



The Uruguay Round Agreement on Agriculture

AN EVALUATION OF ITS
IMPLEMENTATION IN OECD
COUNTRIES

AGRICULTURE AND FOOD



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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FOREWORD

The 1998 meeting of the OECD Agriculture Ministers requested OECD to "... examine ongoing and new agricultural trade and transboundary policy issues and their impacts and to provide analytical support, as appropriate, to the process of agricultural trade liberalisation, without duplicating the work of the WTO ...".

The report has been undertaken in response to that request by Ministers; it is one of several studies carried out under the *Agricultural Trade and Other Transboundary Issues* activity of the 1999-2000 Programme of Work of the OECD's Committee for Agriculture. It analyses in depth the implementation of the three pillars of the Uruguay Round Agreement on Agriculture (URAA): market access, domestic support and export subsidies in OECD countries. It also provides an overall appraisal of the immediate trade implications of the URAA and presents some evidence on the evolution of agricultural trade openness and levels of protection.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	11
 <i>Part I.</i> INTRODUCTION	 17
<i>Part II.</i> MARKET ACCESS	19
Background	19
Post-Uruguay Round tariff structure of OECD countries	19
Tariff quotas	33
The economics of different approaches for allocating tariff-quotas	40
 <i>Part III.</i> DOMESTIC SUPPORT	 51
Background	51
Trends in and composition of domestic support as measured by the URAA	53
How effective has the domestic support discipline been?	59
Economic implications of domestic support commitments	61
Evolution of agricultural support	65
Implementation issues	69
 <i>Part IV.</i> EXPORT SUBSIDY	 73
Background	73
How important are export subsidies?	75
How effective are the export subsidy reduction commitments?	78
Export subsidy reduction commitments and policy changes	82
Outstanding issues	85
Implementation issues	86
 <i>Part V.</i> OVERALL APPRAISAL OF RECENT TRADE DEVELOPMENTS	 91
Background	91
Evidence of agricultural trade openness	92
 <i>Part VI.</i> CONCLUDING REMARKS	 99
 <i>Annex I.</i> USE OF TARIFF QUOTAS IN OECD COUNTRIES	 103
Methodology and data	110
Auctioning	111
 <i>Annex II.</i> MEASUREMENT OF SUPPORT TO AGRICULTURE: OECD AND URAA DOMESTIC SUPPORT CLASSIFICATION	 115

STATISTICAL ANNEX	119
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BIBLIOGRAPHY	175
---------------------------	-----

Tables

1.1. Overdue notifications as of October 2000.....	18
2.1. Production-weighted average applied m.f.n. tariff rates in selected OECD countries (%).....	22
2.2. Bound tariff lines and duty free tariff lines: agriculture and the whole economy in selected OECD countries(%)	24
2.3. Specific and compound tariffs and tariffs with no ad valorem equivalents in selected OECD countries(%)	25
2.4. Tariff escalation by stage of processing(%)	30
2.5. Special agricultural safeguard use by OECD Members and number of tariff items, 1995-2000	31
2.6. Lines with tariff quotas as a proportion of all tariffs lines in selected OECD countries	33
2.7. Agricultural quota-based tariff lines and bound tariff means	34
2.8. Iceland: Current and minimum access fill rates for dairy and livestock products.....	35
2.9. Tariff quota protection: qualitative results.....	38
2.10. Tariff quota by administration method, 1995-99.....	39
2.11. "First come First served" administration method	41
2.12. Applied tariff administration method	42
2.13. "Licenses on demand" administration method	42
2.14. "Historical importers" administration method.....	43
2.15. "Auctioning administration" method.....	45
2.16. "State trading" administration method.....	46
3.1. Composition of domestic support by country, 1995-98 (%)	55
3.2. Ranges of notified current total AMS levels in OECD countries, 1995-99.....	59
3.3. Changes in the dispersion (standard deviation) of per-unit PSE across commodities	62
3.4. Evolution of aggregate measure of support (AMS) and producer support estimate (PSE) (USD billion)	64
3.5. Classification of selected blue and green box policies in the URAA and OECD PSE	67
4.1. Share of notified subsidised exports in total exports (volume) by product category (%).....	75
4.2. Notified subsidised exports, 1995-98 (USD mn).....	76
4.3. Export subsidy volume commitments and use by product in OECD countries	78
4.4. Use of export subsidy volume commitments by country (%).....	79
4.5. OECD countries overshooting annual export subsidy commitments	81
4.6. Use of export subsidy budgetary outlay commitments, by country (%)	81
4.7. Export subsidy rates (%).....	83
5.1. Nominal protection coefficients (NPC) for standard PSE commodities (%)	92
5.2. World and OECD merchandise trade(annual percentage changes).....	93
5.3. Import penetration rates for agricultural commodities in OECD area as a whole (%).....	94
5.4. World commodity prices, 1986-2005(%)	96

Annexes

I.1. Applied tariffs and protection rates in selected OECD countries (%).....	119
I.2. Examples of tariff formulations	120
I.3. Agricultural tariff profile by HS chapter in selected OECD countries	120

Australia.....	120
Canada.....	121
European Union.....	121
Iceland.....	122
Japan.....	122
Mexico.....	123
New Zealand.....	123
Norway.....	124
Switzerland.....	124
Turkey.....	125
United States.....	125
I.4. Potential application of the special agricultural safeguard by OECD Member and product category (number of tariff items).....	126
I.5. Scope of the special agricultural safeguard.....	126
I.6. Volume-based special safeguard use by OECD Member and product category, 1995-99 (number of tariff items).....	127
I.7. Price-based special agricultural safeguard action by OECD Member and product category, 1995-2000 (number of tariff items).....	128
I.8. SSG trigger prices and external reference prices used for tariffication of selected products.	129
I.9. Definition of product categories used in Annex Tables I.5, I.6 and I.7.....	129
I.10. Number of tariff quota lines and fill rates by country.....	130
I.11. Number of tariff quota lines and fill rates by product category.....	130
I.12. Distribution of simple average fill rates, by country.....	130
I.13. Distribution of simple average fill rates, by product category.....	132
I.14. Tariff quota for selected products in selected OECD countries.....	134
I.15. Tariff quotas, fill rates and administration methods for selected products.....	136
I.16. Tariff-quota administration methods by product category, 1995-99.....	142
I.17. Canada: Imports within tariff rate quotas and applied tariffs, 1998.....	144
I.18. References and domestic prices for dairy products.....	145
II.1. Green box expenditures and General services support estimates (GSSE)(Mill. USD).....	151
II.2. Blue box measures.....	151
II.3. Blue box measures – European Union.....	152
II.4. Blue box measures – Iceland.....	153
II.5. Blue box measures – Norway.....	153
II.6. Blue box measures – United States.....	154
II.7. Green box measures by category and by country, 1995-98 (%).....	155
III.1. Structure of export subsidies by product and by country (%).....	156
III.2. Share of subsidised exports in total exports by year and by country (%).....	160
III.3. Subsidised export volumes as a percentage of annual commitments by year and by country	161
III.4. Export subsidy budgetary outlays as a percentage of annual commitments by year and by country.....	163
III.5. Implied average unit export subsidies (national currency per tonne).....	166
III.6. Cumulated unused export subsidies.....	169
IV.1. Nominal protection coefficients by commodity and by country (%).....	169
IV.2. Import penetration rates by commodity and by country (%).....	171
IV.3. Country shares in the value of OECD agricultural trade (%).....	173

Figures

2.1.	Consumer nominal assistance coefficient (NAC), 1986-99(1968-88 = 100)	21
2.2.	Applied m.f.n. and final bound tariff gap in OECD countries, 1995-98	23
2.3.	Agricultural tariff dispersion in selected OECD countries, 1993 and 1996 (Standard deviation, %)	26
2.4.	Agricultural tariff peaks in selected OECD countries, 1993 and 1996	28
2.5.	Frequency distribution of m.f.n. applied tariffs in selected OECD countries (%), 1996	29
2.6.	Tariff quota fill rates in OECD countries (simple average), 1995-98.....	36
3.1.	Domestic support by country: 1986-88 and 1995-97.....	53
3.2.	Composition of domestic support in OECD countries.....	54
3.3.	Countries' share of OECD blue box measures (%).....	56
3.4.	Countries' share of OECD green box measures (%).....	58
3.5.	Green box measures as a percentage of total OECD green box (%)	58
4.1.	Notified subsidised exports in OECD countries (value), 1995-98 (%).....	77

Annexes

I.1.	Tariff quota fill rates in OECD countries (simple average, 1998)	146
I.2.	Tariff quota fill rates in OECD countries (simple average, 1997)	147
I.3.	Tariff quota fill rates in OECD countries (simple average, 1996)	148
I.4.	Tariff quota fill rates in OECD countries (simple average, 1995)	149
I.5.	Frequency distribution of the simple average tariff quota fill rate	150
V.1.	Agricultural trade openness (%)	174

Boxes

I.	Preamble	9
II.1.	Summary of market access provisions	20
III.1.	Summary of domestic support provisions.....	51
IV.1.	Summary of export subsidy provisions.....	74

Annex

II.1.	Classification of policy measures included in the OECD indicators of support	115
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Box 1. Preamble

Agriculture Ministers adopted a set of shared goals in March 1998, stressing that these goals should be seen as an integrated and complementary whole. Among the shared goals is the further integration of the agro-food sector into the multilateral trading system? In pursuit of that goal, Ministers mandated the OECD to examine ongoing and new agricultural trade and trans-boundary policy issues and their impacts, and to provide analytical support, as appropriate, to the process of agricultural trade liberalisation.

In response, the Committee for Agriculture adopted (and the Trade Committee endorsed) a comprehensive programme of work on agricultural trade policy issues, to be carried out throughout the period 1999-2000 and continuing during the period 2001-2002. The programme of work was carefully designed to incorporate specific agricultural trade policy issues that are of major interest to Member countries of the OECD, but which may also concern non-OECD countries. A wide range of issues arising at the interface of trade and domestic policy is also covered, such as the trade implications of different kinds of agricultural support measures, food safety, food security, rural development and environmental protection policies.

On-going core activities of the Committee for Agriculture such as the annual monitoring of agricultural policies and medium term outlook exercises provide an essential backdrop to the specific trade programme of work, which is being implemented on two broad fronts.

One **major element**, characterised as evaluating and strengthening trade liberalisation, aims to assist policy makers and negotiators as they enter the next round of multilateral trade negotiations on agriculture by:

- assessing in-depth the effects of the URAA on trade, on agricultural policy and on protection levels
- identifying possible impacts on trade and markets of different scenarios for further trade liberalisation
- analysing the effect of trade policy instruments such as export credits or export taxes and restrictions that have not, to date, been disciplined and the trade impacts of food aid and STEs.

The **second major** element of the agricultural trade policy work programme deals with a wide range of issues that arise increasingly at the interface of trade and domestic policy. The following issues will be examined:

- production and trade impacts of different agricultural policy measures ranging from market price support to different kinds of direct payments and including agri-environmental measures.
- the concept of multifunctionality and in particular relationships between policies intended to ensure an adequate supply of agriculture's non-food outputs (such as possible contributions to environmental benefits and rural development) and existing or future international commitments with respect to trade.
- policies that contribute to improving environmental performance in ways that are consistent with agricultural trade liberalisation.

Box 1. Preamble (cont.)

- The implications of trade liberalisation for food security in OECD and selected non-OECD countries.
- trade aspects of domestic policies in the area of food safety and quality with respect to topical issues such as biotechnology and animal welfare.
- trade or trans-boundary aspects of competition policy with respect to geographical labels and state trading.

Reflecting the wide range of issues, different methodologies are employed in the implementation of the agricultural trade work programme -- analytical, model-based tools are used alongside statistical and descriptive approaches while some issues receive a conceptual treatment. Choice of methodology is determined by data availability and by the nature and complexity of the issues being examined, leading to either quantitative or qualitative results. In a later phase, work will be undertaken to synthesise the main conclusions and policy implications for each of the main elements of the programme.

This report assesses the effects of the URAA on trade and protection levels. It analyses in depth the implementation of the three pillars of the URAA: market access, domestic support and export subsidy in OECD countries. It also provides an overall appraisal of the immediate trade implications of the URAA and presents some empirical evidence on the evolution of agricultural trade openness and levels of protection.

EXECUTIVE SUMMARY

The Ministerial Communiqué of March 1998 reaffirms support for Article 20 of the URAA, recognising that continuation of the reform process should take into account, *inter alia*, the experience from implementing the reduction commitments as well as their effects on world trade. The present report addresses one aspect of the mandate to examine ongoing and emerging trade and transboundary trade policy issues and their impacts by analysing in-depth the implementation of the three pillars of the Uruguay Round Agreement on Agriculture (URAA) -- market access, export subsidies and domestic support in OECD countries. It does not cover other aspects of the URAA, many of which are taken up in other parts of the Programme of Work of the OECD Directorate for Food, Agriculture and Fisheries. The main findings can be summarised as follows.

The URAA marked an historic point in the reform of the agricultural trade system

One of the main achievements of the URAA has been the development and implementation of a framework to address barriers and distortions to trade in three major policy domains (market access, domestic support and export subsidies). New and operationally effective rules have been established and quantitative constraints have been agreed upon for all three pillars. In addition, the URAA has provided an overall framework for the re-instrumentation of agricultural support towards less trade distorting policies. Moreover, the URAA has provided the basis for further negotiations.

