the OECD Aglink model to assess the impacts of these policy reforms. In a policy simulation run, a TRQ regime for wheat, rice and coarse grains has been introduced providing access for 22 million tonnes at minimal tariffs, but maintaining prohibitively high over-quota tariff rates for imports beyond the TRQ level. Tariffs for imports of other commodities have been cut on average by 50%. In addition, it is assumed that GDP grows by an extra per cent due to trade liberalisation and that the "governors' grain responsibility system" is gradually phased out over a period of five years. All policy changes will be fully implemented by the year 2005.

... would result in significantly higher grain and oilseed imports

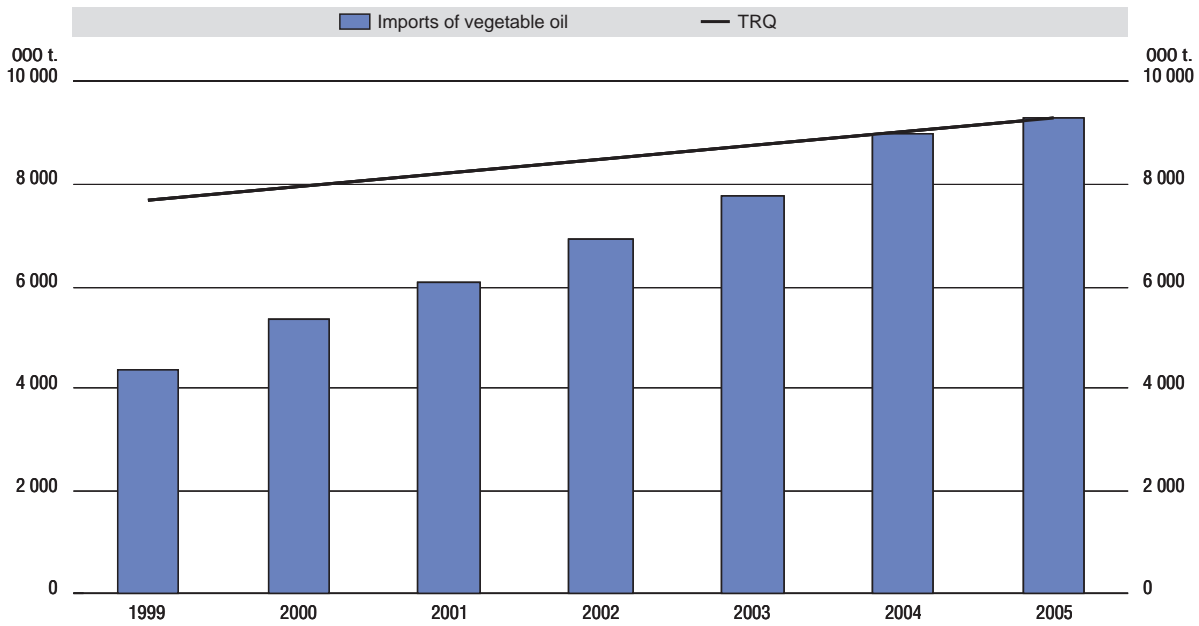
The results of the experiment for combined reforms in trade and domestic policies suggest that China's market for grain and oilseeds could offer far more significant growth potential over the next five years. World wheat and coarse grain prices would rise by about USD 10 per tonne and imports would reach the TRQ levels by 2001 and 2003, respectively. However, for the rest of the implementation period, the TRQs would continue to pose a binding ceiling on imports of wheat and coarse grains with trade beyond that level prevented by prohibitively high "over-quota" tariffs. As the TRQ limits are approached, the rise in world prices then begins to level off.

The experiment assumes a binding TRQ for coarse grains in total. In reality only maize imports will be limited by a TRQ with other coarse grains probably only subject to a flat tariff (*e.g.* a 9% *ad valorem* tariff for barley). The TRQs assumed for coarse grains have therefore been prorated from those applying to maize on the basis of the latter grain's import share of the last five years. Given the high substitutability of the various coarse grains in feed outlets, the prorated quota limits for total coarse grains may, however, be less binding than assumed, so higher imports of barley and other coarse grains could render the assumed import limit on coarse grains ineffective.

... and boost world vegetable oil prices...

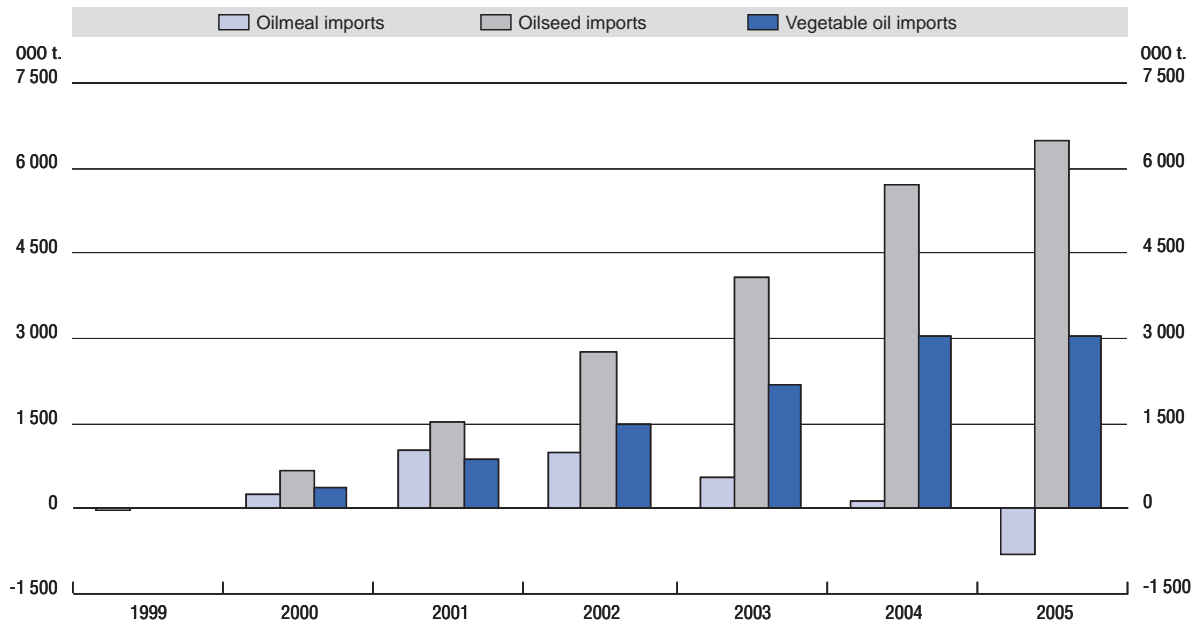
International oilseeds market would benefit too from trade and domestic reform. Prices for vegetable oils would increase by as much as USD 180 per tonne and prices for oilseeds by about USD 30 per tonne. As for grains, the effects of a simultaneous reform of trade and domestic policies would mean the TRQ for vegetable oils (the only TRQ in the oilseeds complex) eventually becomes a binding constraint to imports. However, this binding effect may also be overstated as the applied TRQ had to be pro-rated from the TRQ for soyabean oil. Given the high substitutability of vegetable oils, China's imports are more likely to shift from soya oil to other vegetable oils.¹ The main effects this could have on international and Chinese oilseeds markets are summarised in Figures III.2.1.1 and III.2.1.2.

Figure III.2.1.1. TRQs for vegetable oils are binding constraints to imports



Source: OECD Secretariat.

Figure III.2.1.2. Oilseed and oil imports to increase, oilmeal imports to remain flat



Source: OECD Secretariat.

The effects on China's internal rice markets are small largely because demand for this cereal has become unresponsive to changes in prices and incomes. In rural areas, the marginal capacity to consume more rice when incomes rise has been declining over the last two decades. Higher incomes have meanwhile tended to reduce demand in urban areas. The net change in rice imports is therefore minuscule – irrespective of changes in economic incentives for consumers. The impact on international markets is more significant but arises almost solely because of substitution with wheat and coarse grains. That is, rising world prices for wheat and coarse grains lift prices for rice. More price-responsive wheat and coarse grain consumers shift to rice as grain prices increase, boosting rice demand and prices outside of China. The main changes in prices and trade for cereals and oilseeds are summarised in Table III.2.1.1.

Table III.2.1.1. Summary of the results of various liberalisation scenarios

		I. Trade policy reform, higher income growth and domestic policy reforms	II. Trade policies, no wheat TRQ, higher GDP, plus domestic policy reforms	III. Trade policies, no TRQs, higher GDP plus domestic policy reforms
		Changes in 2005 relative to the baseline		
Grains				
Wheat imports by China	Million t.	3.26	3.26	11.93
Wheat price, international	US\$/t.	10.67	14.39	20.91
Rice imports by China	Million t.	0.03	0.02	0.02
Rice price, international	US\$/t.	14.53	17.53	19.69
Coarse grain imports by China	Million t.	6.96	15.51	13.90
Coarse grain price, international	US\$/t.	10.74	15.65	16.67
Oilseed complex				
Oilseed imports by China	Million t.	6.47	6.03	5.49
Oilseed price, international	World, US\$/t.	35.57	41.35	41.39
Oil meal imports by China	Million t.	-0.79	0.60	-0.10
Oil meal price, international	World, US\$/t.	1.23	12.68	9.68
Vegetable oil imports by China	Million t.	3.04	3.04	3.04
Vegetable oil price, international	World, US\$/t.	183.35	157.44	165.15

... but the net change in rice imports would still be tiny

The binding character of TRQs for grains raises two additional questions:

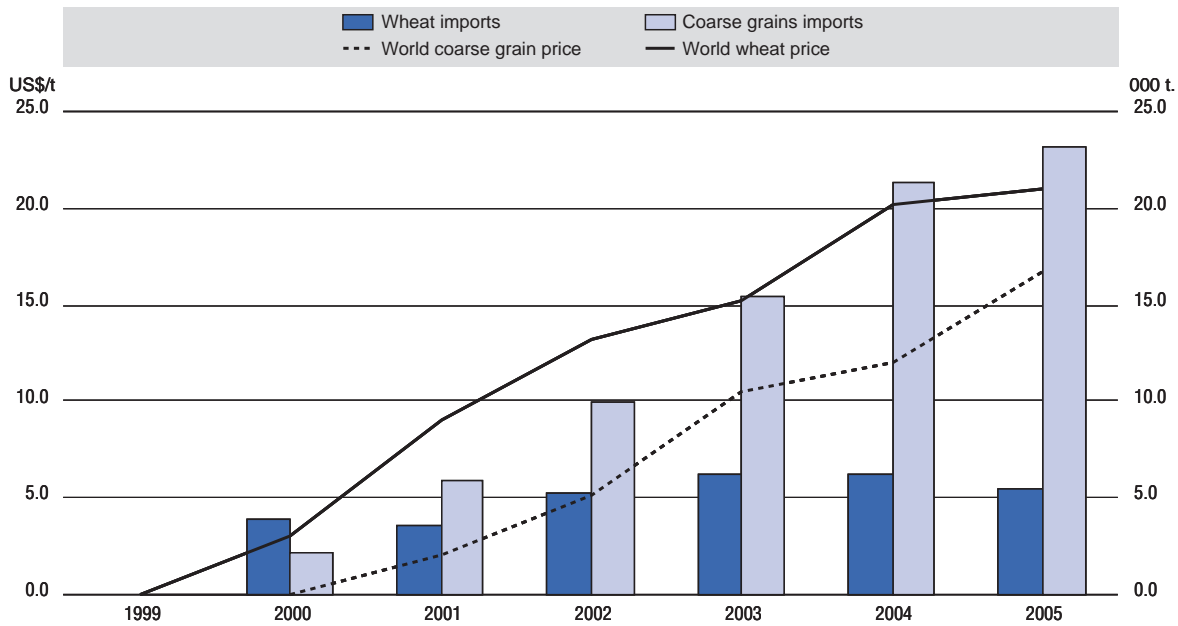
- i) What imports would result if TRQs for coarse grains in total were not binding? Exporters would be expected to shift to barley and other coarse grains as soon as the TRQ for maize limited their shipments.
- ii) What imports would result from a trade regime without any quantitative restrictions? The results of the first variant suggest a TRQ level of about 15 million tonnes (pro-rated from the maize TRQ of 4.5/7.2 million tonnes) – still some 10 million tonnes below the free trade level of about 22 million. Lifting the TRQ limits for coarse grains would also have a marked effect on world prices. Not only would coarse grain prices be boosted by freer trade but wheat prices would rise as well, because of the high degree of substitutability between the two grain sectors on international markets. It is calculated that unrestricted imports of coarse grains would add nearly USD 5 per tonne to world wheat prices, even if wheat imports remained limited by their TRQ bindings.