The immediate quantitative effects on trade and protection levels are moderate

Although the immediate trade impacts specific to the implementation of the URAA in OECD countries are difficult to identify and distinguish from the impacts of other events, the empirical evidence suggests that the overall effects have been moderate. The reasons for this include the weakness of many specific features of the URAA, and the historically high support levels during base periods from which reductions were to be made. In some countries reforms undertaken in anticipation of the outcome of the negotiations were sufficient to fulfil or partially fulfil commitments in some areas of the URAA. Finally, some features of the URAA, including implementation and methodological issues, have weakened its effectiveness in reducing trade protection.

The on-going WTO negotiations on agriculture provide an excellent opportunity to deepen the process of agricultural policy reform and trade liberalisation

The empirical results of this study lead to the conclusion that the challenge now facing WTO members is to build upon the foundation of the URAA to further reduce trade distortions. This requires strengthening the disciplines already established under the URAA and addressing those weaknesses of the current agreement which have been identified as well as to agree on emerging trade issues. At the same time, it requires maintaining an appropriate role for governments to address domestic policy goals in ways that are targeted, transparent, cost effective and avoid distortion of production and trade.

Market access aspects

Notwithstanding the achievements of the URAA, agricultural tariff levels are still high

A major accomplishment was the conversion of non-tariff barriers to tariffs. Although tariffication appears to be a significant step forward, in most OECD countries average agricultural tariffs are higher than non-agricultural tariffs, with rates on some agricultural products exceeding 500%.

The post-UR tariff profile in the agricultural sector in many OECD countries has become more complex

The structure of countries' tariff schedules has become extremely complicated, with several different rates applying to the same product, sometimes depending on their country of origin. The number of tariff lines to accommodate in-quota and over-quota tariffs has increased.

Tariffication has, in some instances, resulted in higher actual or potential protection than before the URAA

The tariffication process allowed scope for considerable discretion, resulting in tariff bindings at rates much above actual protection rates, reducing the significance of subsequent tariff reductions. Moreover, some of the tariffs that emerged from the URAA are not very transparent, including many specific rate tariffs or combination tariffs with both *ad valorem* and specific components. Agricultural tariff dispersion as measured by widely used indicators, such as standard deviation, has increased and trade policy specific measures, such as the number of tariff "spikes", have also risen.

The use of special safeguards has been relatively modest

The special agricultural safeguard was designed to address disturbances in domestic markets arising from the removal of non-tariff measures, either in terms of a surge in imports or a decline in domestic prices. However, the modest use of special safeguards suggests that countries' concerns regarding import surges for tariffied commodities were not warranted. Nevertheless, the potential for using special safeguards remains and could be used even when import quantities are very low as has occurred already in some instances.

Tariff-quotas have opened up markets in some cases, but overall are under-filled by a significant margin

The increased use of tariff-quotas has allowed some access to markets that were previously closed and some additional access to markets where imports were restricted. In-quota tariffs are often set at low levels, although this is not always the case. In most countries, however, import of the full in-quota quantity does not occur. The empirical evidence presented suggests that, on average, tariff-quotas in OECD countries have been only two-thirds filled. Moreover, the fill rate of tariff quotas has steadily decreased over time.

Under-utilisation of tariff-quotas could be attributable to many factors

Under-utilisation of tariff-quotas could be attributable to various factors, some of which are beyond the importing countries' control. Small quota quantities combined with high tariff rates for over-tariff quota imports, as well as restrictive methods of administering tariff-quotas, hinder trade. Further, countries have considerable flexibility in allocating tariff-quota quantities at the in-quota tariff levels. Tariff-quotas, both under current and minimum access, have often been allocated to specific supplier countries through preferential tariffs under bilateral and regional agreements or preferential quota provisions, thereby limiting market access by other countries.

Methods of tariff-quota allocation determine who earns the economic rents

Administration of tariff-quota licenses not only determines who captures the economic rent, but it may also institutionalise the mechanism to create rent, thereby affecting market access opportunities. The analysis has highlighted the fact that the different methods available to allocate import quotas have widely different impacts on the distribution of rents and on market access. If allocation is on a first-come first-served basis, the importer is likely to capture the rents. If allocation is by licensing of importing firms based on historic market shares, rents are likely to accrue to the importer, but there is a risk of concentration of the rents in the hands of a small number of importers and significant administrative and rent-seeking costs may arise. If quotas are auctioned by the government in the importing country, then the government will capture all or part of the rent. If the license system confers market power on importers and the tariff-quota is underfilled, market access is limited and excess quota rents are created.

The degree of tariff-quota utilisation varies among methods of quota allocation

The simple average tariff-quota fill rate for OECD countries over the 1995-98 period was higher with the allocation methods of historical importers, producer groups and state trading than with auctioning and first-come first-served approaches.

....but is also somewhat dependent on additional factors

The fill rate through auctioning was found to be low, although auctioning is generally deemed a very efficient method of achieving an allocation which is consistent with the most favoured nation (m.f.n.) principle and is potentially the most transparent allocation mechanism. In order that all the benefits of auctioning materialise, including high tariff quota fill rates, auctions must be conducted under competitive market conditions.

The most efficient way to expand market access is through tariff-only protection, provided that the tariff rate is low

Expansion of market access through tariff-quotas can be achieved in various ways, including expanding the quantity, reducing the in- and over-quota tariff rates and changing the quota allocation methods. The most efficient way to increase market access depends on a clear understanding of the factors impeding full uptake of tariff-quotas. For example, if the tariff-quota allocation methods yield low utilisation of tariff-quotas, then an increase in tariff-quota quantities will not necessarily result in greater market access. Tariff quotas are, in general, less trade-distorting than non-tariff barriers but are considered to be second-best policy instruments in improving market access. The most efficient way to expand market access is through tariff-only protection, provided that the tariff rate is low.

Domestic support aspects***Domestic support is highly concentrated in a few countries***

In the URAA, three countries or regions, the **European Union, Japan** and the **United States**, account for 90% of total domestic support (i.e. AMS, blue box, green box, *de minimis*, and special and differential treatment) for the OECD area as a whole.

Green box payments and other exempt policies are assuming greater importance

For the 1986-88 base period, the AMS was the major component of the URAA domestic support. However, during the implementation period, while the AMS was declining, exempt measures were increasing. The largest increases in green box expenditures were recorded in the **European Union, Japan** and the **United States**. Green box expenditures were greater than current total AMS by 1996. Domestic food aid was the most important category of green box measures, most of it accorded by the **United States**.

The AMS commitments are close to becoming a binding constraint for only five OECD countries

For many OECD countries the impact of the domestic support discipline has been imperceptible, although for some countries it is becoming a binding constraint. Reforms undertaken between the base period and the start of the implementation period, together with the fact that blue box measures were included in the AMS in the base period and thereafter removed, meant that most countries have reduced their Current Total AMS levels much more than required under the URAA.

Over 60% of domestic agricultural support in OECD countries are excluded from the domestic reduction commitments

Notwithstanding the reduction in the support deemed to be the most trade distorting, progress towards achieving “a progressive and concerted reduction in agricultural support” as envisaged by the OECD Ministerial Principles for agricultural policy reform, has been modest.

Changes in the mix of domestic agricultural support policies between the 1986-88 base period and the first three years of the implementation period involved a move away from reliance on the most trade-distorting policies toward blue and green box policies. Related effects on production and trade may have been reduced.

Despite the reduction in the current total AMS, the level of agricultural support as measured by the PSE remains quite high and the gap between the OECD PSE and the AMS is increasing over time. Many policies which may cause significant trade distortions are exempt from the domestic reduction commitments. Moreover, there are a number of technical and conceptual issues, including the aggregate (non-product specific) nature of the reduction commitment, the method of calculation of market price support and use of negative figures when calculating Current Total AMS, which weaken the effectiveness of the domestic support discipline. As a result, domestic support reduction commitments will not necessarily result in reduced support overall as required by the 1987 and 1998 OECD Ministerial Principles for agricultural policy reform.

Many exempt support measures have production and trade effects

Although “green box” and “blue box” support measures might be less trade distorting than traditional market price support, many of these measures may not be production and trade neutral. This question requires further investigation. The total amount of the payment as well as the detailed design and duration of a programme are critical factors for determining the impact of policies on production and trade.

The eligibility criteria of the URAA for “green box” measures do not always ensure that no or minimal distortions to production and trade result

Although it is virtually impossible to design income support policies that do not have some effects on resource allocation through income, wealth and risk effects, there is considerable scope for strengthening the disciplines to ensure that the exempt policies are minimally trade distorting. Currently, the policy specific criteria and conditions for green box measures do not always seem to ensure that permitted measures meet this requirement. Further investigation is required of whether payments reported in the “green box” are non or minimally trade distorting. Such research could contribute to the further development of more rigorous operational criteria for exemption from reduction commitments.

Export subsidy aspects

Resort to export subsidies has been reduced

In contrast to non-agricultural exports where subsidisation has been prohibited since the start of the GATT in the late 1940s, export subsidies are permitted in agriculture. The URAA imposed strict limits on WTO member countries' agricultural export subsidies. Consequently, resort to export subsidies has been reduced. The export subsidy discipline of the URAA proved to be the most binding of the three disciplines. Yet, very few countries changed their policies substantially to conform with their export subsidy commitments.

The European Union is the major provider of export subsidies

The main reduction commitments affect OECD countries, particularly the **European Union** which is the major user, accounting for 90% of all export subsidies accorded by OECD countries.

During the implementation period, subsidised exports were lower than allowed levels, although in some instances countries have overshot their export subsidy commitments

For the OECD as a whole, subsidised exports were lower than permitted. Over the 1995-98 period, 42% of the permitted budgetary outlays and 64% of the permitted volumes were used. The number of products being subsidised was also well below the possibilities provided for in Country Schedules.

The start of the implementation period coincided with a marked rise in world market prices for cereals, which allowed countries to fulfil their reduction commitments easily. In fact, the European Union even imposed a tax on cereal exports during that period.

However, some countries have availed of the rollover provision whereby in any of the second through fifth year of the implementation period the use of export subsidies may exceed, under certain conditions, the corresponding annual commitment levels. In some cases, the rate of export subsidy remained high and there was a large degree of disparity among commodities. Some commodities, such as beef and dairy products, still received subsidies on the bulk of their exports, reflecting the dominance of the European Union in these markets.

Despite overall compliance, the various ways in which export subsidy commitments may be circumvented have given rise to concern

Notwithstanding compliance, a number of outstanding implementation issues remains. Some countries have changed their policies to comply with URAA export subsidy commitments. The effects on export competitiveness of the possible subsidy elements of export credits, international food aid, export restrictions and revenue pooling arrangements have come under increasing scrutiny. There is a need to strengthen coverage and criteria to ensure that countries do not resort to other export competition policies which distort markets and undermine the long-term objective of reducing support and protection.

Part I.

INTRODUCTION

The Marrakech Accord, creating the World Trade Organisation (WTO) and including the Agreement on Agriculture (URAA) was signed in April 1994. Implementation began during 1995. The URAA was a significant departure from the way agriculture had traditionally been treated in the international trading system (OECD, 1995; 1997*a*). The URAA imposed disciplines on trade-distorting domestic policies as well as on trade policies, increased transparency and predictability through tariffication. New rules and commitments were established in the areas of market access, export competition and domestic support. Moreover, implementation of the URAA commitments has increasingly become an element in domestic policy decisions when countries design domestic policy reforms.

While it was generally agreed that the URAA provisions represent a significant step in the direction of trade liberalisation, it was also recognised that their actual impact on agricultural policies and trade would depend largely on the way in which they are implemented. Although it might still be too early for a final assessment of how effective the URAA has been, interesting insights can already be gained from the way governments have so far implemented the commitments. An assessment of this experience should provide insights as governments participate in the new round of agricultural negotiations, begun in March 2000.

Implementation of URAA commitments that is now occurring raises a number of questions for policy makers. How effective have the three disciplines contained in the URAA been in bringing about a reduction in the level of production-related support and protection? Which elements of the disciplines have proved effective and which ineffective? What policy lessons can be drawn from the experience so far? What might be inferred about opportunities and challenges for further trade liberalisation?

A comprehensive analysis of the extent to which the level of protection for agriculture has been reduced requires a systematic approach encompassing issues relating to sanitary and phytosanitary arrangements and technical barriers to trade. This report, however, deals exclusively with the market access, domestic support and export subsidy aspects of the URAA.

The analysis is primarily based on country notifications to WTO. As of October 2000, all OECD countries, except **Mexico** and **Hungary**, had notified the WTO for 1995 and 1996. From 1997 onwards, there are a number of overdue notifications for all three pillars (**Table 1.1**). **Korea** and **Japan** do not have export subsidy reduction commitments, while tariff quotas and special safeguard reduction commitments are not applicable for **Turkey**. Throughout the analysis, export subsidies refer only to export subsidies as listed under Article 9 of the URAA and as notified to the WTO (**Box IV.1**). The time period in the analysis of the three pillars is the reporting period of country notifications to WTO.

The report is structured as follows: Part II deals with market aspect access aspects of the implementation of the URAA with particular emphasis on the economic impacts of tariff rate quotas and their administration methods, in so far as available data permit. An economic analysis of the tariff structure in the post-URAA era is undertaken. Part III presents an analysis of the domestic support discipline of the URAA. The structure of domestic agricultural policies that has developed under the URAA is discussed and the economic implications of the domestic support commitments are analysed. Part IV deals with the export subsidy pillar of the URAA. It analyses the experience with export subsidy commitments, both in volume and budgetary outlay terms, and discusses some of the implementation issues that have arisen. Part V provides an overall appraisal of the immediate trade implications of the URAA, while Part VI presents some concluding remarks.