Completely free trade would raise grain imports by 26 million tonnes

The second variant aims to assess the impacts of complete free trade for both wheat and coarse grains (except for the small in-quota tariff of 3%). Combined with domestic policy reform this would increase China's total grain imports by about 26 million tonnes, comprising 14 million tonnes of coarse grains and 12 million tonnes of wheat (Figure III.2.1.3) to a total of about 40 million tonnes.

It is important to note that these simulation runs assume no other constraints, and that changes in production, consumption and trade occur only in response to economic incentives (changes in output and input prices as well as consumer incomes). For example, the model runs do not take account of the lack of transport infrastructure necessary to handle additional imports. The grain handling capacity of China's ports is estimated at only some 30 million tonnes per annum. Although some analysts believe this bottle-neck could be quickly overcome by more investment in port capacity, the lack of internal grain transport facilities would also tend to cap trade. Larger shipments of grain to consumers in the remote areas of China's hinterland could require an increase in the price paid by the final consumer to levels at which domestic production becomes competitive – even without border protection or domestic subsidies on fertiliser or water. Similar effects could arise from other policy changes, like a change in China's grain storage policy – a gradual reduction of China's vast domestic reserves could replace much of the projected grain imports.

Figure III.2.1.3. Complete free trade would increase grain imports by 26 million tonnes



Source: OECD Secretariat.

China should be growing less cereals and oilseeds and more vegetables

The policy options open to China during a five-year transition period should be sufficient to enable the gradual implementation of reforms. This could provide an unrivalled window of opportunity to choose a regime that liberates production patterns closer to the country's comparative advantages. With its labour-rich and land/water-deficient agriculture, China should be curbing the land and water-intensive production of cereals and oilseeds and turning towards more labour-intensive production of vegetables, where it does have a comparative advantage. The result could be a "win-win" situation bringing benefits to the broader economy and, by saving water and protecting marginal farmland, helping to conserving natural resources.

In summary, for OECD countries, the reform of China's market has potentially big implications for grain and oil-seed trade. The envisaged trade reform package is likely to increase internal pressures on policy makers, render domestic policies more difficult to maintain and are likely to promote domestic policy reform. A decomposition of the overall effects suggests that 50% of the envisaged increase in wheat imports is due to domestic reforms, for coarse grains domestic reforms would even account for 80% of the overall effect. As confirmed by essentially all forward-looking policy analyses presented in the *OECD Agricultural Outlook*, substantial benefits result from domestic reforms that are expected to accompany further trade liberalisation.

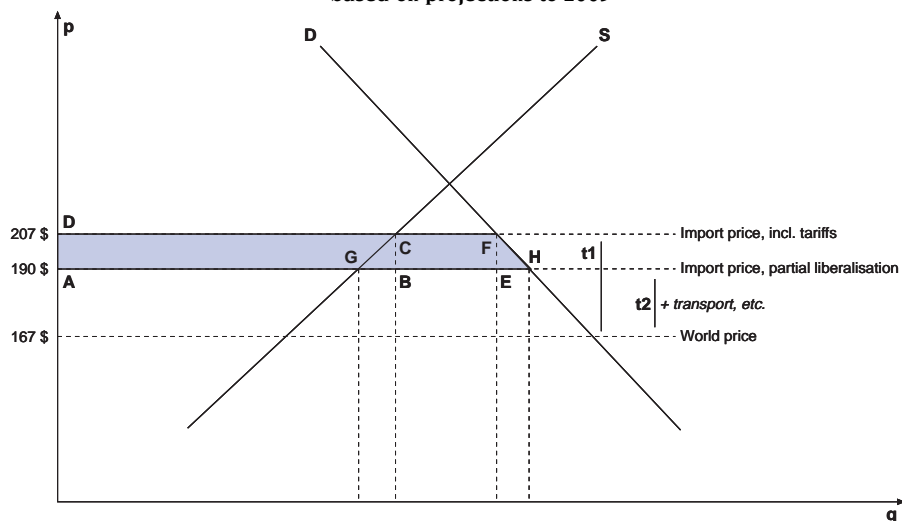
Box III.2.1.2. Trade liberalisation and food security in China

The impact of agricultural trade liberalisation on national food security is a source of concern for policymakers in many countries. Two dimensions of this concern are the effect of lower border measures on domestic food prices and the impacts of integration into one world market on domestic price variability.

1. What will happen to food prices?

Lower tariffs and larger import quotas are expected to increase access to foreign food supplies at lower prices and/or higher quantities. A first quantitative assessment suggests a marked downward pressure on domestic grain prices. Assuming a reduction in tariffs as envisaged in the WTO accession negotiations would mean that domestic wheat prices, for instance, would fall by 8% (USD 17 per tonne) compared with the baseline scenario of no trade liberalisation (Figure 1). Nonetheless, prices in China would still be above the world prices of USD 165 per tonne, largely due to remaining domestic policy distortions. This suggests even larger benefits for consumers particularly if domestic agricultural policies were to be undertaken in tandem with trade policy reforms. In total, consumers would have – from a cut in tariffs for food grains – an additional USD 4.5 billion at their disposal (AHFD). This is not a negligible contribution to their ability to buy food and thus to improve household food security.

Figure 1. Tariff reductions to result in lower wheat prices for domestic consumers, based on projections to 2005



2. How will the benefits be distributed among China's consumers?

An increase in consumers' surplus is a necessary but not a sufficient condition for improved food security. What is equally important is to know how these benefits are distributed over the various consumer segments. Available statistics suggests that private incomes are very unevenly distributed in China. The richest 10% of the population, for instance, have access to more than 30% of total income (row 1 of Table 1), while the poorest 10% have to live on only 2.2% of income. At the same time, the richest 20% spend only 42% of their income on food while food expenditure of the poorest decile accounts for 59% of their total income. The relative expenditure shares are even more polarised for staple foodstuffs. While the richest 20% spend about 12% for grains, grains account for almost 19% of food expenditure for the poorest 10% of the population (row 3 of Table 1). This suggests that the poorest consumers are likely to benefit the most from lower prices for grains in particular and from lower food prices in general.

Table 1. Income distribution and food expenditure in China

	Row No.	Lowest decile	Lowest quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile	Highest decile
Per cent of income (%) in 1995	1	2.20	5.30	9.65	14.50	21.50	46.85	30.9
Share of income spent on food (%)	2	59.0	57.0	51.5	50.0	47.0	42.0	n.a.
Share of income spent on grains (%)	3	18.8	17.7	15.4	14.2	13.3	11.9	n.a.

Source: World Bank and State Statistical Bureau (SSB).

Box III.2.1.2. Trade liberalisation and food security in China (cont.)

An empirical analysis confirms this hypothesis. If food prices fall in China, low-income households with the highest food expenditure share are likely to benefit most. Lower food prices lift incomes in the poorest segment by almost 6% while the real income effect for the richest segment is equivalent to merely 2% (Table 2). The income effects from lower grain prices are small, but the differences between the poorest and the richest population segment are even more significant. The poorest consumers would experience a real income effect of almost one per cent, while the additional benefits for the richest consumers would be equivalent to a mere 0.06% of their income (Table 2).

Freer trade in food and agriculture would also have an impact on overall income distribution. Incorporating the real income effects into the existing distribution would render the following change: the poorest 10% of the population would gain a slightly larger share of overall income (from 2.20% to 2.32%), while some of the richer consumer segments may have a slightly smaller share (Table 2). Overall welfare would however increase and all consumers would be better off regardless of their current income, even though at different degrees. Moreover, the increase in purchasing power through lower food expenditures (real incomes increase between 5.9 and 2.1%) opens up new consumption opportunities. Lower income segments are likely to spend the biggest part of the additional income on food, which adds to food security of these groups. Richer income segments are likely to spend much of their additional purchasing power on non-food items, which should provide – *via* the consumption multiplier effect – an extra stimulus to overall economic growth.

Table 2. Distributive effects of tariff reductions through lower food expenditure in China

	Row No.	Lowest decile	Lowest quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
Income effect (%) of lower grain prices	1	0.93	0.73	0.35	0.21	0.13	0.06
Income effect (%) of lower food prices	2	5.90	5.13	4.12	3.50	2.82	2.10
Per cent of income after liberalisation (%)	3	2.32	5.54	9.99	14.92	21.98	47.56

Source: Secretariat's calculations based on World Bank and SSB data.

It should be noted that these calculations do **not** account for possible adverse effects on producers. For a complete cost-benefit analysis, both a possible loss in total producers' surplus (AGCD) and the distribution of this loss would need to be taken into account. Insofar as farmers consume what they produce, lower market prices mean higher opportunity costs, but do not affect food security in terms of physical access to food. More importantly, these calculations do not consider the negative impacts on the landless poorest of the poor in rural areas, whose income and livelihood depend on farm prices. The statistical information for a quantification of the impacts on these population segments is very fragmented or entirely missing.

How will trade liberalisation affect the variability of prices?

Lowering border measures will also strengthen the links between China's food market and the much larger world market for basic foodstuffs. Larger markets can, for instance, help absorb price swings caused by abrupt changes in production of a particular climatic zone. Lower price variability, in turn, is a key contributing factor to food security. More flexible supplies mean that the probability of food prices moving into unaffordable ranges will decline and thus reduce the vulnerability of low-income consumer segments. However there is also the possibility of an increased transmission of price swings from the international market. Lower border measures provide less protection against price swings in the international markets and may bring about increased volatility for China's domestic market. Which of the two effects outweighs the other is essentially an empirical question and calls for an answer based on an empirical analysis.

The OECD Aglink model was used to measure possible changes in price variability. A first experiment looked at the impacts of a series of random shocks originating in the world wheat market, with and without open borders. In the second experiment, China's wheat yields were subjected to a series of random shocks and then the impacts of shocks on both the domestic and the international markets were measured. The results of the first scenario suggest that China's participation in the world wheat market would lower international price volatility. The coefficient of variation for international wheat prices would decline from 2.96 to 2.74 and the price swings would dissipate faster over time (Table 3). However, this scenario also suggests that a price shock in the international market would be more fully transmitted into China's grain economy. The second scenario underlined that there are important benefits for China in the case of a supply shock that originates in its domestic food market. If China's wheat market were fully integrated into the world grain economy, the enlarged market would help absorb such a shock faster and more effectively.

Box III.2.1.2. **Trade liberalisation and food security in China** (*cont.*)

In summary, this suggests that open borders may make China's grain economy more susceptible to international shocks, but more resilient to domestic ones. However, even if price variability were to increase in response to an international shock, other countries would benefit from less volatile prices if China is integrated into the international market.

Table 3. **Trade integration and price variability (coefficient of variation) for wheat**

	Price variability in China Coefficient of variation		Price variability in the international market Coefficient of variation	
	<i>open</i>	<i>closed</i>	<i>open</i>	<i>closed</i>
International supply shock	2.69	1.39	2.74	2.96
Domestic supply shock	3.09	6.70	3.09	1.73

* Based on 30 random supply shocks.

The empirical analysis suggests that trade liberalisation can provide an important contribution to China's food security. More specifically, lower border measures should: *i*) reduce imported food prices, *ii*) help increase the purchasing power of low-income consumers; and *iii*) help reduce the extent of price swings resulting from a domestic supply shock. Against this, lower border measures also mean that price swings originating from the world market would be transmitted more completely into China's domestic market and may cause larger price swings for domestic consumers.

3. India

Macroeconomic situation

Following the general elections in September-October 1999, the BJP and its allies formed a new government, which immediately embarked upon major institutional and structural reforms and opening the economy to the outside world. An important step in this respect was the liberalisation of the insurance and financial markets in 1999. The slow pace at which India has implemented policies on deregulation, improving the legal framework and transparency has hindered foreign investment in infrastructure such as power, water, sanitation and waste management.

Preliminary estimates indicate that GDP grew by about 6% in 1999,² slightly lower than the 6.8% recorded in 1998-99. The continued strong growth can be largely attributed to a recovery in the industrial sector, in particular in cement, vehicle and steel manufacturing, and to a lesser extent in the service sector. During the 1990s the service sector has shown a robust rate of growth and in 1999 accounted for about 45% of total GDP. Growth in the industrial sector was boosted by further progress in implementing economic and structural reforms. The construction sector also showed a strong performance in 1999 with GDP growth accelerating by 9% compared to the previous year. However, growth in the agricultural sector slowed sharply to about 1%, down from the remarkable growth achieved in 1998-99 of 7.2%. The rate of inflation fell to less than 4% in 1999, the lowest rate recorded since reforms started in 1991, but is expected to pick up in 2000-01 as domestic demand recovers. The exchange rate remained relatively stable in 1999, with only a small depreciation of about 3% in the rupee (R43.5:1\$).

Traditionally, India's development strategy has emphasised government intervention and import substitution. Protectionism has isolated India from the rest of the world for several decades after independence, and its share of world trade has fallen to less than 1%. Since the mid-1990s total merchandise exports, as well as agricultural exports have increased steadily. In 1998-99 total exports rose by about 9%, while agricultural exports increased by a modest 4%. However, the massive depreciation of the currencies of the export oriented south-east Asian economies in 1998 has dramatically reduced India's

export competitiveness, with provisional estimates indicating that total merchandise exports slumped by 26%, while exports of agricultural and food products shrank by 42% in 1999 compared to the previous year. In recent years the downward trend in agriculture's share of total exports continued and was estimated at 14% in 1999. Other factors that have contributed to the sharp fall in agricultural exports include both internal and external obstacles such as infrastructural bottlenecks, bureaucratic problems, quality and hygiene concerns, as well as external trade barriers to farm and textile exports.

Despite the adverse spillover effects of the Asian crisis and the economic sanctions,³ the current account deficit in 1998-99 was estimated at a modest 1% of GDP. However, with the sharp rise in oil prices in 1999, the current account deficit is expected to reach 1.6-1.8% of GDP for the 1999 fiscal year. The rise in the current account deficit is not a serious concern, and can be easily covered by the rise in net capital inflows, which increased by more than one-third in 1999. On the demand side, following a slump in 1997, private consumption recovered in 1998 with growth in real consumption doubling to 5.1%. While total investment declined in 1998 due mainly to the slow-down in the industrial sector, in 1999 investment is estimated to have increased in response to the stronger performance in the manufacturing sector. With the recovery in private aggregate demand, investment growth is expected to increase in 2000-01. One of the key policy goals of the new government is to increase foreign direct investment inflows to USD 10 billion annually from their current level of about USD 3.5 billion. A significant rise in FDI is crucial if India is to maintain the high rates of economic growth achieved during the 1990s.

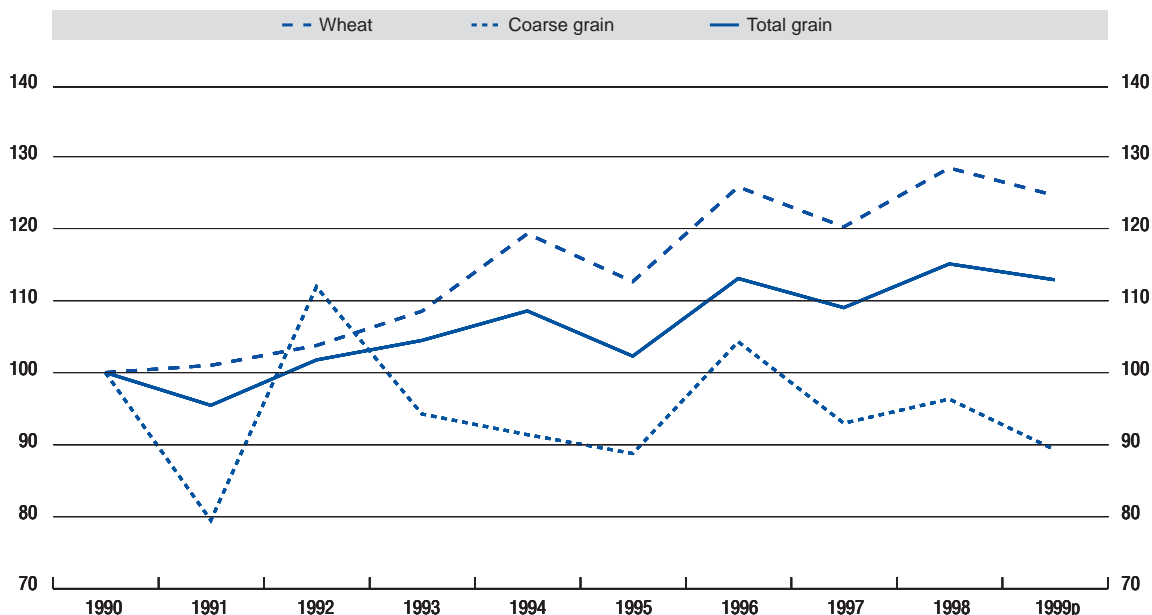
Some further liberalisation in India's general trade policies occurred in 1999. Some of the more significant changes include the removal of licence requirements for over 894 import items, the replacement of the export processing zones by free trade zones, the extension of the zero duty export promotion scheme to chemicals and textiles, as well as the growing recognition of services as an important component in exports.

Agriculture and the agro-food sector

Agriculture is the backbone of the Indian economy and accounts for about 26% of India's GDP, and almost 65% of employment. Almost 75% of the population live in rural areas and depend on agriculture and agricultural related industries for a living. The overall growth in agricultural output in 1999 is estimated at only 0.8%, largely due to lower rainfall, estimated at 4% below the long run average. Crop production accounts for over three-quarters of gross agricultural output, with foodgrains, oilseeds, sugar and vegetables accounting for over 80% of crop output. Despite the severe floods in some of the major crop growing states in 1998, foodgrain production reached a new record high of 203 million tonnes, compared to 192 million tonnes in 1997. For 1999 foodgrain production is estimated to have fallen by about 1.9% compared to the previous year, to 199 million tonnes, but still well above the average annual level of production during the 1990s (Figure III.3.1).

More specifically, production of wheat and coarse grains fell by 2.8% and 7%, respectively, while the increase in rice production of 1.7% was insufficient to offset the overall fall in foodgrains. The fall in output of wheat and coarse grains in 1999 can be attributed to a contraction in the acreage sown due to rainfall deficiency in the initial phase of the monsoon. Moreover, preliminary estimates indicate that output of pulses declined by 8.2% in 1999 to 13.6 million tonnes compared to the previous year. Production of fruits and vegetables is also very important in India, and India accounts for about 10% of world production of fruit crops and is the second largest producer, next to China, of vegetables. In 1998-99 production of fruits and vegetables reached a record high of 50 and 85 million tonnes respectively, of which, potato production accounted for almost 24 million tonnes. An increase in sown areas and rising productivity have been mainly responsible for the increase in output, nevertheless, there is an enormous scope for reducing post-harvest handling losses. Some estimates indicate that post harvest losses can be as high as 15-20% of production, of which, poor post-harvest handling practices account for about 37% of the losses (storage, grading and packaging). These losses are mainly due to the lack of post harvest infrastructure, especially cold storage facilities and cold transport facilities for perishable fruits and vegetables. Substantial efforts are being made to increase the cold storage capacity through various financial and other incentives.

Figure III.3.1. Total grain, wheat and coarse grain production 1990-1999
1990 = 100



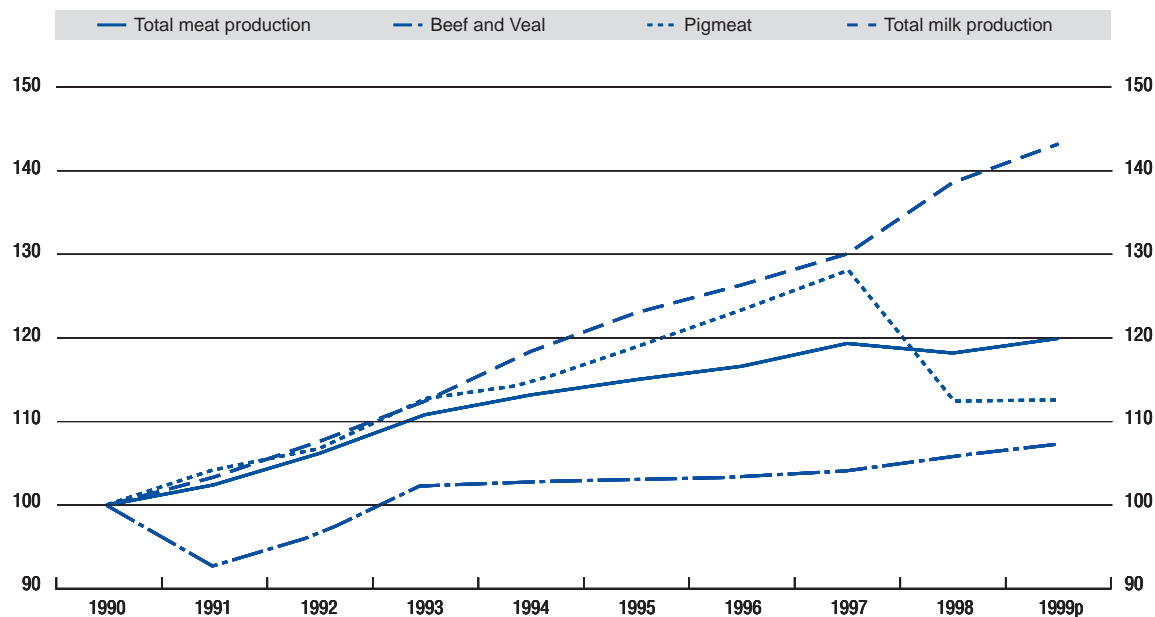
Source: OECD.

As regards the other major crops, oilseed production declined by over 14% in 1999 compared to the previous year. This fall in output can be attributed to a sharp fall in groundnut production in Gujarat, and to a lesser extent a fall in soyabean production, while production of rapeseed/mustard rose marginally. The production of sugarcane is estimated at a record 315 million tonnes in 1999, an increase of almost 7% over 1998. This is expected to raise overall sugar production by about 6% to 16.5 million tonnes and will contribute to carry-over stocks which should improve domestic availability and price stability. While the production of jute and mesta have fluctuated widely in the 1990s, following a sharp decline in 1998, production increased by about 9% in 1999 to reach 10.6 million tonnes. Cotton production remained relatively stable in 1999, falling marginally to 12.1 million tonnes. India is the world's largest producer of tea and is the fourth largest exporter, exporting about 24% of its annual output. Due to very dry weather at the beginning of 1999 followed by floods, especially in the north-east Region, tea production is estimated to have fallen by about 7% in 1999. Of the other crops, coffee and rubber production increased in 1999.