Table 1.1. Overdue notifications as of October 2000

		Tariff quotas	Special safeguards	Domestic support	Export subsidies
1996	Hungary			X	
	Mexico	X			
1997	Hungary			X	
	Mexico	X			
1998	Canada			X	
	European Union			X	
	Hungary			X	
	Iceland	X	X		X
	Japan			X	
	Mexico	X			
	United States			X	
1999	Australia			X	
	Canada	X	X	X	X
	European Union		X	X	X
	Hungary		X	X	
	Iceland	X	X	X	X
	Japan			X	
	Korea	X	X	X	X
	Mexico	X		X	X
	New Zealand				
	Norway	X	X	X	X
	Poland			X	
	Switzerland	X	X	X	X
	Turkey	NA	NA		
	United States			X	X

Notes: A blank indicates that notification is available and used in the study.
An "X" indicates that the notification is overdue.
NA = indicates that the requirement was not applicable for this Member during the period covered.

Part II.

MARKET ACCESS

Background

A significant achievement of the Uruguay Round is the long-term structure of the Agreement on Agriculture. With the URAA, the rules and principles governing agricultural market access were changed in a fundamental way. The market access provisions of the URAA established disciplines on trade distorting practices while maintaining historical trade volumes and creating increased access opportunities in highly protected markets¹ (**Box II.1**). Most importantly, a wide range of non-tariff barriers was banned, including quantitative import restrictions, variable import levies and discretionary import licensing. These barriers were converted to ordinary tariffs (tariffication). Existing and new tariffs were bound and subject to reduction. Current access commitments were put in place to ensure that there was not an erosion in market access as a result of the URAA. At the same time, some increase in market access opportunities was to be generated through minimum access commitments.

To analyse the impact of market access disciplines the following questions are addressed:

- What tariff profile emerged?
- How do tariff quotas operate? To what extent have tariff quotas been filled? What allocation mechanisms have been used and what have been the effects?
- To what extent are applied tariffs different from bound tariffs?
- To what extent are tariffs higher than the true trade protection?
- How frequently has the special agricultural safeguard mechanism been invoked?

This part is structured as follows. The terms of the market access provisions are described in **Box II.1**. A preliminary analysis of the tariff profile of OECD countries as it emerged from the URAA is presented, followed by discussion of tariff quotas which attempts to provide a preliminary analysis as to whether they have improved or impeded market access. The economic implications of the various approaches used to allocate import quotas in OECD countries are then examined. It highlights, in particular, the implications of auctioning import permits. A brief discussion of the use of tariff quotas in OECD countries, and of the methodology and data used in the empirical analysis is presented in the Annex I.

Post-Uruguay Round tariff structure of OECD countries

Tariffication

Import controls of any kind impose economic costs on consumers and the economy as a whole. Tariffs provide a more transparent instrument of protection and are generally preferable to other trade inhibiting policies, which tend to completely insulate markets. At a given level, they allow changes in world prices to be transmitted to domestic markets, so that producers and consumers respond to world market signals.²

A number of factors influence the impact of tariffication on market access. In an attempt to gauge the level of tariff protection and to identify those products for which potential distortions in consumption and production are likely to be largest, a few simple and complementary summary indicators, which are commonly used in the literature, have been calculated (OECD, 1999a, 1997; Daly and Kuwahara, 1998). These summary indicators are designed to reflect the key features of OECD Member countries' tariffs. They include the level, predictability, transparency, dispersion and peaks of tariffs within countries and tariff escalation.

Bound and applied most favoured nation (m.f.n.) tariff levels

In principle, tariffication was to result in tariffs no more protective than the non-tariff barriers that existed in the base period. As all agricultural tariffs were then to be reduced from those initial levels under the URAA, market access should increase. However, there are a number of factors that may prevent this from occurring, including the base period selected for tariffication, the way the average tariff reduction was achieved and the changes in the actual protection between the base period and the end of the UR negotiations. In addition, market access can be affected by exogenous factors such as a contraction in economic activity or uneven technological advances in importing and exporting countries

As shown in **Figure 2.1**, over the 1986-99 period, the rate of protection, as measured by the consumer nominal assistance coefficient (NAC) was highest during the 1986-88 base period used for the market access provisions. This base period had the highest level of support for grains, sugar and dairy products. This gives credence to the argument that, in the base period 1986-88, the level of support was abnormally high. The implication is that tariff reductions from the initial levels may not result in an increase in trade.

Box II.1. Summary of market access provisions

Tariffication, tariff bindings, and reductions

- Non-tariffs barriers to be converted to tariff equivalents (tariffication) equal to the difference between internal and external prices existing in the base period.
- All tariffs to be bound (i.e. cannot be increased without notification and compensation).
- Reduce existing and new tariffs by 36%, on a simple average (unweighted) basis, in equal instalments over six years.
- Reduce tariffs for each item by a minimum of 15%.

Minimum and current access

- Minimum access import opportunities to be provided for products subject to tariffication with imports below 5% of domestic consumption in the base period.
- Current access opportunities equivalent to those existing in the base period where imports exceeding 5% of domestic consumption had occurred in the base period.
- To ensure that these access opportunities are provided, countries will establish tariff-rate quotas, with the access amounts subject to a reduced duty and imports above that amount subject to the tariff established through tariffication.
- Increase minimum access quotas from 3% of base period domestic consumption to 5% over the implementation period.

Box II.1. Summary of market access provisions (cont.)

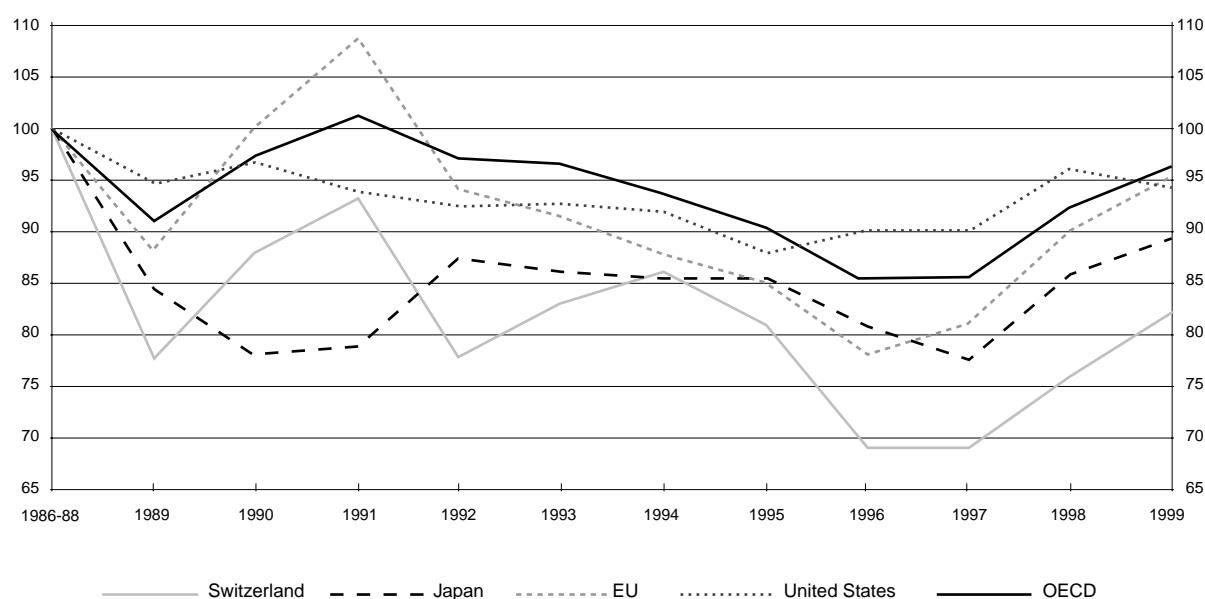
Safeguards, exceptions, and special and differential treatment

- Special temporary agricultural safeguard mechanism put in place for products subject to tariffication. Imposed if the increase in the volume of imports or the drop in price of imports exceeds certain trigger levels.
- Special treatment allows countries, under certain conditions, to postpone tariffication up to the end of the implementation period as long as minimum access opportunities are provided.
- Developing countries 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 subject to tariffication and binding but exempt from reduction commitments.

Base period, implementation period

- Base period: 1986-88. Implementation: 6 years, beginning in 1995 (10 years for developing countries).

Figure 2.1. Consumer nominal assistance coefficient (NAC), 1986-99
(1986-88 = 100)



Source: OECD PSE database, 2000.

The reduction formula involves a simple average that made it possible to spread the reduction unevenly across products (OECD, 1995)³. In a number of cases such flexibility has been used and the average reduction was achieved through deeper cuts in low tariffs on less sensitive commodities, accounting for a small proportion of a country's total agricultural production or trade.⁴ As a consequence, overall market access did not increase appreciably. **Figure 2.1** also suggests that protection decreased between the base period and the end of the Uruguay Round negotiations.

In some OECD countries, pre-UR tariffs on agricultural products were very low, as many products, particularly the most politically sensitive ones, were subject to quantitative restrictions. Judging from the production-weighted averages of applied m.f.n. tariff rates for all agricultural tariff lines the overall level of tariff protection in 1996 decreased only in **Australia** and **New Zealand**, the two countries which had the lowest tariff levels in 1993 (**Table 2.1**).⁵ The highest increase is estimated in **Norway**, reflecting the prevalence of non-tariff barriers before the URAA. In all countries, except **Australia** and **New Zealand**, the m.f.n. average applied tariffs for agriculture in 1996 are higher than the corresponding rates for the whole economy.

In **Canada**, the average tariff on agricultural and food products has increased dramatically between 1993 and 1996 mirroring the tariffication of quantitative restrictions. The production-weighted average tariff rate in 1996 is estimated at 7% for agricultural products, but 57% for food and beverages. Tariff increases were more significant in some products, most notably in sectors subject to supply management (milk and dairy products, chicken, turkey and eggs). In the **Czech Republic**, while the simple average m.f.n. applied tariff rate is relatively moderate, the food processing sector is the most heavily protected in the economy averaging 19%. They are particularly high in meat processing, where they average 30% and range up to 233% for dairy products, sugar refining and wine. In the **European Union**, nearly 280 tariff lines (at the HS ten-digit level) carry rates whose *ad valorem* equivalents exceed 50%. The highest-tariff items (above 120%) are meat of cattle, pigs and sheep, edible offal of animal origin, milk and cream, some cheeses, rice, wheat flour and bran, and manufactures of prepared animal feed. Average tariffs for oilseeds, fruit and vegetables, and plants, are significantly below the agricultural average and some are seasonal or zero.

Table 2.1. Production-weighted average applied m.f.n. tariff rates in selected OECD countries^(a) (%)

Country	Agriculture			Food, beverages and tobacco			Whole economy		
	1988	1993	1996	1988	1993	1996	1988	1993	1996
Australia ^(b)	1.7	0.7	0.5	6.2	3.2	3.3	11.2	6.6	4.2
Canada	4.1	4.0	7.1	16.8	15.6	57.4	8.7	8.4	12.1
European Union	7.3	7.0	15.7	27.4	27.1	32.5	8.2	8.4	7.7
Iceland	5.2	6.0	10.0	10.0	10.2	10.6	4.7	4.7	5.2
Japan ^(b)	5.1	5.1	5.0	15.6	17.5	18.9	4.2	3.6	3.4
New Zealand	3.3	2.0	1.8	8.9	5.6	5.2	10.6	5.7	5.1
Norway	2.3	1.8	102.2	7.9	8.1	135.1	5.3	4.0	22.3
Switzerland ^(c)	2.9	2.7	2.6	23.4	18.7	11.7	4.8	4.5	3.2
Turkey	31.0	6.8	9.3	200.0	78.1	82.3	39.0	9.6	10.6
United States ^(b)	3.8	4.1	7.9	7.6	8.2	15.9	4.4	4.7	5.2

ISIC REV. 2

(a) Calculations are based on each country's own value-added.

(b) Agriculture includes forestry and fishing.

(c) Tariff means are understated as the *ad valorem* equivalents of most specific tariffs are not included in the calculations.

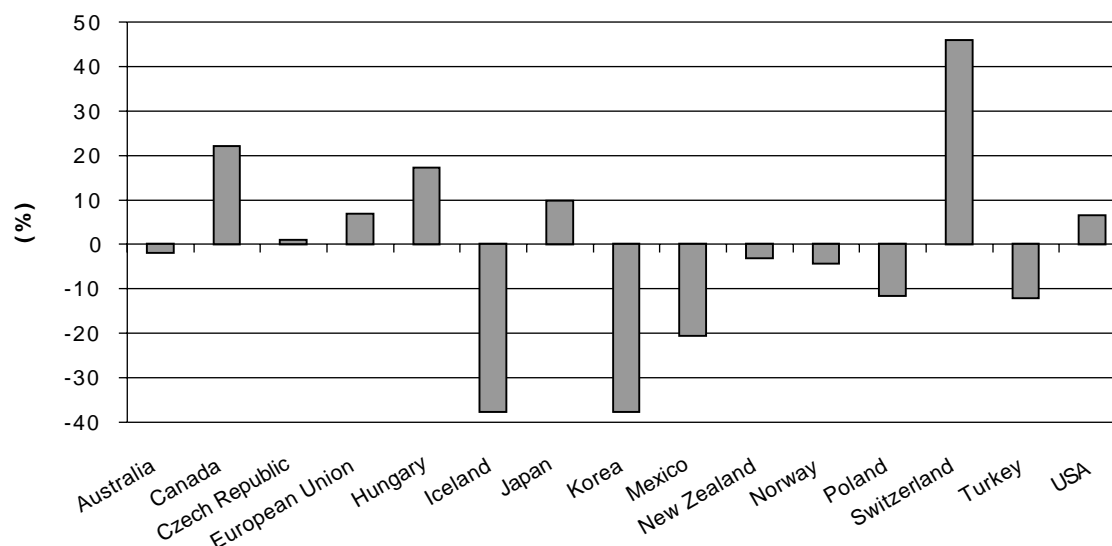
Source: OECD (1997b).