The livestock sector is an important part of the agricultural sector and accounts for 25% of total agricultural output. India has one of the largest livestock herds in the world and is the largest producer of milk. In 1998 total milk production reached 75 million tonnes, while per capita availability increased to 211 grams per day. Milk production increased by a further 3% in 1999 from the record high of 1998 (Figure III.3.2). Meat production increased to 4.6 million tonnes in 1998, due to higher output of all the major meats, especially pigmeat and beef production. The rise in meat production continued in 1999 with output rising to 4.7 million tonnes, due mainly to an increase in output of poultry meat, and to a lesser extent beef.

One of the major concerns in India is the relatively low level of crop and livestock productivity compared to international levels. Over the last five years the rate of growth in productivity for all the major crops has remained relatively stable or declined, while there has been only a marginal improvement in productivity in the livestock sector. In an attempt to reverse this downward trend, the government has introduced several programmes aimed at the greater use of high quality seeds and breeding stock as well as enhancing the extension service.

Figure III.3.2. **Production of livestock products, 1990-1999**
1990 = 100



Source: OECD.

Structural Adjustment Policies

With India's population expected to reach 1.5 billion people by 2050, there is ever growing pressure on the limited agricultural resources for food production. The success of the green revolution which helped India to avoid famine is beginning to fade and growth in agricultural production is slowing. There is growing concern over the need for restructuring and rejuvenation of the agricultural sector, by adopting modern technologies to stimulate production, processing, and marketing of agricultural products. The current land ownership pattern largely reflects the historical and political developments since independence, with a large number of small fragmented farms in the most populous states, and large farms in other states. More specifically, estimates indicate that there are in excess of 100 million agricultural holdings in India, of which, 91% are small farms (< 4 ha), and less than 2% are classified as large holdings. The overall trend indicates a gradual decline in the number of large farms and an increase in the number of marginal farms (< 2 ha) as well as an increase in land fragmentation. This trend has been aided by the land reform laws which have tended to set specific upper size limits on individual holdings. The overall impact of these policies has been an increase in land fragmentation and a gradual reduction in the average farm size.

The role of irrigation is crucial to increasing cropping intensity and to producing more foodgrains per hectare of land. Almost 40% of the agricultural land in India is irrigated, and of the irrigated land, about one-fifth is affected, in various degrees, by salinity and water logging. Approximately 35% of the affected land lies in the plains of the Indus and Ganges rivers which are an important bread basket for India. This situation is expected to worsen, further reducing the availability of arable land for crop production, as the five main food crops, wheat, rice, maize, potatoes and soyabeans have a low salt tolerance. Much of the irrigation canal system is in poor condition and inefficient due to a lack of proper maintenance. Some estimates indicate that only 30-40% of the water entering the canals actually reaches the crops. According to a

recent report from the World Bank a 10% improvement in water use in India would add an extra 14 million hectares to the total irrigated area. Moreover, there is little new investment in the irrigation system due to a lack of funds. While under-utilisation of the irrigation potential continues to persist, several measures have been taken to extend the benefits of irrigation to more agricultural areas. These include the promotion of better water management practices, installation of sprinkler and drip irrigation systems in water scarce areas and greater farmer participation in irrigation water management.

Domestic Support Policies

The main tenant of agricultural policy has been to ensure adequate food supplies and in this respect to attain self sufficiency in the production of the main foodgrains. India's agricultural policy objectives are based on a number of important cornerstones: to ensure food security, to reduce regional inequalities, to remove institutional obstacles to agricultural growth, and to promote the adoption of new technologies in agriculture. In addition to the policies relating to land reform and the development of rural infrastructures, there has been substantial intervention in agricultural markets, as well as significant input subsidies on fertilisers, power, water and credits. With the general elections in the fall of 1999, there was some increase in government spending on fertiliser, power and credit subsidies. As regards power subsidies almost one-third are allocated to agriculture. A reduction in the transmission and distribution losses in the sector, which are estimated at up to 20% of production, would increase the availability of power and allow for a significant reduction in consumer prices. In recent years, about 50% of the fertiliser subsidies were paid to the manufacturing industry, through the price retention scheme, while the remainder is paid to farmers. On 1 March 2000, there was some streamlining of the price retention scheme and prices for fertilisers rose by about 15%.

Price policies have also been an important plank of agricultural policies in India. In essence, price policies have had a dual function: to provide an incentive for producers to increase production, while at the same time to ensure reasonable prices to consumers. In times of food shortages, agricultural price policies were aimed at protecting consumers by keeping prices, in particular foodgrain prices, low. Price policies also encouraged higher production through the provision of minimum support prices for a large number of crops. Part of the agricultural policy domain also includes the food management system, which involves the procurement, storage and public distribution of food grains at "reasonable" prices. During periods of shortages, the minimum price support and procurement operations are augmented with compulsory procurement, a levy on millers, and restrictions on the movement of foodgrains between states. Foodgrains are then distributed at subsidised rates through the Public Distribution System (PDS). Several attempts have been made in recent years to streamline the PDS, through better targeting of recipients. The government is also considering moving away from the traditional price policies to support the poor, to more broad based safety net policies, as well as the introduction of a system of food coupons.

More than 90% of credits are provided to agricultural producers through Co-operative and Commercial Banks, with the remainder provided through Regional Rural Banks. In order to improve the access to credits for small and marginal farmers the Government has mandated the Commercial Banks to set aside 18% of their total annual lending for the agricultural sector. The more targeted credit measures introduced in 1998 have contributed to the 20% increase in loans to farmers in 1999.

In late 1999 a number of important initiatives relating to crop insurance (National Agricultural Insurance Scheme) were introduced. The new initiatives cover all farmers and all crops including foodgrains, oilseeds, horticultural and commercial crops. Several new incentives for agriculture and rural development were outlined in the budget including a new credit subsidy scheme for the construction of cold stores for agricultural products, a five year tax holiday on profits from investments in cold storage facilities and a 30% deduction from profits for a further five-year period, as well as increased funding for watershed development and an accelerated irrigation project programme.

About 300 million people, or 30% of the population live below the poverty line, of which, almost 80% live in rural areas. Many of the programmes that focus on rural areas, such as the Integrated Rural Development Programme (IRDP) and the Rural Landless Employment Guarantee Programme (RLEGP),

are essentially anti-poverty programmes and their main objective is to improve the economic wellbeing of the poor. While poverty is widespread throughout the Indian continent, the incidences of rural poverty tend to be more concentrated in the more agricultural based states in the North and the East.

International Policy Environment

Despite the introduction of economic reforms and liberalisation in 1991, trade measures have been of a rather *ad hoc* nature during the 1990s, with both quantitative and qualitative restrictions on exports and imports. This has resulted in exports being rather erratic and imports difficult to predict leading to alternating periods of shortages and surpluses. However, in recent years great efforts have been made to develop a more stable and predictable trade regime to facilitate agricultural development. In 1999, further progress was made in reducing both internal and external barriers to trade in agricultural and food products.

Concerning the WTO, India signed an agreement on 28 December 1999 to phase out quantitative restrictions on over 1 400 import items, including agricultural products as well as a wide range of consumer products, by April 2001, two years ahead of schedule. In addition, the government has indicated that it will cut tariffs, currently at a weighted average of 26%, by about 50% by 2002. India has also reached bilateral agreements with six of its trading partners; Australia, Canada, EU, Japan, New Zealand and Switzerland, to phase out its remaining import restrictions by March 2003. The WTO dispute settlement panel ruled in 1999 that India had no valid balance of payments problem to justify countervailing controls on imports.

In December 1999, the government increased the import duty on refined edible oils from 16.5% to 27.5%. The import duty on crude oils was left unchanged. The purpose of the duty increase is to support the domestic industry for processing and refining of oilseeds, and to limit imports of refined oils. This change in the duty of 10 percentage points is likely to lead to a change in the structure of vegetable oil imports and favour crude oils at the expense of refined products. The government also increased the levy on sugar imports from 27.5% to 40%. However, the countervailing duty on imported sugar remains unchanged at USD 19.5 per tonne.

Assessment and outlook

Strong economic growth continued in 1999-2000, with preliminary estimates indicating that GDP grew by about 6% over the previous year. Unlike 1998-99, when a recovery in the agricultural sector was the main spur to growth, a better than expected performance in the industrial sector, in particular manufacturing, was the basis for the good economic performance. A continuation of the downward trend in the inflation rate has also contributed to the improved macro economic situation. While the exchange rate has remained relatively stable over the last two years, the large depreciation of the currencies of other east Asian economies has increased competition on export markets. The loss of competitiveness on export markets in addition to the range of internal obstacles to the movement of agricultural products have contributed to the slump in agricultural exports in 1999.

After the surge in agricultural production in 1998 the output growth rate fell to 0.8% in 1999. Foodgrain production fell by 1.9% to 199 million tonnes, mainly due to a decline in output of wheat, coarse grains and pulses, while the production of rice increased marginally. The main reasons for output decline is a contraction in the areas sown together with below normal rainfall during the growing season. Of the other major crops, production of oilseeds, tea and vegetables fell, while sugarcane, coffee and rubber increased substantially. As regards livestock products, after the sharp rise in milk and meat production in 1998, preliminary estimates indicate that production increased marginally in 1999.

The farm structure in India largely reflects subsistence farming with over 90% of agricultural holdings of less than 4 hectares. Moreover, the general trend is toward a further decline in the number of large farms and an increase in small and marginal farms. Irrigation plays a crucial role in cropping intensity and about 40% of agricultural land is irrigated. However, the lack of funds for proper maintenance has reduced the efficiency of the irrigation system and led to high water losses. Several new programmes are being discussed to reduce losses and to improve water management practices.

Price policies play an important role in the overall agricultural policy mix and have the dual function of ensuring low prices to consumers, while at the same time providing an incentive to producers to increase output. There are some indications that the government is moving away from the traditional form of price policies to support the poor, to more broad based safety nets, with further streamlining of the PDS and the possibility to introduce food coupons. Apart from some increase in credit and irrigation subsidies in 1999, other input subsidies remained unchanged as did the general price support policies. A number of new crop insurance schemes were introduced during 1999.

While considerable progress has been made in implementing macroeconomic reforms, renewed efforts are needed to speed up the process of structural and institutional reforms, and the liberalisation of internal and external trade. The removal of state restrictions on the movement of agricultural products, as well as improving quality standards and further liberalisation of the domestic market would improve the terms of trade for many farmers and would encourage higher production of crops and livestock. While the food processing sector is small and highly fragmented, there is growing awareness among policymakers of the need for increased investment in order to modernise and increase scale, to realise the value added and export potential of the sector. Moreover, increased investment in general infrastructure, especially in rural areas, as well as in marketing structures and human capital is critical for maintaining high growth, alleviating poverty and addressing the problem of the degradation of natural resources.

4. Russia

Macroeconomic situation

GDP grew by 3.2% in 1999, but was still lower by 2% than in pre-recession 1997. The recovery was mainly led by industrial output, which grew by 8%, benefiting from the sharp depreciation of the rouble following the August 1998 crisis.

A prudent monetary policy by the Central Bank, together with a strengthening of the current account and fiscal deficit reduction, have helped to bring down inflation and maintain a relatively stable exchange rate. Annual (December-on-December) CPI inflation fell to 36.5% compared to 84.4% in 1998. Federal budget performance improved in 1999, contributing to the fall in the overall fiscal deficit to 4% of GDP. The trade balance and the current account strengthened. While higher oil prices on world markets enabled Russia to keep the total value of exports at the 1998 level, imports collapsed by over 30%, reflecting the sharp depreciation of the rouble in 1998 and depressed domestic demand.