As a result of tariffication, tariff protection for a number of agricultural products increased, particularly for those perceived as being the most politically sensitive. Overall protection of these products has been higher during the implementation period insofar as the tariffs were set at rates substantially higher than the tariff equivalent of the pre-UR non-tariff barriers (Hathaway and Ingo, 1997). As shown in **Annex Table I.1**, in many instances, m.f.n. applied tariffs are much higher than actual protection, as measured by the nominal protection coefficient. Overstating base level tariff equivalents implies that a part of the tariff is redundant.⁶ Thus, the bound tariff, which is the highest rate permissible under the URAA, could be reduced significantly without actually improving market access.

Comparison of the m.f.n applied tariff rates in the implementation period with the final bound ones at the end of the implementation period indicates that the m.f.n applied tariff was more than 10 percentage points higher than the final bound rate in **Switzerland**, **Canada** and **Hungary**, implying

that these countries had to continue reducing tariff protection (**Figure 2.2**).⁷ On the other hand, the final bound rate was higher than the m.f.n. applied 1996 tariff in **Korea, Iceland, Norway, and Mexico**, suggesting that these countries had room to increase tariff protection should they decide to do so.⁸

Figure 2.2. **Applied m.f.n. and final bound tariff gap in OECD countries, 1995-98**



Notes: HS chapter, 6 digits; Bound rates for Korea and Turkey are for the year 2004. Australia, Canada: 1996, 1998; Czech Republic, Hungary, Switzerland: 1995; EU: 1995, 1996, 1997; Iceland, Norway: 1995, 1996; Japan: 1996, 1997; Korea, Mexico, New Zealand, Poland, United States: 1996, Turkey: 1998.

Source: WTO, *Trade Policy Reviews*, various issues; OECD (1999a ; 1997b)

The largest difference between 1996 m.f.n. applied and post-UR final bound rates is found in **Korea's** schedule, where the m.f.n applied rate for other cereals is 3% and the bound rate is 800% (OECD, 1999a). Similarly, **Iceland's** schedule contains a number of product groups at the HS 6-digit level where the difference exceeds 100 percentage points. The biggest difference is on some sweetened milk and cream (Section 01, HS040130), for which the applied m.f.n rate is 30% and the bound rate is 563% (OECD, 1999a). In the **Czech Republic**, agricultural tariffs are applied at their bound rates.

Tariff predictability

Prior to the conclusion of the Uruguay Round, many agricultural tariffs were not bound. A major outcome of the URAA was to increase the proportion of tariffs that are bound, thus providing a more certain environment for market access.

In the pre-UR period, only **Mexico** had bound all its agricultural tariff lines. By contrast, as a result of the URAA over 90% of agricultural tariff lines are fully bound for all OECD countries (**Table 2.2**). Moreover, most of the OECD countries have tariffed all import restrictions for agricultural products. For the **European Union, Iceland, Japan** and **New Zealand**, all agricultural tariffs are bound, against two thirds previously, while for **Australia** the share of agriculture tariff lines that are bound increased from 24% to 100%.

The OECD countries for which tariffs have not been bound in their entirety are **Hungary** (91%), **Korea** (96%) and **Poland** (97%). The most important agricultural products that remain unbound are rice and rice products (**Korea**), some live animals and products (**Korea, Hungary** and **Poland**), some fats and oils (**Hungary** and **Poland**), and some prepared food (**Hungary, Poland**).⁹

**Table 2.2. Bound tariff lines and duty free tariff lines:
agriculture and the whole economy in selected OECD countries
(%)**

Country	Agriculture				Whole economy			
	Bound tariff lines		Duty-free tariff lines		Bound tariff lines		Duty-free tariff lines	
	1993	1996	1993	1996	1993	1996	1993	1996
Australia	24	100	77	78	21	97	51	52
Canada	95	100	50	49	97	99	32	36
European Union	73	100	36	35	92	100	17	17
Iceland	72	100	80	72	82	94	68	66
Japan	71	100	45	47	87	99	40	41
Mexico	100	100	9	9	100	100	6	8
New Zealand	73	100	73	75	64	100	57	58
Norway	85	100	44	39	92	100	37	36
Switzerland	65	100	8	5	86	99	6	7
Turkey	23	100	11	13	23	46	4	8
USA	93	100	36	36	97	100	22	25

Note: Calculations were made by HS Chapter and Sub-heading, according to WTO definition of the agricultural excluded sector in the HS classification. Fisheries are

Source: OECD (1997b).

Tariff transparency

The transparency of tariff-only protection depends on the nature of the tariff. Other things equal, *ad valorem* tariffs are in general more transparent and less trade distorting than specific tariffs (OECD 1997a and 1997b). *Ad valorem* duties are calculated as a constant proportion of the value for duty of the imported good, where specific tariffs are expressed as a fixed monetary amount per physical unit of weight of the product imported, so that the associated degree of protection is dependent on the import price and can change independently of the rate itself. When world prices decline, specific tariffs provide more protection proportionately than *ad valorem* tariffs and vice versa. Thus, as prices fall, the *ad valorem* equivalents of specific tariffs rise and vice versa, thereby contributing to domestic price stability in the face of sharp fluctuations in world commodity prices. By dampening the extent to which domestic prices adjust to international price changes, thereby restricting access more, they accentuate downward pressure on world prices.

Ad valorem tariffs are more transparent than specific tariffs. Specific tariffs are more regressive and tend to distort domestic production patterns more than *ad valorem* tariffs because the level of protection depends on the value of the product. Further, specific tariffs may conceal high *ad valorem* equivalents as the estimation of average tariff levels is cumbersome, thereby making cross-country comparisons difficult. On the other hand, specific tariffs are in some instances relatively simple to administer and as their *ad valorem* equivalents are inversely related to prices they contribute to domestic price stability in the face of sharp fluctuations in world prices.

In addition to *ad valorem* and specific tariffs, other forms are used in the URAA, making it considerably more difficult to assess the corresponding protection levels. This range from mixed (*ad valorem* or specific) duties; to compound duties (*ad valorem* plus specific duties); to more technical formulations including those based on alcohol content, sugar content or the value of the imported product. For example, 'entry price' type systems where the applicable tariff is determined on the basis of the unit value of imports; and 'price bands' which allow the applied tariff to fluctuate within limits generally depending on world prices for the products concerned (**Annex Table I.2**). In some cases the mechanisms form part of the scheduled commitments of the Member concerned, in others 'normal' tariffs are bound, but the applied rate is determined by the mechanism.¹⁰

Although tariffication resulted in a large number of specific, mixed or compound duties, the vast majority of tariff bindings are denominated in *ad valorem* terms (**Table 2.3** and **Annex Table I.3**). However, in some OECD countries, among the consequences of the URAA was a sizeable increase in the

number of specific rates. Only in **Australia** and **New Zealand** did the share of specific and compound tariffs decline in the post-UR period. In **Switzerland** the proportion of tariffs for which no *ad valorem* equivalents are available increased from 8% to 79% of all tariff lines.

Table 2.3. Specific and compound tariffs and tariffs with no *ad valorem* equivalents in selected OECD countries
(%)

Country	Agriculture				Whole economy			
	Specific and compound tariffs		Tariffs with no <i>ad valorem</i> equivalent		Specific and compound tariffs		Tariffs with no <i>ad valorem</i> equivalent	
	1993	1996	1993	1996	1993	1996	1993	1996
Australia	4.0	3.0	2.0	2.0	5.0	2.0	4.0	1.0
Canada	16.0	20.0	0.0	6.0	7.0	8.0	0.0	2.0
European Union	30.0	33.0	23.0	5.0	12.0	12.0	8.0	3.0
Iceland	0.0	10.0	0.0	1.0	0.0	5.0	0.0	0.0
Japan	9.0	14.0	0.0	6.0	5.0	7.0	0.0	3.0
Mexico	0.0	3.0	0.0	1.0	0.0	2.0	0.0	1.0
New Zealand	2.0	0.0	1.0	0.0	3.0	1.0	2.0	0.0
Norway	...	...	3.0	4.0	22.0	9.0	2.0	9.0
Switzerland	94.0	95.0	8.0	79.0	94.0	93.0	4.0	26.0
Turkey	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
United States	33.0	34.0	4.0	6.0	17.0	16.0	1.0	4.0

Note: Calculations were made by HS Chapter and Sub-heading, according to WTO definition of the agricultural sector in the HS classification. Fisheries are excluded. In Norway, agricultural bound tariffs are expressed in *ad valorem* equivalents and in specific terms.

Source: OECD (1997b).

According to **Table 2.3**, the tariff schedules of **Australia**, **Iceland**, **Mexico**, **New Zealand** and **Turkey** exhibit a high degree of transparency as less than 10% of all bound agricultural tariffs consist of non *ad valorem* bindings. On the other hand, non *ad valorem* tariff bindings account for more than 50% of all bound agricultural tariffs in **Switzerland**. In the **European Union**, the new rates have mainly been expressed in specific terms (about 750 tariff lines out of a total of 1822 agricultural tariff lines at HS ten-digit level). Also, in the **United States** about 34% of tariffs are expressed in specific terms.

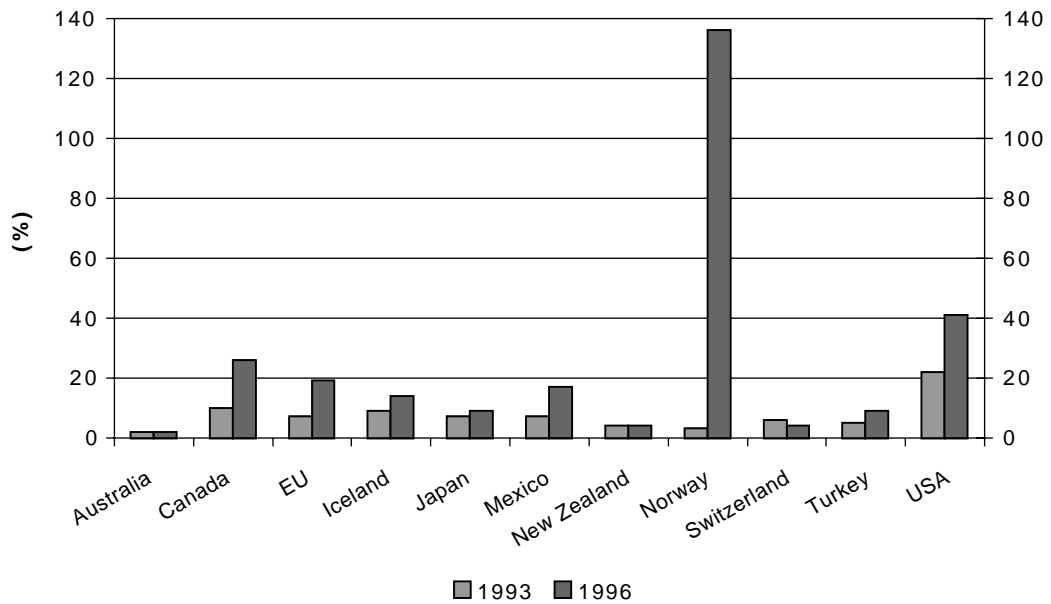
Tariff dispersion and peaks

The economic losses associated with a country's tariff structure depend not only on the average tariff rates, but also on the variance in these rates across products within a country. For a given overall tariff average, the greater the dispersion in tariff rates, the greater the likelihood that consumers' and producers' decisions are distorted by the tariff structure.¹¹ Moreover, tariff uniformity makes the trade regime more transparent and easier to administer (Panagariya and Rodrik, 1993). A low average tariff rate could thus disguise significant economic and trade distortions if the dispersion of tariff rates is high. The dispersion also provides an indication of the complexity of a country's tariff schedule.¹² If products within a given group face widely different tariff rates, this can result in large changes in their relative prices. Large changes in relative prices constitute a potentially serious source of distortion to domestic consumption and production patterns, and trade.

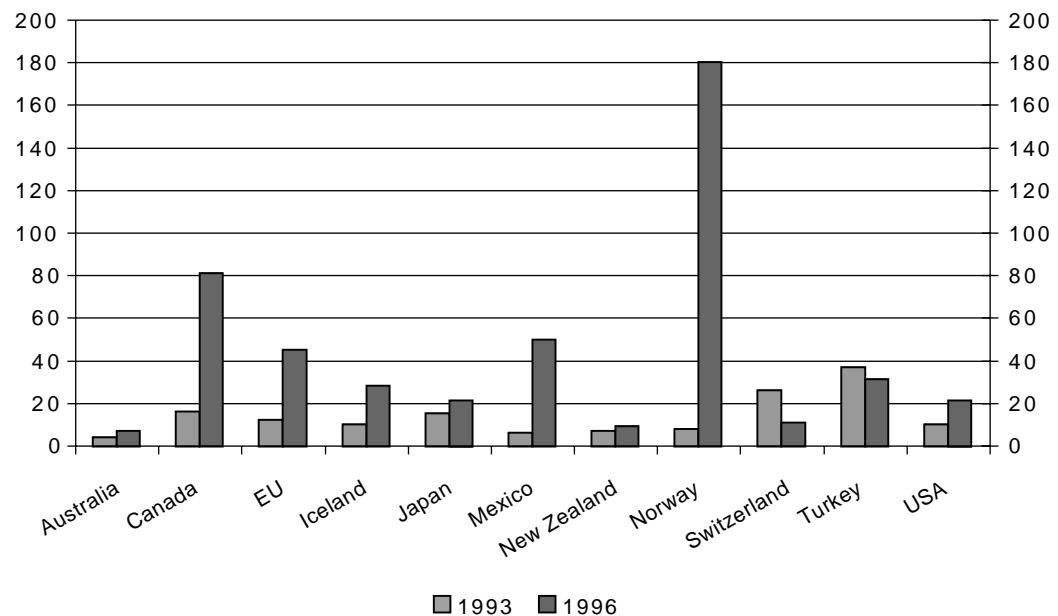
Standard deviation has been used to give a statistical measure of the range of tariff levels. As shown in **Figure 2.3**, dispersion of tariffs for primary agriculture and for processed products as measured by the standard deviation was greater for most OECD countries in 1996 relative to 1993.¹³ The increase was more pronounced for food products than for primary agriculture. The highest increase for primary agriculture is estimated in **Norway**, the **United States**, **Canada**, the **European Union** and **Mexico**. For food products the standard deviation is estimated to have increased most in **Norway**, **Canada**, **Mexico** and the **European Union**.

Figure 2.3. **Agricultural tariff dispersion in selected OECD countries, 1993 and 1996**
(Standard deviation, %)

Agriculture*



Food, Beverage and Tobacco*



* ISIC classification, revision 2.

An additional indicator of dispersion is the proportion of items for which the tariff rate exceeds a reference level. The reference level may, for example, be a specific multiple of the nation's average tariff rate. Tariff rates in excess of the given national reference level are referred to as spikes (or "domestic peaks"). "International spikes" are customarily defined as those tariffs which exceed 15%. The greater the proportion of "spikes" in a country's tariff schedule, the greater the potential economic distortion.¹⁴

As shown in **Figure 2.4**, dispersion of tariffs as measured by domestic and international "spikes" increased for most OECD countries in 1996 relative to 1993. The increase was most pronounced in **Norway**, the **European Union** and **Mexico**. In the **European Union** the tariff profile shows high peaks for cereals and, to a lesser extent, meat and meat products, dairy and poultry, sugar and tobacco products.

Another way to gauge the dispersion of tariffs is through the frequency distribution. As depicted in **Figure 2.5**, there are widespread differences in the distribution of applied m.f.n tariff rates across OECD countries. For the **European Union**, **Japan** and **Turkey** the distribution is more even, whilst in **Australia** and **New Zealand** approximately 95% of tariffs are between zero and 15%.

More than half the bound tariffs in **Australia**, **Iceland** and **New Zealand** are zero. The more duty-free items, the simpler the tariff schedule. A comparison of the proportions of all tariff lines that are duty-free suggests that pre-URAA tariff protection was more widespread in **Switzerland**, **Mexico**, **Turkey**, the **European Union** and the **United States** than in **Australia**, **New Zealand** and **Iceland** (**Table 2.2**). This will remain the case even with the implementation of the URAA. However, the URAA did bring about an increase in the proportion of tariff lines that are duty-free.

Tariff escalation

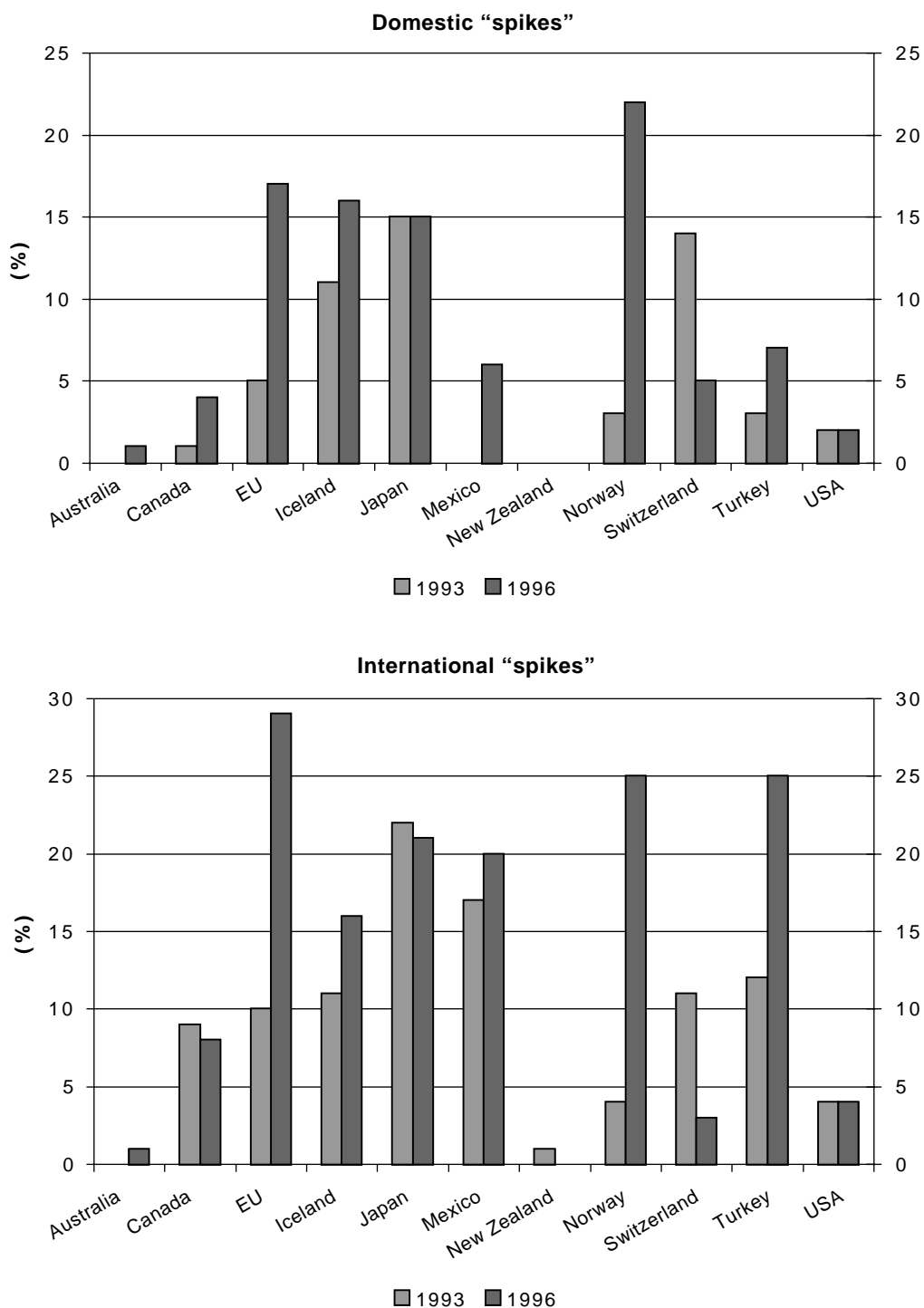
Tariff escalation occurs when the tariff applied on a product "chain" rises as goods undergo further processing, resulting in a higher effective protection for the processing industry than otherwise would be the case. It thus produces a bias against processed goods and creates impediments to imports of higher value-added products.¹⁵

One of the accomplishments of the overall UR package was a reduction in tariff escalation for all sectors (GATT, 1994; Daly and Kuwahara, 1998). Nonetheless, available evidence suggests that tariff escalation is still prevalent, although the extent of escalation differs greatly across countries (**Table 2.4**). **Australia's** agricultural tariffs on primary products tend to be lower than for semi-processed and processed goods, although escalation is more evident in the manufacturing sector. In **Canada**, tariff escalation remains relatively high in certain sectors, particularly food products, with the average tariff on finished food products nearly twenty times the level at the first stage of processing. In the **Czech Republic**, tariffs in the food sector are escalate steeply, averaging 0.1% for goods at the lowest stage of processing to 13.7% for semi-processed goods, and 17.4% for fully processed goods. The **European Union's** agricultural tariffs display tariff escalation, although it decreased somewhat over time. In **Switzerland** and **Turkey** significant tariff escalation is evident in the food sector. However, Turkey's overall tariffs display negative escalation from first stage to raw materials to semi-processed products.¹⁶ In contrast in **Japan** and **Korea**, agricultural tariff escalation is difficult to detect as domestic producers of intermediate food products are the most protected. The tariff average actually declines between the first and second stage of processing before increasing slightly at the third stage. In **Mexico**, the average duty on semi-manufactured food, beverages and tobacco products was higher than on finished products.¹⁷

Special safeguard provisions

An agricultural safeguard clause allows the imposition of supplementary tariffs in the event of import prices falling or import quantities surging relative to specified base-year levels (1986-88). Special safeguards can be invoked only for products that have been subject to tariffication for which application of the special safeguards is indicated in the Schedule. However, special safeguards can only be invoked after quotas have been filled. The special safeguard was designed to address disturbance in domestic

Figure 2.4. Agricultural tariff peaks in selected OECD countries, 1993 and 1996



Notes: Calculations were made by HS Chapter and Sub-heading, according to WTO definition of the agricultural sector in the HS classification. Fisheries are excluded. Domestic tariff "spikes" are defined as those exceeding three times the overall simple average m.f.n rate. International "spikes" are defined as those exceeding 15%.

Figure 2.5. Frequency distribution of m.f.n. applied tariffs in selected OECD countries (%), 1996

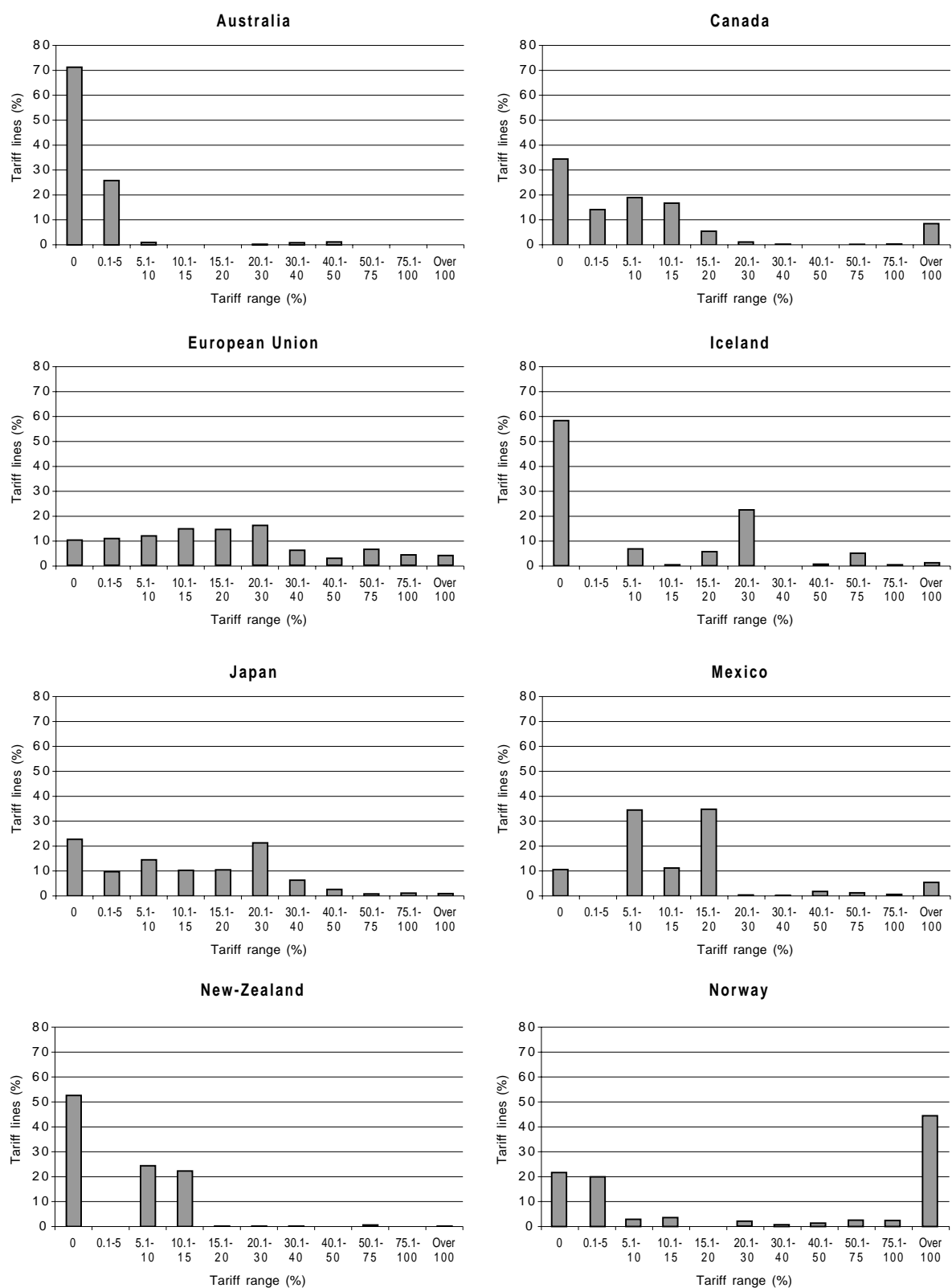
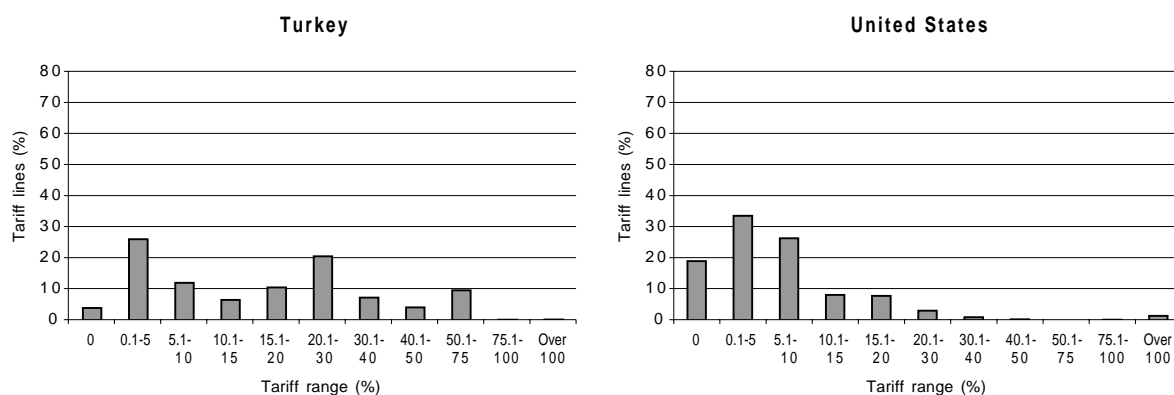


Figure 2.5. Frequency distribution of m.f.n. applied tariffs in selected OECD countries (%), 1996
(Cont.)