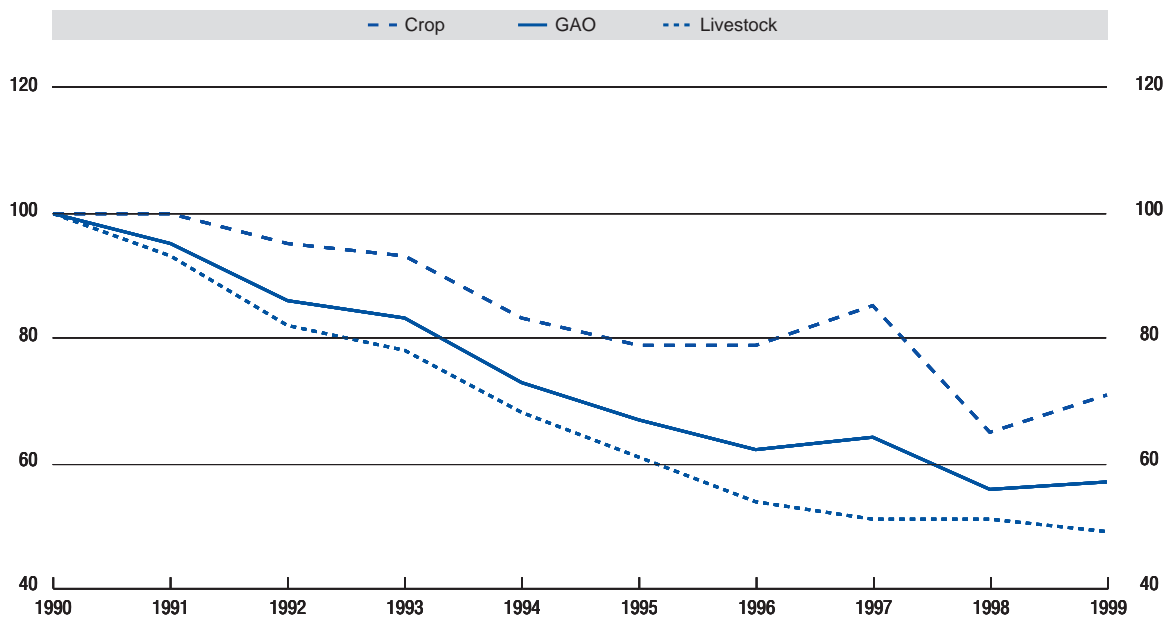
Real household incomes fell and poverty increased in the first half of 1999. In the second half of the year the situation started to improve, as reflected by the fall in the share of people below the officially determined poverty level from 38% in the first quarter to 26% in the last quarter of the year, compared to 22% in the first half of 1998. However, according to official figures average real incomes fell by an estimated 15% and real wages by 23% in 1999. The industrial recovery helped to reduce slightly the rate of unemployment to 12% at the end of 1999.

Agricultural and agro-food situation

The GAO rose by 2.4% in 1999 with crop production rising by 9% and animal production falling by 3.7%. However, the apparent rise in GAO reflects to a large extent the dramatic fall in agricultural production in 1998 as the 1999 GAO was still lower by 11.1% than in 1997 (Figure III.4.1). Grain production rose to 54.7 million tonnes from an exceptionally low level of 47.9 million in 1998, but remained well below the 1996-1999 average of 65.1 million tonnes. There was a substantial rise in production of sunflower, sugar beet and vegetables, due to both higher yields and larger sowing areas.

A relatively good harvest, combined with an improvement in agricultural terms of trade for the second consecutive year, helped to improve the financial situation of large farms. This has been indicated by the fall in the officially registered share of loss-making agricultural enterprises from 88% in 1998 to 59% in 1999.

Figure III.4.1. Evolution of agricultural production in Russia
Index 1990 = 100



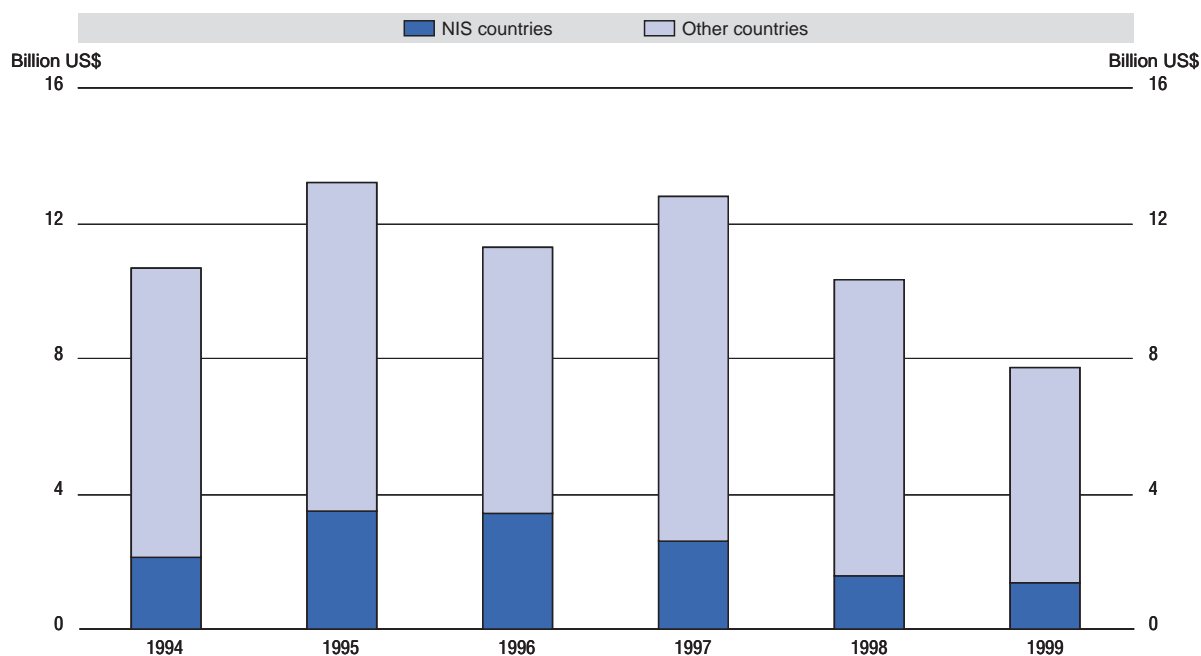
Source: OECD Secretariat.

Both meat and dairy production in Russia continued to decline. In the second half of 1999 some rise in hog numbers was registered, boosted by higher producer prices, food aid supplies including of corn, soybeans, soybean meal and other feed grains, and grain imports from Kazakhstan through commercial and barter arrangements. However, the sustainability of this rise is questionable as food aid provisions are dwindling and domestic feed grains remain in short supply. A low grain harvest in 1999, following a miserable one in 1998 has cut grain stocks, especially for feed grain, leading to sharp rises in feed grain prices in the first quarter of 2000 and, thus, undermining the profitability of hog and poultry raising. Moreover, the majority of large meat and dairy farms is facing an insolvency problem. Their bank accounts are frozen. Most of them resort to barter trade arrangements, which makes them less responsive to market signals while meat and dairy production continues to shift towards small-scale household production. Much of this is subsistence production with only a small proportion of the produce destined for the markets.

Changes in food consumption reflected a fall in real incomes as consumption of low-priced bread and bakery products, eggs, potatoes and vegetables increased or stabilised and consumption of more expensive livestock and dairy products fell sharply in the second half of 1998 and continued to fall in the first half of 1999, albeit at slower rates. Consumption data are expected finally to show stability in livestock and dairy consumption in the second half of 1999 as real incomes began to grow from the very low levels prevailing at the start of the year.

Russian food industry output rose by 7.5%, benefiting from a sharp depreciation of the rouble. Despite lower household incomes and domestic demand in 1999, a 40% reduction in agro-food imports is indicative of higher aggregate demand for domestically produced food products. In particular, this import-substitution effect enhanced production of margarine, canned meat, granulated sugar, cigarettes, baking yeast, beer, pasta, and food concentrates whose output rose by between 20% and almost 60%. However, meat and dairy production (with the exception of canned meat and ice cream) continued to decline.

Figure III.4.2. Russian agro-food imports, 1994-1999



Source: Goskomstat, Moscow.

In value terms, Russian agro-food imports fell again in 1999 and were 40% below the pre-crisis 1997 level (Figure III.4.2). The fall was partly due to a reduction in quantities of agro-food products imported, but also to a fall in world prices, subsidies applied by the European Union on beef and pork exports to Russia and an inflow of food aid. But with agro-food imports valued at USD 7.7 billion in 1999, Russia remains one of the main export markets, in particular for raw sugar, meat and dairy products.

The relative shares of imports from the NIS ("near abroad") and other ("far abroad") countries remained almost at the pre-crisis level, meaning that the fall in imports affected these two groups of countries roughly in the same proportion. There has been a substantial change in the structure of food imports with rising shares of unprocessed agro-food products, such as raw sugar, carcass meat and raw tobacco, in total agro-food imports. This is due to continued requirements of the domestic processing sector to cover the deficit in raw materials.

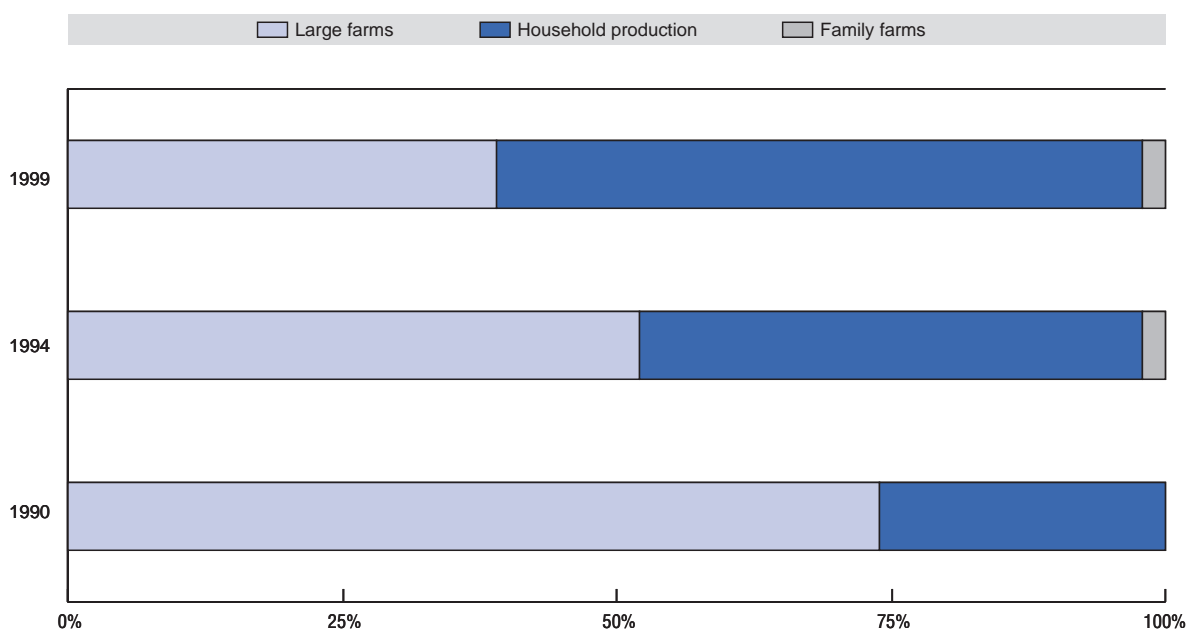
Structural adjustment policies

In 1999, there was no major progress in farm restructuring and the deadlock on land legislation continued. About 10% of agricultural land is undoubtedly privately owned either by family farms (6%) or household producers (4%). Another 56% is owned collectively by large agricultural enterprises organised in the form of share-based ownership where land and non-land assets are owned by collectives, who are present and former employees. The remaining 34% of land is state-owned. Almost one-half of the state-owned land is used by large agricultural enterprises and the remaining land is almost equally divided between private users and state land reserves. Only about 5% of previous large agricultural enterprises' employees decided to leave the enterprise and to establish their own family farm. The number of family farms has tended to decline in more recent years. Some liquidated family farms continue farming activities as household producers, which allows them to avoid taxes.