Note: HS Chapter 1-24, excluding fisheries.

Source: OECD Secretariat calculations based on OECD (1997b).

Table 2.4. Tariff escalation by stage of processing (%)

Country	Total economy			Food products		
	Primary	Semi-processed	Fully-processed	Primary	Semi-processed	Fully-processed
Australia (1998)	0.5	5.9	6.4	0.3	0.3	2.0
Canada (1996)	6.0	7.0	10.8	2.2	7.3	45.0
Canada (1998)	5.0	4.7	9.8	1.8	7.2	42.1
Czech Republic (1995)				0.1	13.7	17.4
European Union (1995)	8.7	7.8	10.8	11.7	22.0	27.8
European Union (1997)	13.9	6.2	10.7	15.7	17.6	24.0
Japan (1997)				35.3	19.6	25.3
Korea (1996)	11.8	8.1	9.4	14.1	17.0	22.4
Mexico (1997)	12.3	10.8	15.5	17.0	37.2	30.8
New Zealand (1996)	1.2	3.5	8.4			
Switzerland (1995)	3.0	2.6	2.9	15.3	93.1	94.0
Turkey (1998)	21.6	7.3	14.1	36.0	40.6	60.0

Note: Food products corresponds to ISIC 311, except Mexico and Turkey which also includes beverages and tobacco (ISIC 31).

Source: WTO, Trade Policy Review, various issues, Geneva.

markets which might arise from the removal of non-tariff measures, either in terms of a surge in imports that would displace national production or a decline in domestic prices because tariffs established through tariffication may not provide sufficient protection. The special safeguard provisions are an alternative to the general safeguard provisions in the GATT, and are much easier to invoke because they do not require an injury test.

The special safeguard provisions raise a number of important issues in implementing the market access provisions. In principle, the possibility of invoking the special safeguards weakens the likely trade impact of tariffication, renders the tariffication process less transparent than would otherwise be the case and creates the possibility that tariffs will, in effect, be variable (Josling, Tangermann and Warley, 1996).

All OECD countries have reserved the right to invoke the special safeguard clause for tariffied products (**Annex Table I.4**). However, contrary to the predictions of many commentators, there has not been widespread recourse to special safeguards. As indicated in **Table 2.5**, only eight WTO Members (seven of whom are OECD Members) have used special safeguards.¹⁸ The percentage of tariff lines with special safeguards ranges from zero in **New Zealand** to 66 in **Poland** (**Annex Table I.5**). Possible reasons

for the limited application of special safeguard are that tariffs resulting from tariffication remain high and that world prices have increased since the base period.

The special safeguard can be activated either by a volume-based trigger or a price-based trigger, but not both concurrently. The special safeguard permits additional duties to be imposed in situations where the volume of imports increases beyond a specified trigger level which varies according to the share of the domestic market which is supplied by imports, or in situations where prices fall below some specified trigger level. Both price-based and volume-based special safeguards are applicable only to over-tariff quota imports.

The volume-based special safeguard allows additional duty to be imposed on imports that occur above a certain level. The trigger level is derived using a complex formula and is determined by: the average level of imports over the preceding three years; the relationship between volume of imports and corresponding domestic consumption; and the absolute volume change in consumption over the most recent years for which data are available.¹⁹ The trigger level is higher: the greater the three-year average level of imports; the lower the share of imports in domestic consumption; and the faster domestic consumption increases. The maximum additional duty may not exceed one-third of the ordinary customs duty in effect for the commodity in question and may only be maintained until the end of the year in which it has been imposed.

As shown in **Table 2.5**, the volume-based special safeguards was invoked on 210 tariff lines over the 1995-99 period. The volume-based special safeguard was invoked most frequently in 1996, entirely by the **European Union** and **Japan**.²⁰ For the other years, the volume-based special safeguard was applied to a small number of tariff lines.

Table 2.5. Special agricultural safeguard use by OECD Members and number of tariff items, 1995-2000

Price-based special agricultural safeguard action							
Country	1995	1996	1997	1998	1999	2000	Total
European Union*	12	14	14	12			52
Hungary***					7		7
Japan**	3	1		2	8	3	17
Korea***	3	5	5	5			18
Poland**		2	3	5	106		116
Switzerland*					7		7
United States*	24	49	74	74			221
Total	42	71	96	98	128	3	438

* HS 8-digit items. ** HS 9-digit items. *** HS 10-digit items

Volume-based special agricultural safeguard action							
Member	1995	1996	1997	1998	1999	2000	Total
European Union*		47	46	27			120
Japan**	5	61	5	3	3		79
Korea***			2	2			4
Poland***			1	1	1		3
United States*****				6			6
Total	5	108	54	39	4		210

* HS 8-digit item Marketing year. ** HS 9-digit items. Fiscal year.
 *** HS 4-digit item Calendar year. **** HS 6-digit item. Calendar year.
 ***** HS 8-digit item Calendar year.

Source: WTO (2000) *Special Agricultural Safeguard*, background paper by the Secretariat G/AG/NG/S/9 and OECD Secretariat calculations based on country notifications to WTO.

Under the price-based special safeguard, an additional duty can be imposed if the c.i.f. import price of the shipment concerned falls below 90% of the 1986-88 average reference price ("trigger price"). The duty imposed increases the more the import price falls below the trigger price. Thus the duty becomes an increasing percentage of the import price as the import price falls.²¹ As shown in **Table 2.5**, seven

OECD countries have notified price-based special safeguard measures. The highest number of tariff lines on which the price-based special safeguard has been invoked in one country in one year was 106 (Poland in 1999), with most countries using the price-based special safeguard on only a small number of tariff lines. However, over the 1995-99 period, OECD countries have used price-based special safeguards more widely than volume-based special safeguard. Between 1995 and 1999 the price-based special safeguard was invoked for 435 tariff items and the volume-based special safeguard for 210 tariffs items. The price-based special safeguard was more widespread in dairy, sugar, and coffee, tea and cocoa, while the volume-based special safeguard was used mainly on fruits and vegetables and meats (**Annex Tables I.6 and I.7**). In the **European Union** over the 1995-98 period, special price safeguards have only been implemented in three sectors: sugar, poultry and molasses, while special volume safeguards have only been implemented in 1996 and in one sector, fruits and vegetables.²²

Two main issues have become apparent from an examination of the notifications concerning the level of imports affected by price-based special safeguards. First, it appears that in a number of cases the additional duty has been imposed on minimum quantities. For example, **the United States** applied the price-based special safeguard to 2 kg of coffee preparation, 8 kg of a certain American-type cheese and 18 kg of fresh blue cheese. **Japan** has used the following trigger levels for the volume-based safeguard: zero tonnes for some milk and cream imports (actual imports 1.2 tonnes); and 0.21 tonnes for butter milk powder (actual imports 1.02 tonnes).

In addition, the trigger prices countries apply in the price-based special safeguard are, in many cases, higher than the external reference prices used to calculate tariff equivalents. Article 5 of the URAA stipulates that the trigger price shall, in general, be the average c.i.f. unit value of the product concerned in the 1986-88 period in the domestic currency of the importing country. However, unlike the process of tariffication, where the external price could be verified, there was no requirement for countries to establish trigger prices for SSG measures. Further, the level of commodity aggregation for application of the SSG is different from that used for tariffication (somewhat broader product definition).

As is evident from **Annex Table I.8**, trigger prices are in many cases higher than the external reference prices used to calculate tariffication. Moreover, in some cases the trigger prices appear to have been calculated on the basis of unit values of actual imports, including imports under preferential conditions, thereby attracting higher prices than otherwise would be the case (Tangermann, 1998, p. 125). For example, the **European Union** trigger price for sugar, which is of the order of magnitude of the European Union domestic intervention price, is based on the unit value of preferential **European Union** sugar imports from ACP countries. Similarly, the **United States** trigger price for sugar is based on unit prices of sugar imported preferentially into the USA from Caribbean countries. The European Union trigger price for butter reflects the high price of butter imported into the European Union under preferential terms from New Zealand.

There are a number of uncertainties involved in both the price- and quantity-based mechanisms, which could create trade distortions, depending on the precise implementation. Under the volume-trigger special safeguard, there is the possibility of a volume-based safeguard trigger of zero. As there is no requirement for a minimum level of imports to trigger the volume-based special safeguard, there is the possibility that any import of the product concerned can activate the trigger.²³ Second, the inclusion of tariff quota imports in the calculation of the trigger level implies that tariff quota imports alone can activate the trigger level (e.g. when the tariff quota commitment is greater than the average imports in the previous three years). Article 5 of the URAA determines that tariff quota imports shall be counted for the purpose of determining the trigger level, but that no additional duty can be imposed on them. Consequently any over-tariff quota imports will face an additional duty, up to a 33% increase in the tariff they must pay, even though no over-tariff quota imports have actually occurred.²⁴ Third, Article 5 of the URAA does not define the safeguard unit. This implies that the calculation of a volume-based special safeguard trigger could be based on a basket of products containing more than one tariff line, instead of at the individual tariff line level.²⁵

Finally, in applications of both the volume-based and price-based special safeguard the lack of information required by the relevant notifications inhibits transparency. For example, the notifications do not provide information regarding the extent to which the import price is below the trigger price, nor do they record the current level of duty being applied to the imports or how much additional duty will be levied on imports after the special safeguard is activated.

Tariff quotas

Background

Until the URAA, tariff quotas were not as widespread as standard quotas or tariffs. The market access provisions have, paradoxically, caused a proliferation of tariff-quotas in agricultural trade.²⁶ All OECD countries, except **Turkey**, have tariff quota commitments shown in their Schedules with a total of around 700 individual tariff quota commitments (**Table 2.6**).

Table 2.6. Lines with tariff quotas as a proportion of all tariffs lines in selected OECD countries

Country	Agriculture %		Whole economy %	
	1993	1996	1993	1996
Australia	1.0	1.0	3.0	0.0
Canada	0.0	12.0	0.0	3.0
European Union	1.0	8.0	1.0	2.0
Iceland	0.0	28.0	0.0	7.0
Japan	2.0	10.0	1.0	3.0
Mexico	0.0	9.0	0.0	2.0
New Zealand	0.0	0.0	0.0	0.0
Norway	0.0	23.0	0.0	5.0
Switzerland	0.0	19.0	0.0	5.0
Turkey	0.0	0.0	0.0	0.0
United States	1.0	10.0	0.0	2.0

Source: OECD (1997b).

Tariff quotas allow two different tariffs to be applied to imports of the same product line. For a specified quantity of imported goods, a reduced tariff rate applies. For imports beyond the specified quantity a higher tariff rate applies.²⁷ Thus, a tariff quota is essentially a two-tiered tariff and tariffs and quotas are special cases of tariff quotas. Under the URAA, the lower-tier or “in-quota” rate is set at low levels to provide imports not less than the same level of market access opportunity that existed prior to 1986-88 base period (current access) or to provide a basic level of market access opportunity for imports where imports had been low (minimum access).

The second-tier, or “over-quota” rate, is set at a higher rate intended to approximate the level of protection enjoyed before the URAA. WTO members committed to lowering over-quota rates by at least 15% (10% for less developing countries (LDCs) over the six-year implementation (ten years for LDCs). The in-quota rates and the quantities to which they apply are incorporated in the country schedules and are bound under the URAA. However, unlike the over-quota rates, they were generally not subject to negotiation under the Uruguay Round.

Tariff-quotas, although not as economically efficient as tariffs, are, in general, less trade-distorting than non-tariff barriers. It can be argued that tariff-quotas increase market access, since, in contrast to import quotas, there is no explicit ceiling on imports under this system.

However, tariff-quotas are second-best policy instruments as they retain many of the characteristics of non-tariff barriers which might impede market access. The difference between the in-quota and the over-quota tariffs is often so large as to prohibit any trade at the higher rate (**Table 2.7**). If the over-quota tariff is high and the volume of imports within the tariff-quotas remains restricted the tariff-quota will exhibit many of the most market distorting aspects of a non-tariff barrier. Moreover, it may be possible,

through the methods used to administer tariff-quotas, to restrict trade and reduce transmission of world price signals to producers and consumers in importing countries. In addition, the implications of tariff-quotas for price stability are more complex than those of tariffs or quotas due to the possibility of policy regime switching (Abbot and Paarlberg, 1998).²⁸

Table 2.7. **Agricultural quota-based tariff lines and bound tariff means**

	Number of lines		Simple average bound tariff means		Change (%)
	In-quota	Out-quota ^(a)	In-quota	Out-quota	
Australia	10	10	7	27	286
Canada	83	88	8	203	2 438
Czech Republic	63	63	27	49	81
European Union	77	181	8	45	463
Hungary	308	375	21	39	86
Iceland	247	335	51	223	337
Japan	58	58	20	274	1 270
Korea	118	64	21	366	1 643
Mexico (b)	50	221	49	41	- 16
New Zealand	4	4	0	7	...
Norway	272	421	216	239	11
Poland	512	486	25	56	124
Switzerland	157	382	36	81	125
United States	173	10	10	29	190

Notes:

(a) This refers to both tariff-quotas and special safeguard where applicable.