The role of household producers has constantly been growing and their contribution to the GAO grew to about 59% in 1999 (Figure III.4.3). Their number is 16 million (excluding small gardens and orchards) owning on average about 0.4 hectares. Quite often they supplement their own land with land leased from local administrations and, formally or informally, from large farms. The average size of about 5 million most active household farms is almost 5 hectares.⁴ Rough estimates suggest that households are actually using more than 20% of agricultural land in Russia, of which they own just 4%. The distinction between most active household producers and small family farms is purely legal (in contrast to family farms, household producers are not registered as legal entities and do not pay profit taxes), as the difference in the scale of operation between them seems to be disappearing.

Only about 10% of large farms have been truly restructured through one of the following ways: the break-up of large farms into smaller technologically integrated production units; the concentration of large farm land and property entitlements in the hands of a limited number of owners by means of the purchase, exchange or leasing of entitlements; or the partition of large farms into household plots. One of the major problems encountered is the financial insolvency of large farms. According to official estimates, their total outstanding debt totalled Rb 182 billion (about USD 6.4 billion) at the beginning of March 2000. In many cases debts exceed the value of annual sales. The law on insolvency, effective from 1 March 1998, provided some possibilities for farm restructuring, but no practical steps had been taken by March 2000. Instead, a part of agricultural debts have been written-off again. This time debts amounting to Rb 3.5 billion (about USD 120 million) and consisting of 1995 commodity credits, budget loans due in 1999, centralised credits received between 1991 and 1994 and part of regional bonds were written-off according to the government directive of 29 November 1999. As of March 2000, a new bill is being prepared on the restructuring of large farms' debts to federal and local budgets and to extra-budgetary funds. While this new proposal relates to "debt restructuring", it is almost certain that, as on previous occasions, it will imply the writing-off of a substantial part of debts. The write-offs combined with the extensive system of preferential credits subsidised by the state, have impeded the development

Figure III.4.3. The share of GAO by the three main farm types in Russia



Source: Goskomstat, Moscow.

of financial discipline among agricultural producers, increased the risk of lending to agricultural producers, and crowded out commercial banking activities in rural areas.

The discussion on the Land Code has not made any progress in 1999. As of March 2000, the discussion on the possible approval of the compromise version of the Land Code that both the Duma and Kremlin agreed upon in 1998 has been revived. The possibility of a national referendum on the sale of agricultural land was mentioned by then acting President Putin in February 2000, but this proposal has been unanimously criticised by various agrarian groups represented in the State Duma. As a result, agricultural land sale transactions have been extremely limited, even in regions which have decided to introduce more progressive land legislation at the local level (among others Saratov, Samara and Tatarstan).

Domestic support policies

In 1999 there were no major changes in policies supporting agricultural production in Russia. Agriculture is still not considered to be part of a market economy. The government continues to issue decrees “on the urgent measures to ensure spring sowing and bringing in the harvest” and “on measures to provide agricultural producers with pesticides and fertilisers”. The Ministry of Agriculture and the Ministry of Fuel and Energy reach agreements on “physical delivery to the provinces of fuel and lubricants” and on monthly schedules of deliveries. The largest proportion of financial support for agriculture is meant to support large farms, not differentiating between economically viable and bankrupt ones, crowding out the activities of the private sector and preserving the dependence of large farms on federal and regional authorities.

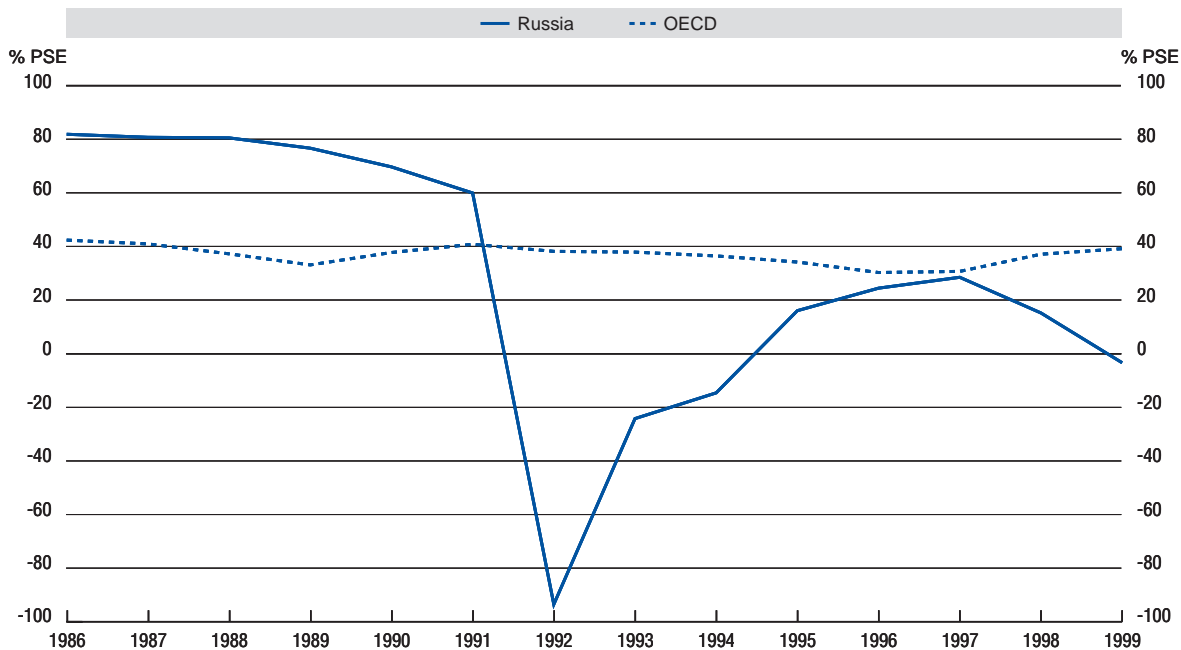
The Soft Credit Fund for the agro-food sector continued to extend loans to farmers at a highly subsidised rate of a quarter of the Central Bank of Russia refinancing rate. These loans, the main source of seasonal lending for agriculture, were disbursed to farmers by five banks, including by the *de facto* bankrupt SBS-Agro. Sound lending principles are not applied with a significant part of credits in default. In 1999 the Fund released Rb 4.6 billion in soft credits, compared to 6.1 billion in 1998. The fall was due to the low repayment rates of 1998 loans, which reduced the Fund's resources, and was not compensated by the limited budgetary subsidy. The funds available will be further reduced in 2000, partly due to the collapse of the SBS-Agro bank, which failed to repay to the Fund Rb 1.4 billion of credits repaid by farmers.

A new state bank Rosselkhozbank (Russian Agriculture Bank) is being created, partly taking over regional branches of the bankrupt SBS-Agro. A relevant draft governmental resolution has been submitted for the president's approval and the Central Bank licence is expected to be provided as of March 2000. The government would own some 51% of the new bank's shares and the remainder would be distributed among regional administrations and other shareholders. The Ministry of Agriculture expects that the bank will play a key role in lending to agriculture, including provision of funds from the Soft Loan Fund and the Leasing Fund. Taking into account that a competitive banking structure does not exist in rural areas, the new state bank would in practice have a monopoly on the provision of credits to agriculture.

In May 1999 the State Duma passed the law “On Parity of Prices for Agricultural and Industrial Products Used in Agriculture and Compensation of Losses Caused by Its Offence”. The law was unanimously approved by the Federation Council in June 1999, but as of March 2000 not yet signed by the President. The law makes the government responsible for ensuring that rises in agricultural input and output prices do not diverge and mandates the government partially to compensate agriculture's “losses” caused by the price disparity in the period 1991-1998. This law also authorises a 50% reduction on prices and tariffs paid by farmers for such inputs as natural gas, heating and electricity. If implemented, the law would result in substantial budgetary transfers to and stronger administrative control over the agro-food sector in Russia.

The level of support measured by the Producer Support Estimates (PSEs) rose in Russia to 29% in 1997, but fell to 15% in 1998 and fell again to minus 3% in 1999. The negative level of support in 1999 means that Russian producers were implicitly taxed compared to an estimated average support in OECD countries at 40% (Figure III.4.4). The main reasons for a decline in the measured level of support in Russia were: a strong devaluation of the rouble in August 1998 leading to a substantial fall in producer prices relative to the world market prices in the last four months of 1998 and over the whole

Figure III.4.4. PSEs in Russia and OECD average



Source: OECD PSE/CSE database.

of 1999; further reduction in budgetary support to producers; and some reduction in charges on food imports in 1998 maintained in 1999.

International policy environment

In 1999, the Russian government remained committed towards maintaining a fairly liberal trade environment. However, several official measures suggest that trade policy remains under strong pressure, not only from protectionist and sectoral interests (*e.g.* sugar import duties, import ban on eggs from the EU, discriminatory fees and procedures on imports of alcohol compared to nationally produced products and oilseed export taxes), but also from attempts to increase fiscal revenues. As the real appreciation of the rouble gradually erodes the effects of the 1998 devaluation, pressure for stronger border protection will probably intensify in the medium term. Russia's aspirations to join the WTO during the medium term may have some influence in deterring it from involvement in any such new restrictive policies. Nevertheless, in 1999 there was no progress in Russia's accession to the WTO. Differences of opinion between Russia and several major trading parties concerned all three "pillars" of Uruguay Agreement on Agriculture: domestic support (in particular the selection of the base period for the calculation of the Aggregate Measure of Support – AMS), market access and export subsidies as well as such areas as sanitary and phyto-sanitary (SPS) provisions, technical barriers to trade (TBS), customs valuation, barter trade, subnational entities and rules of origin. It may be expected that after the election period in Russia the negotiation process will advance in 2000.

In the framework of the 1999 food aid agreements with the United States and the European Union, Russia received 4.6 million tonnes of food worth USD 0.76 billion. Most of the food given to Russia under the two arrangements has been sold at market prices in Russia and the revenues have mostly been forwarded to the state Pension Fund. Relatively small amounts were contributed to

the health care and social welfare institutions. The share of food aid in total food imports was large at 12%, including 30% for meat products, 25% for milk products and 70% for cereals. In September 1999, Russia requested from the United States a new food aid package of 5 million tonnes. However, the United States has postponed a decision on this issue and as of March 2000 only a limited agreement on a "small package" consisting of 300 000 tonnes of food wheat, 200 000 tonnes of foodstuffs and 20 000 tonnes of seeds has been reached. The deliveries of seeds started in March 2000.

Assessment and outlook

The short-term prospects for the Russian economy look favourable, supported by prudent macro-economic policies and a more stable political framework following recent elections. However, Russia is still constrained by substantial structural and institutional weaknesses. Medium and long term prospects depend on reforms to improve the overall environment for entrepreneurship, investment and sound corporate governance.

Benefiting from the 1998 devaluation of the rouble and better weather conditions, the agro-food sector demonstrated a modest but positive growth of agricultural production in 1999. Growth in the food processing industry was even more pronounced. However, as the rouble continues the slow but generally constant real appreciation that began in the second quarter of 1999, this macro-economic shield against imports will not last long. Therefore, the agro-food sector will, most probably, face stronger international competition in the medium term. Some revival of agro-food imports on commercial terms has already been confirmed by trade statistics for the second half of 1999. Moreover, a number of structural problems such as poorly developed private channels for supplying inputs and purchasing farm products; local monopolies, administrative barriers to inter-regional trade; a poor general business environment including barriers to entry and poor enforcement of contracts; and inadequately developed market information services impede the creation of the competitive framework within which agriculture could develop on a more sustainable basis. Land market legislation is still on hold and only about 10% of large farms have gone through the real restructuring process. Many remaining farms are kept in operation only due to the poor enforcement of the bankruptcy law, various types of support received from the local and federal authorities and at the expense of large farms' employees not being paid for most of the year and/or accepting various payments in kind.