(b) The in-quota average tariff is higher than the over-quota tariff due, in part, to the fact that averages were calculated using ad valorem rates only.

Source: OECD (1999b).

From the market access perspective, the central point about tariff-quotas is the level of protection that they provide and the associated economic distortions. The following sections provide some evidence of the fill rates over the 1995-99 implementation period and an attempt is made to provide some explanations as to why tariff-quotas were not fully utilised.

Tariff quotas and trade protection

Fill rates

An important indicator of the trade impact is the percentage of the tariff-quota quantity that is actually imported, that is, the fill rate. Such information is useful insofar as it can help to identify how the tariff-quotas may be adjusted to increase market access. If, for example, tariff-quotas are fully utilised, then greater imports could result through expansion of tariff-quotas. Likewise, if imports are less than the tariff-quota quantity, an expansion of tariff-quantity alone might not be sufficient to result in increased imports.

However, even if tariff-quotas are fully utilised, increasing them may not be sufficient to ensure an increase in trade.²⁹ Tariff-quotas are often allocated totally or partially to specific supplying countries under preferential agreements. This excludes or restricts other suppliers who may be as or more efficient than those with allocations. Thirty-four tariff quota allocations in the **United States**, nineteen in the **European Union** and seventeen in the **Czech Republic** are on a country-specific basis. Tariff-quota access to those countries was generally allocated to traditional supplying countries (**Annex I.1**). The allocations for access to the **European Union** are mainly allocated to the ACP countries, and central and eastern European countries. **New Zealand** also has significant allocated access for butter and sheep meat into the **European Union** and **Canada**. The allocation of tariff-quota access to specific countries is most prevalent for dairy products, sugar and meat, in particular beef. Further, as discussed later in the report, quota licenses are often designated by product line for each country, thereby fragmenting the license market.

Overall, many of the tariff-quotas have not been filled. As illustrated in **Figure 2.6** the average simple tariff quota fill rate for OECD countries was 65% over the 1995-98 implementation period. It is

noteworthy that the fill rate of tariff quotas has steadily decreased over time. The simple average fill rate for the OECD countries as a whole declined from 67% in 1995 to 63% in 1998 (**Annex Figures I.1, I.2, I.3, I.4; Annex Table I.10**). These results provide support to the argument that the establishment of tariff-quotas could hamper market access and trade flows.

There is a wide range of fill rates among countries. On average, tariff quotas were filled less than two-thirds in **Poland, the Czech Republic, New Zealand, Hungary** and the **United States** during the 1995-98 period. The highest fill rate was estimated for **Australia** (95%), followed by **Switzerland** (91%).

With respect to tariff quota fill rates by product group, **Figure 2.6** and **Annex Table I.11** portray simple averages together with the number of tariff quotas included. Quotas for tobacco products and for agricultural fibres appear to be the least utilised (an average fill rate of 46%), while tariff quotas for fruits and vegetables have, on average, the highest fill rates (71%) over the 1995-98 period. Reflecting the changes of fill rates by country over time, the rate of utilisation of tariff-quotas declined for most product groups particularly for agricultural fibres, sugar, and livestock. Fill rates increased only for coffee and oilseeds.

Caution should be exercised in interpreting the tariff-quota fill-rate results as all quotas, irrespective of size, are assigned the same weight. No allowance is made for differences in size between individual tariff-quotas. A small tariff-quota is given the same weight as a large tariff-quota with the same level of fill. Likewise, the simple average does not differentiate between low value and high value products.

To obtain a better understanding of the representativeness of the simple average fill rates, **Annex Figures I.1, I.2, I.3** and **I.4** and **Annex Tables I.12** and **I.13** show the frequency distribution of tariff quota fill rates by specified fill ranges. About a quarter of tariff-quotas were filled to less than 20%. This would tend to suggest that estimates of simple average fill rates could be misleading. Nevertheless, a degree of stability is apparent in the tariff-quota systems from the data over the four years which indicates relatively stable average fill rates and fairly stable distributions by degree of fill (**Annex Tables I.10** and **I.11**).

In analysing the market impacts of tariff-quotas, a distinction should be made between current access and minimum access commitments, as the fill rates could be different. As is evident from **Table 2.8**, in Iceland, fill rates for dairy products under minimum access are less than half of the corresponding fill rates under current access for each of the three years. For livestock products, the minimum access fill rate in 1995 is less than one-fifth of the current access fill rates.³⁰

Table 2.8. Iceland: Current and minimum access fill rates for dairy and livestock products

Product group	Current access (%)			Minimum access (%)		
	1995	1996	1997	1995	1996	1997
Dairy	100+	100+	100+	50	50	50
Livestock	100+	0	0	19	30	36

Source: OECD Secretariat estimates based on Iceland's Notifications to WTO

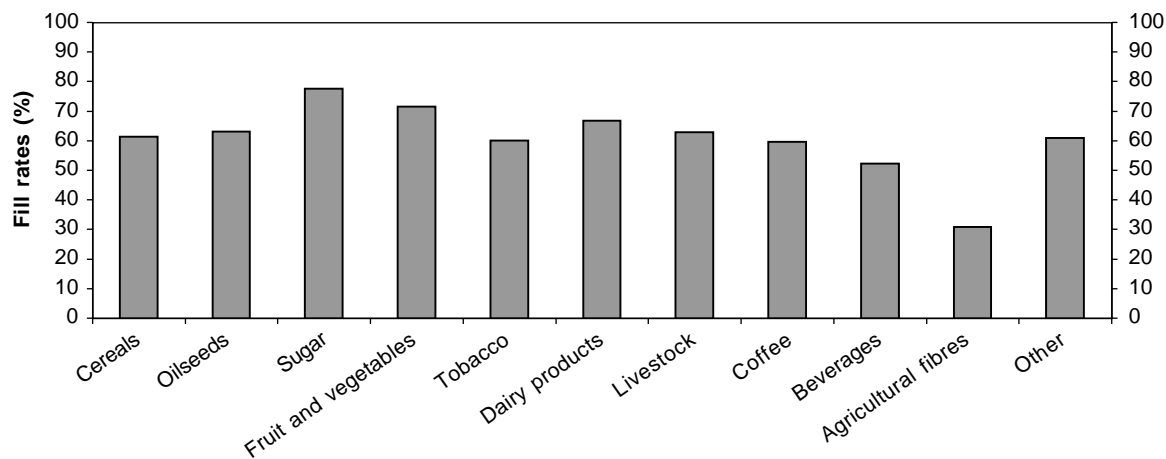
There are several factors which can lead to differing degrees of tariff-quota utilisation. Some of the factors include the level of import demand under prevailing market conditions at the in- and over- quota tariff rates, the availability of the imported good from supplying countries, changing competitiveness in the importing country, the ability of those holding quota rights to influence prices in the importing country and world prices. Moreover, the method by which tariff-quotas are administered, and the levels at which the in- and over-quota tariff rates are set, can also influence the likelihood of tariff-quotas being filled and the rate of fill.

In-quota and over-quota tariff rates

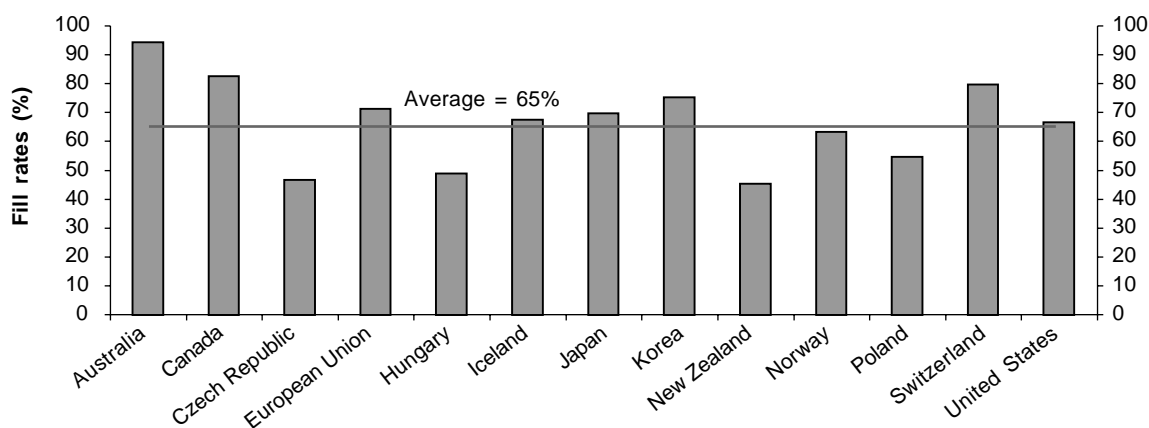
From an economic perspective, the significance of tariff-quotas arises from the degree of protection that they give to domestic industries. That protection is reflected in higher domestic prices than the price obtainable for imports of the same products.

Figure 2.6. Tariff quota fill rates in OECD countries (simple average), 1995-98

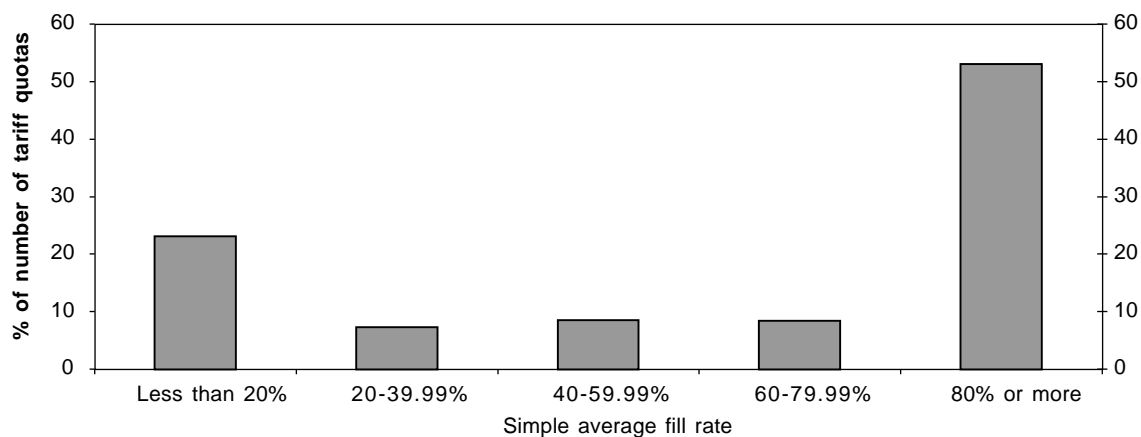
By product category



By country



Frequency distribution of fill rates



Notes: No data available for Mexico.

Source: OECD Secretariat calculations based on country notifications to WTO.

A tariff-quota combines some features of tariffs and import quotas. A quota is fixed for imports that can enter at a lower tariff rate. Unlike a quota, a tariff-quota does not specifically limit the volume of imports to the quota level. Imports can still take place over the quota ceiling, but usually at a higher tariff rate. A relatively large over-quota tariff could protect importers from a rapid surge in imports, and a relatively low in-quota tariff would ensure market access to exporters up to the quota level. Whether the economic repercussions of tariff-quotas are like those of a tariff or a quota depends upon whether imports are below, equal to, or over the quota level for the lower in-quota tariff rate.

Knowledge of the level and nature of protection that in fact applies and who receives market rents is important in enhancing market access. A number of situations can arise where the elements of the tariff-quota interact with market conditions in ways which could result in different market access outcomes. Under competitive market conditions, five possible situations could be distinguished (Podbury, and Roberts, 1999; François, 1999; Boughner and de Gorter, 1999):

1. *The domestic price exceeds the landed import price by exactly the in-quota tariff rate.* The tariff quota would have the same effect as a pure tariff at the lower rate. The rate of protection, as measured by the extent to which internal prices exceed landed import prices excluding duty, would usually be equivalent to, at least, the in-quota tariff and no quota rents would arise. Market access could be increased by reducing the in-quota tariff or by expanding the tariff-quota volume.
2. *The domestic price exceeds the landed import price by exactly the over-quota tariff rate, the tariff-quota is filled and trade is occurring at the over-quota tariff rate.* The over-quota tariff is binding and the tariff-quota would have the same effects as a tariff. Nevertheless, in this case quota rents would accrue. Market access could be increased through reduction in the over-quota tariff rate, and to a lesser extent through increase of tariff-quota volumes.
3. *The domestic price exceeds the landed import price by more than the in-quota tariff and the tariff-quota is not filled.* The level of protection exceeds in-quota tariff.
4. The domestic price exceeds the landed import price by more than the over-quota tariff and the tariff-quota may or may not be fully filled.
5. *Tariff-quotas are exactly filled and the domestic price exceeds the landed import price by more than the in-quota tariff but by less than the over-quota tariff.* In this case, the quota level is binding and the tariff-quota would have the same effect as an import quota. Quota rents would arise because the price of the imported good can exceed the tariff-inclusive import price. The rate of protection would be at least as great as the in-quota tariff and potentially as great as the over-quota tariff.

The last three cases suggest that administrative arrangements within the tariff-quota could be limiting imports.³¹ Therefore, to increase market access, administrative arrangements need to be addressed.