In 2000 crop production should increase for the second consecutive year, from still very low levels in 1999 affected by the adverse weather conditions. Grain production should not be smaller than the 1995-1996 average of 63 million tonnes compared to 54.7 million tonnes in 1999. Meat and dairy production will most probably fall again due to low grain availability affected by the poor 1999 harvest, only partly compensated by food aid and grain imports on commercial terms. In the medium term grain availability should improve, but any sustainable revival in livestock production will depend on structural reforms in the whole agro-food sector. Meat and dairy consumption is expected to grow, however, as real incomes profit from expected growth in GDP of 2-4% yearly in the medium term. Imports should also become relatively cheaper in the mid-term as the rouble recovers. This combination – of rising demand, a relatively weak domestic production response and a firmer rouble – suggests that both meat and dairy imports will grow.

5. South Africa

Macroeconomic situation⁵

The decline in economic activity due to the East Asian crisis continued into 1999. Though the financial market volatility led to a slowdown in South African growth, prudent fiscal and monetary policy responses and sound financial management muted its impact. Real GDP is estimated to have grown in 1999 by 1.2% over 1998. Considerable success has been achieved in containing inflation through tight

monetary policy. The consumer price index continued to decline from 8.6% for 1997 to 6.9% for 1998 and 5.2% for 1999. The Rand on the other hand continued to depreciate against major currencies – from R 4.60 to a USD in 1997 to R 6.10 in 1999, creating favourable conditions for maintaining South Africa's positive trade balance. The current account deficit of USD 0.5 billion, explained by negative income and service balances, is cushioned by strong portfolio investment flows and high foreign exchange reserves. Foreign direct investment at about USD 1.5 billion in 1997 and USD 1.2 billion in 1998 has, however, remained far below portfolio investment, which was USD 6.6 billion and USD 3.7 billion for the same years. As analysed in last year's report, the inability of the economy to create jobs remains one of the biggest challenges for South African policymakers. The slowdown in world economic activity due to the disruption of international financial markets in 1997 and 1998 together with the pressure on domestic producers to remain competitive in an international arena contributed to a reduction in formal employment. Declining international commodity prices, especially the price of gold, further inhibited employment creation. Rising wage and non-wage costs, together with ongoing rationalisation in the public sector, were also factors that aggravated the employment situation in South Africa, where 40% of the population lives below the minimum household subsistence level and unemployment reached 37.6% in 1997. The high incidence of poverty is accompanied by the spreading HIV/AIDS disease, estimated to have infected over 9% of the population.

The inability of the economy to generate domestic savings is another major concern. South Africa's gross domestic saving declined from 16.5% of GDP in 1996 to an all-time low of only 13% in the fourth quarter of 1998, but recovered slightly from that to an average saving ratio of 15% for 1999. The budget deficit has been reduced, beyond official targets for 1999, to 2.4% of GDP through increased revenue collection and lower spending on public sector wages and interest payments.

Agricultural and agro-food situation

The contribution of primary agriculture to the GDP remained between 4 and 5% of GDP. In 1998, the contribution of primary agriculture to the GDP amounted to R 24 758 million at constant 1995 prices. It represented 4.5% of GDP. With the strong backward and forward linkages into the rest of the economy, the "agro-industrial" complex is thought to contribute at least 15% of GDP (some calculations go much higher).

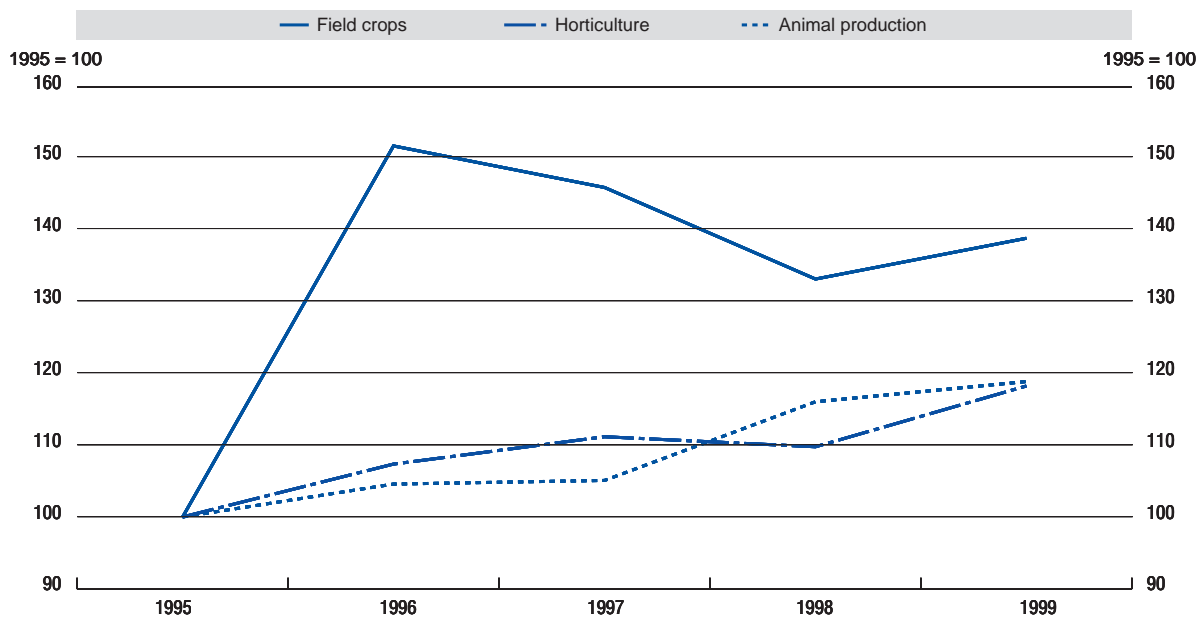
During 1999 the estimated volume of agricultural production was 3.7% higher than in 1998. The volume of field crop production increased by 2.7% compared to the previous year. Horticultural production increased by 7.7%. Animal production increased by 2.4%, (Figure III.5.1) although for the 12 months ending August 1999 the total number of livestock was estimated to have declined by 2.1%, with decreases in all animal categories (cattle, sheep, goats and pigs).

For the year ended 31 December 1999, producer prices were on average 1.4% lower than in 1998, compared to an increase of 3.9% in the previous year. Producer prices for field crops were 8.0% higher, with increases in the producer prices of maize (13.4%), wheat (17.3%), tobacco (7.0%) and dry beans (17.2%), and a decrease in producer prices of sugar cane (6.8%), groundnuts (22.2%) and sunflower seed (7.8%). Producer prices of horticultural products were on average 8.3% lower than in the previous year while producer prices of animal products were 3.2% lower in 1999 than in 1998 (Figure III.5.2). The terms of trade in agriculture, measuring the extent to which producer prices keep pace with farming inputs, weakened from 0.882 to 0.811 during the year ended 31 December 1999. Only for field crops did the terms of trade strengthen (Figure III.5.3).

The *net farm income* decreased by 7.8% during 1998. This trend continued with a decrease in *net farm income* by 13.5% during 1999 and amounted to R7 168 million. Depreciation increased by 6.3% during 1999. Payments for salaries and wages as well as interest, which represent 19.5 and 13.6% of the total farm cost, amounted to R7 236 million and R5 030 million respectively (Figure III.5.4). Investment into capital assets increased by 3%.

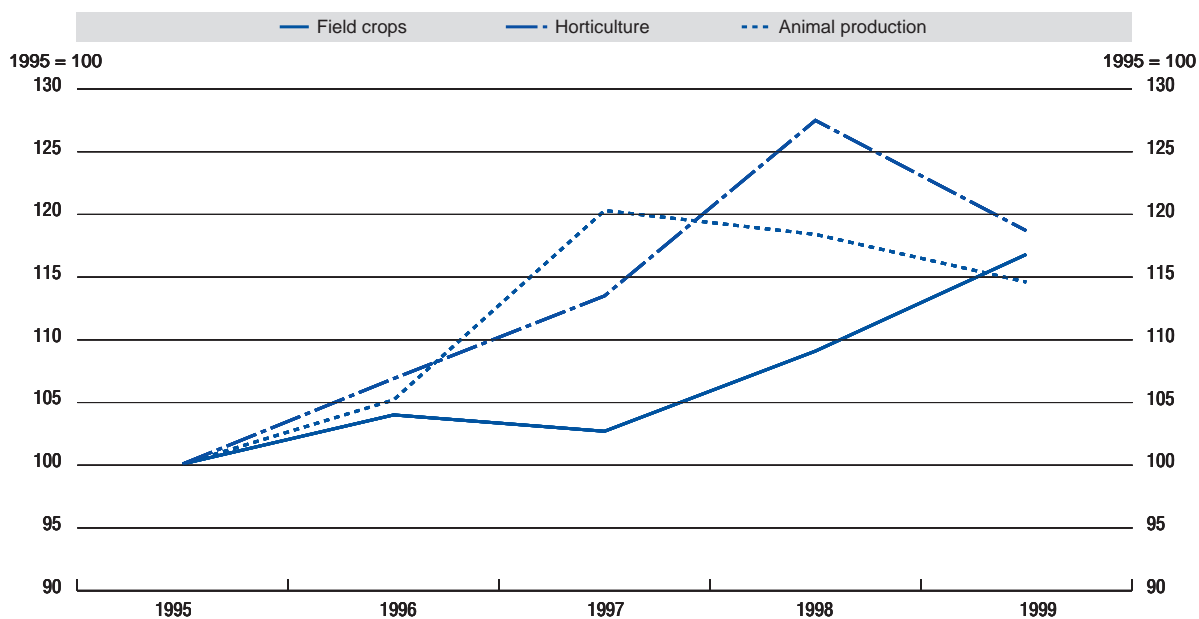
South Africa is a net exporter of agricultural products. In the period 1994 to 1999 the agricultural contribution to total export values was in the order of 8 to 10%. The agricultural share in total imports varied between 6 and 7% during the same period. Exports exceeded the value of imports during this period by percentages which varied between 19% (1995) and 60% (1999). In 1999 the value of agricultural imports decreased by 5.9%, while the value of exports increased by 10.1% over the previous year.

Figure III.5.1. Volume index of agricultural production, 1995-1999
January-December



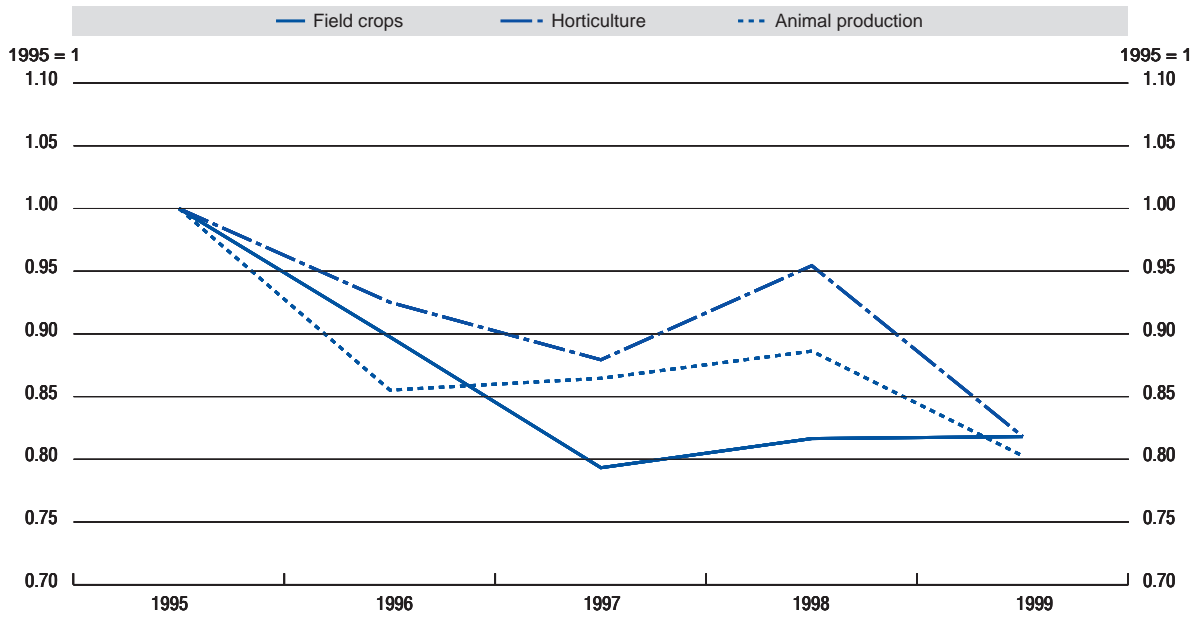
Source: National Department of Agriculture.

Figure III.5.2. Producer price index, 1995-1999
January-December



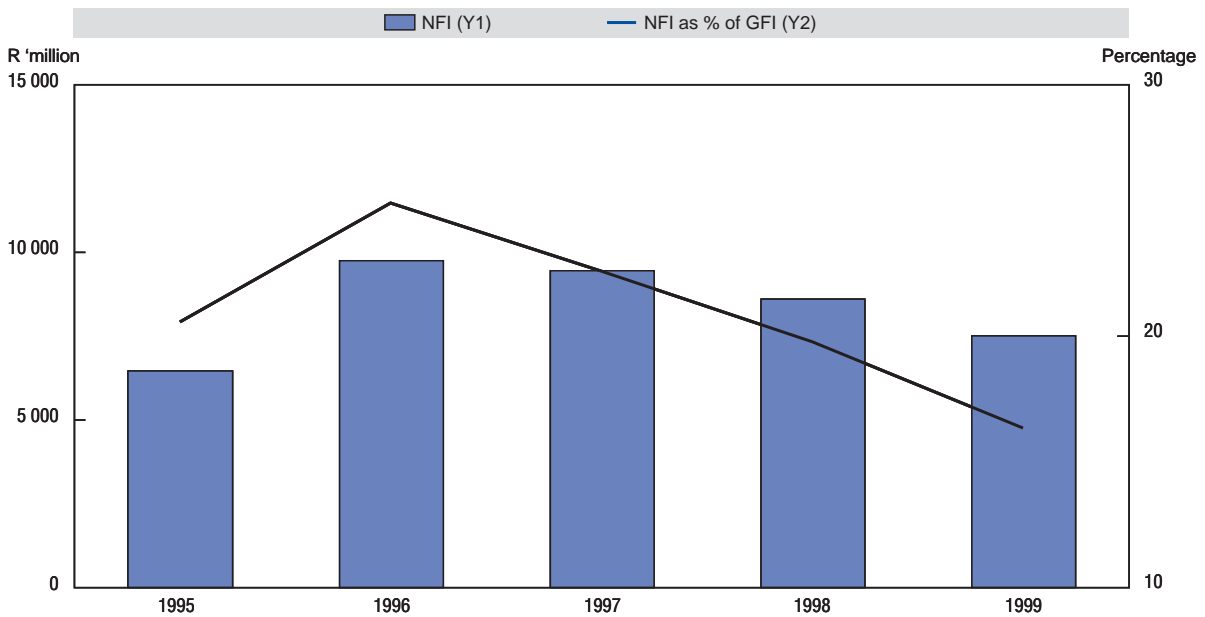
Source: National Department of Agriculture.

Figure III.5.3. Terms of trade of agriculture, 1995-1999
January-December



Source: National Department of Agriculture.

Figure III.5.4. Net farm income (NFI) 1995-1999
January-December



Source: National Department of Agriculture.

Based on the 1999 export values, citrus fruit (R 2 577 million), sugar (R 1 578 million), grapes (R 1 265 million), wine (R 1 190 million), apples, pears and quinces (R 916 million) were the most important export products. Rice (R867 million), whiskies and other spirits (R 585 million), sunflower and cotton seed oil (R 443 million), tobacco (R 423 million) and wheat (R 375 million) were the most important import products.

During 1999, the United Kingdom, the Netherlands, Belgium, Saudi Arabia and Mozambique were the five largest trading partners of RSA in terms of export destinations for Republic of South Africa (RSA) products.

Structural adjustment policies

According to the latest available census figures, South Africa's dual agricultural structure consists of some 57 000 large-scale commercial farms, sharply contrasted with roughly 1.3 million small-scale farmers producing for household consumption and/or for sale. Government is paying greater attention to infrastructure development and rural development initiatives to change the face of rural South Africa through tackling the endemic and deep poverty found in many areas. These are being brought together in an integrated rural development policy, which is co-ordinated in the President's office. There is a specific focus on the three provinces with the greatest rural poverty: Northern Province, KwaZulu Natal and the Eastern Cape. Among many other areas, the policy includes the implementation of farmer settlement programs to give expression to government's policy to support greater diversity of farm sizes and farm enterprises.

Provincial agricultural budgets have been cut in all provinces, and the country's aggregate agricultural budget has declined rapidly since 1994. In addition, most provincial agricultural departments (and many others of the provincial departments) have large numbers of under-skilled workers. An effective support service is one of the essential elements to ensure the sustainability of farmer settlement programmes and to increase the productivity of agricultural production in general. Human resource development within government has therefore been targeted to improve service delivery.

A complementary development is the strengthening of farmers' associations and a clearer understanding by farmers and government alike of the services farmers need. It is believed that with a firm demand from farmers for competent services, improvements in training, greater flexibility in service provision and slowly improving provincial control over personnel and budgets, the basis for major improvements is being laid, albeit slowly.

As a result of the agricultural job summit in 1999, a number of initiatives are under consideration, which may lead to specific structural changes to secure success.

Domestic support policies

Following the first democratic elections in 1994, a new White Paper on Agriculture was approved by Parliament in 1995. This paper was a statement of broad policy principles. In order to facilitate the transformation of the sector, there was need to develop more focused policy, guided by the national vision expressed in the RDP (Reconstruction and Development Programme) and GEAR (Growth, Employment and Redistribution), which is to create conditions to effectively deal with the legacy of South Africa's history. To translate these policy principles into operational programmes, a policy reform process was initiated in 1997 to investigate agricultural policy options for government. After the consultative stage individual policy guidelines were identified and will be further developed as each policy is implemented. While some of GEAR's macroeconomic objectives are being achieved, the programme has thus far been ineffective in creating jobs through small business development.

Agricultural markets have been deregulated, and the subsidies that farmers previously received indirectly through the huge transfers made to control boards are no longer possible. An important element of the deregulation process was the abolition of drought subsidies, which White farmers used to lobby very successfully for, but which had the effect of encouraging higher risk farming practices and short-term approaches to natural resource use. Commercial farmers have moved swiftly to manage risk.

A futures market for crops has rapidly emerged in the private sector, and many more farmers are using insurance. However, these measures do not help the 1.3 million small-scale, largely subsistence farmers, for whom other measures are being examined.

International policy environment

Agricultural trade reforms have complemented the deregulation of domestic policies. South Africa completed the tariffication process for agricultural commodities in 1996 in line with its WTO commitments. The simple average tariff level was 5.6% in 1998. A process of rationalising the tariff schedule was implemented in 1997 and this led to a 38% decline in the number of tariff lines. In 1997 all export subsidies for agricultural commodities were eliminated, except for sugar. Licenses and quotas are not restricted to quota administration in respect of trade agreements, and non-tariff import controls remain only for sanitary and phytosanitary measures accepted by the WTO.

In parallel to the commitments taken in the UR agreement, South Africa has been seeking greater regional integration. It is part of the Southern African Customs Union (SACU) since 1987 with its partners of Botswana, Lesotho, Namibia and Swaziland. In addition, South Africa is not a member of the Southern Africa Development Community (SADC) which is a forum for co-operation in political and development matters as well as trade integration seeking the establishment of a free trade area in Southern Africa. The government believes that balanced development in the region and a collective approach for seeking market access outside the region will benefit both its neighbours and itself. Since 1994, the country has been involved in trade negotiations within the region. The most significant is the SADC Trade Protocol. Recognising its dominant position in the region, South Africa, together with the partners in SACU, has offered an asymmetric agreement in which it will open its markets faster than its counterparts. This will give the other SADC countries time to re-adjust their economies and attract investment to take advantage of the new opportunities from increased regional trade, and to reduce the trade imbalance currently prevailing.

The government has concluded a long series of negotiations with the European Union in order to set up freer trade between South Africa and the European Union. These have culminated in an agreement signed on 11 October 1999, which was to have been implemented on 1 January 2000. After delays over the labels of origin for certain spirits, a compromise was finally reached in the first quarter of 2000. This agreement will have its strongest impact in the agriculture sector by allowing many South African agricultural commodities to enter the European market without tariffs. Concerned about the difficulties in competing with subsidised farm products and subsidised agricultural exports, in common with its Cairns Group partners, South Africa will continue to argue in the future rounds of WTO negotiations that in the interests of fair trade, all countries should reduce the level of support to agriculture, and especially that export subsidies should be eliminated.

South Africa in the continuation of the mandated agricultural negotiations under the auspices of the WTO will seek substantial improvement of market opportunities for all South African agricultural products, seek fair trade conditions on agricultural products and ensure that its development needs are accommodated.

Assessment and outlook

South Africa's economic strategy is still centred on increasing growth and employment. Infrastructure development, human resource development and crime prevention are also identified as key performance areas within government. As in the past, the agricultural sector, as a major rural employer and contributor to the positive trade balance, is seen to have an important role to play in furthering government's objectives. The implementation of farmer settlement programmes; improvement of agricultural support services; human resource development; facilitating rural infrastructure development; facilitating trade development and support; and household food security given sustainable resource use, are specific focus areas for agriculture.

A growth in GDP of 3%, a continued slowdown in price inflation and a declining budget deficit are expected over the medium term. Whether this will hold amongst others depends on the impact of the recent floods and increases in the domestic fuel prices on the economy. After declining in 1999, investment in productive infrastructure is expected to grow the next three years.

Provided climatic conditions are favourable, the outlook is for increases in agricultural output of at least 2.5% in 2000 and 2001. Farmers are reportedly increasing the area planted to wheat in 2000 by 13% to more than 800 000 hectares: this could lead to a crop of more than 2 million tonnes, cutting back 2001 import requirements. Agricultural exports, mainly fresh and processed fruits and vegetables, sugar and some grains, will continue to be an important contributor to South Africa's economy and the country is likely to benefit if the future round of trade negotiations leads to a substantial liberalisation of international trade in agricultural products.

Notes

1. It is, however, important to note that rapeseed oil and palm oil trade is also subject to import restrictions. The TQRs are 1.1 million tonnes for palm oil and 600 000 tonnes for rapeseed oil. Moreover, trade in oilseed and oilseed products is scheduled to be completely liberalised by 2006.
2. The year 1999 refers to the fiscal year which covers the period April 1999 to March 2000.
3. Most of the economic sanctions were lifted in 2000 following President Clinton's visit to India.
4. See V.Y. Uzun "Privatisation of Land and Farm Restructuring: Ideas, Mechanisms, Results, Problems" in: *Farm Profitability, Sustainability, and Restructuring in Russia*, Proceedings of the Workshop Held in Golitsyno, Moscow Region, 1-2 October 1999.
5. Information from the South African Reserve Bank Bulletins is acknowledged.

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