Which of the aforementioned five cases is prevalent will depend on how the quota and the tariff rate are set. If the over-quota tariff rate provides a level of protection in excess of the protection given by the quantitative restrictions then the quota or the in-quota tariff will be binding. If the over-quota tariff rate understates the true protection given by the non-tariff barriers then the over-quota tariff is likely to be binding.

An attempt is made to estimate the extent to which the domestic price exceeds the landed import price by calculating nominal protection coefficients, that is, the price gap expressed as a percentage of the world reference price, for a number of key commodities. Nominal protection coefficients, together with the in-quota and over-quota tariff rates, and tariff-quota fill rates are reported in **Annex Table I.14**. A number of points emerge from these calculations. In a number of cases, particularly for wheat, beef, pigmeat, poultrymeat and sheepmeat, the in-quota 1995 tariff rates are higher than the nominal protection coefficients. With a few exceptions, the rate of protection, as measured by the nominal protection coefficient, was much higher in the 1986-88 base period than during the three years of the implementation period.

Table 2.9. Tariff quota protection: qualitative results

Commodity	NPC=P1, fill rate <100	NPC=P2, fill rate >100	NPC>P1, fill rate <100	NPC>P2	P1 < NPC < P2, fill rate = 100
Wheat				Japan	
Sugar					EU
Cheese			US	Australia	Canada
Skimmed milk powder			Japan, US		Canada, EU
Butter	US		Czech Rep., Japan		Canada, EU
Beef			EU	Korea	
Pigmeat			Hungary, Iceland	Korea	EU
Poultrymeat			Norway	Iceland, Korea	EU
Sheepmeat			EU		

Notes: See Annex Table I.14
NPC = nominal protection coefficient; P1 = in-quota tariff rate; P2 = over-quota tariff rate.
Source: OECD Secretariat calculations.

Table 2.9 provides a qualitative synthesis of the results reported in **Annex Table I.15**. For cheese in the **US**, skimmed milk powder in **Japan** and the **US**, butter in the **Czech Republic** and **Japan**, pigmeat in **Hungary** and **Iceland**, poultrymeat in **Norway**, and beef and sheepmeat in the **European Union**, the nominal protection coefficient is higher than the 1995 in-quota tariff-rate but the volume of imports is less than the tariff-quota (Case 3). For cheese in **Australia**, wheat in **Japan**, poultrymeat in **Iceland**, and for beef, pigmeat and poultrymeat in **Korea**, nominal protection coefficients are higher than the over-quota tariffs, indicating that administrative arrangements appear to impede imports sufficiently to ensure domestic prices above the import price plus the over-quota tariff (Case 4). Finally, for cheese in **Canada**, sugar in the **European Union**, skimmed milk powder and butter in **Canada** and the **European Union**, and for pigmeat and poultrymeat in the **European Union**, the rate of trade protection lies between the in-quota and over-quota tariff, but tariff quotas were fully utilised (Case 5). In this case, it could be argued that the over-quota tariff is more than sufficient to prevent imports beyond the tariff-quota volume, or administrative arrangements prevent imports from exceeding the tariff-quota volume. Under such conditions, market access could be increased in various ways, including expansion of the tariff-quota quantity, reduction of the over-quota tariff and reform of administrative constraints for allocating the tariff-quotas.

Approaches for allocating tariff quotas

The method of allocating import quotas can have important impacts on trade and on the rate of tariff-quota utilisation. Most licensing systems lead to the establishment of vested interests and built-in rigidities.³² The precise method of administration of tariff-quotas could operate as a second tier level of protection over and above that provided through the tariffs. If a license, for example, is not tradable tariff-quota holders may decide not to import the entire portion they have been allotted due to unfavourable market conditions, resulting in underfilling of the tariff-quota. Moreover, there are several methods of allocating licenses that can cause a low fill rate. In theory, if licenses are allocated entirely to state trading enterprises or producer groups or associations in the importing country, imports can be reduced below the tariff-quota level. State trading enterprises could use their monopsony power to engage in unfair trade practices, particularly if they have sole rights in buying and selling the commodity (Dixit and Josling, 1997; USDA, 1998).

The right to import at a lower tariff entitles its holder to earn economic rent. Depending on the administrative arrangements, rents could be captured by importers in the purchasing country, the government of the importing country or suppliers from exporting countries. If, for example, governments in importing countries administer tariff-quotas by allocating the rights to import or the import licences between importers, the rent could be appropriated by the importers. Likewise, if exporting countries or their agencies were allocated import rights for specific quantities, the rents might be captured by exporters or exporting countries.³³ The government could appropriate the rents through auctioning or through an import agency.

As shown in **Table 2.10** a number of methods of administering tariff-quota allocations are used by OECD countries: applied tariffs, first-come first-served, import licensing on demand, auctioning, historical importers, producer groups, state trading and export licensing.

Table 2.10. Tariff quota by administration method, 1995-99

	Simple average fill rate					% of the number of quota lines					Number of countries				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Applied tariffs	72	67	67	66	n.a.	46	43	43	39	n.a.	7	6	5	5	2
Auctioning	31	38	41	51	n.a.	4	4	4	3	n.a.	4	4	4	3	0
First-come, first served	51	56	57	59	n.a.	11	12	13	15	n.a.	5	5	5	5	1
Historical importers	94	94	89	86	n.a.	6	5	5	5	n.a.	6	5	5	5	1
Licences on demand	60	59	55	51	n.a.	24	26	27	27	n.a.	8	8	8	8	2
Mixed allocation methods	77	87	84	83	76	6	6	6	7	n.a.	6	7	7	6	2
Producer groups or associations	100	66	100	81	n.a.	0	0	0	1	0	1	1	1	1	0
State trading	91	88	94	95	n.a.	2	2	2	3	0	3	3	3	3	0
Not specified	n.a.	34	49	44	41	0	1	1	1	4	0	2	1	1	1
Other	100	100	100	100	n.a.	0	0	0	0	0	1	1	1	1	0
All	67	66	64	63	n.a.	100	100	100	100	100	-	-	-	-	-

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill*; Background paper by the Secretariat, G/AG/NG/S/8.

Some forms of administration are widely used by OECD countries and cover many product groups (**Annex Table I.16**). However, other forms of administration apply to a relatively few tariff-quotas in only some countries and product groups. For example, administration of tariff-quotas by producer groups or associations is applied only by **Korea** and for three tariff-quotas only. On the other hand, tariff-quota administration by applied tariffs and licences on demand are the most common methods used by OECD countries.

The administration of tariff-quotas varies depending on a number of factors, including the product, the market structure, the size of tariff-quota, seasonal flows, the number of supplying countries and general methods of distribution within importing countries.

There are basically two types of tariff-quota allocations -- global or country-specific. Global tariff-quotas apply on imports of specified products regardless of country of origin and all member countries are free to compete. In this instance, the holder of the quota is normally the importer. Since there is no predetermination of where the product will originate, the importing country administers the quota. Common methods of administering this type of tariff-quotas are first-come-first-served and non-import licensing methods.

Under the country-specific tariff-quota allocation method, a country is granted access to a specific amount of the tariff-quota. Since the importers and exporters already know from where the product will originate, either country can administer the tariff-quota and obtain the quota rent.

Table 2.10 illustrates the extent to which tariff-quotas were filled in the 1995-99 period with differing forms of tariff-quota administration that have been used by OECD countries. Caution should be exercised in interpreting these results as, in some instances, the number of tariff-quotas with particular forms of administration is small and/or they are concentrated in specific countries or product groups. This is particularly the case for state trading enterprises, auctioning and producer groups administration. In these cases other factors in addition to administration method could explain levels and distribution of tariff-quota fill rates.

Some methods are applied across a wide range of countries and product groups. These include applied tariffs, licenses on demand and to a lesser extent first-come first-served, and historical importers (**Annex Table I.15** and **I.16**). In these cases it can be argued that the fill rates and distribution are representative for those administration methods.

There is a wide range of fill rates between different methods of tariff-quota administration, although there is no apparent link between the number of observations and the fill rates. However, the fill rates for tariff-quotas associated with particular forms of administration are similar for 1995, 1996 and 1997 (**Annex Figure I.5**).³⁴ Overall this supports the argument that the method of tariff-quota administration has a bearing on the fill rate of tariff-quotas.

Imperfect competition

Market power can also influence market access. Imperfect competition can emerge in exporting countries if all or most of the rights to export are allocated to a single entity or if export licenses are assigned to a selected few exporting firms. When market power is exercised by importers they may directly influence volumes imported to maximise rents. Likewise, a producer monopoly in an exporting country can affect the fill rate if the optimal production under the monopoly falls below the amount allocated to the exporting country.³⁵

Other factors

In addition to the main allocation methods, additional, burdensome import requirements are often in place which are of crucial importance to the quota fill rate. For example, some countries have required that importers commit to purchasing a specified amount of domestic production in order to qualify for a license to import (domestic content). In other cases, restrictions are placed on the end use of the imported product, such as that imports may only be used for feed or for processing.

In some countries commitments are made at a broad level of product aggregation, such as “meat” or “dairy products”, and then allocated at a very disaggregated level, thereby minimising trade in commodities that compete with domestic production.³⁶ Further, to protect processing industries some countries limit tariff quota imports to raw products and bulk commodities. Finally, unduly limited duration of validity of import licenses introduces uncertainty and risk, which in turn can distort trade and hinder market access.

The economics of different approaches for allocating tariff-quotas

First-come-first served

A *first-come-first-served* approach implies that whoever is able to bring the goods into the country first will probably capture the quota rents. Importers are permitted entry at the in-quota tariff rates until the tariff-quota is filled; then the higher tariff automatically applies. Imports up to the level of the tariff-quota quantity are not impeded in any way.

The first-come-first-served approach is more market-oriented than other methods of tariff-quota allocation, such as import licensing, because it is open to all importers. It entails minimum government intervention, is administratively simple, allows for new entrants and is transparent relative to other forms of tariff-quota administration. In the absence of intervention by state trading enterprises, importers and exporters are generally free to compete for a share of the tariff-quota quantity, and there is little risk of manipulation by the government of the importing country. Nevertheless, for customs territories with a large number of import points, this approach may be technically cumbersome.

Vested interests are less likely to be created by a first-come-first-served method than under a licensing system. Quota rents may be captured by either importers and/or exporters. However, in cases of country-specific quotas where export licensing is used this might not be the case.

Where demand for import licenses is low, a first-come-first-served method for allocating licenses might be feasible. However, first-come-first-served administration could pose problems in cases where there is high demand. Tariff-quotas could be over-subscribed and it might be difficult to determine which license applications are received first. In such cases, there could be a rush to import on the day the

tariff-quota is opened, and neither exporters nor importers would know at the time of shipment whether they would face the in-quota or over-quota duty upon importation.³⁷

Another potential problem with the first-come-first-served method of tariff-quota administration is that it may encourage a surge of imports at the beginning of the tariff-quota period. Concentration of imports at one time of the year could lead to higher storage costs in the importing country for the remainder of the year and may discriminate against distant or seasonal suppliers, thereby destabilising trade. The seasonality problem could be overcome if the tariff-quota is opened in tranches throughout the year (Podbury and Roberts, 1999). Such an approach may be desirable for seasonal products, where a single opening date could make it difficult for some countries to have access to the tariff-quota. It can also lead to concentration of the import quota in the hands of a small number of large importers and consequently can distort the structure of domestic markets.³⁸

The first-come-first-served method may not be possible if the tariff-quota volume is small. In such a case, uncertainty becomes an issue, as importers and exporters do not know at the time of entering into contracts whether they will face the in-quota or over-quota tariff rate.

This approach is used in many OECD countries. It is the third most common form of tariff-quota administration after applied tariffs and licenses on demand, accounting for about 10% of the total number of tariff-quotas (**Table 2.10**). This allocation method is used, for example, in **Canada** for cereals, for thirty-nine products in **Korea** and for most products in **Hungary, Poland, the Czech Republic** and the **United States**.

Table 2.11. "First come First served" administration method

Member	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Canada	4	4	4	4	n.a.	50	63	49	53	n.a.
Czech Republic	24	24	24	24	24	44	50	47	45	46
European Union	9	17	21	18	16	69	72	75	65	71
Switzerland	6	7	6	6	n.a.	98	96	83	85	n.a.
United States	30	30	31	31	18	42	42	48	62	71
OECD (a)	73	82	86	83	n.a.	51	56	57	59	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

The simple average fill rates on tariff-quotas associated with this method in OECD countries were below the average for all tariff-quotas, ranging from 51% in 1995 to 59% in 1998 (**Table 2.10** and **2.11**). There is also a wide dispersion of fill rates. Around half the tariff-quotas in this category had fill rates of less than 60%.

Applied tariffs

Under this method, the importing country chooses not to charge the over-quota tariff rate on imports in excess of the quota volume. All imports of the product concerned are allowed at the in-quota tariff rate or below and no import quota licenses are issued to importers. The tariff-quota is administered as if it were a tariff at the lower, in-quota rate rather than as a tariff-quota. However, the importing country maintains the right to apply the higher, over-quota rate. This method does not confer any rents on exporters or importers.

This method of administration is by far the most common, accounting for approximately half of all tariff-quotas in 1995-98 (**Table 2.10**). Simple average fill rates for this method were over 60% in all four years (**Table 2.12**).

Around 55% of tariff-quotas in this category were filled by more than 80% in each year. Nevertheless, around 35% in each year were filled to less than 60%, suggesting that in many instances demand was insufficient to fill the tariff-quota.

Table 2.12. Applied tariff administration method

Member	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Australia	1	1	1	1	1	100	100	100	100	100
Canada	1	1	n.a.	n.a.	n.a.	100	100	n.a.	n.a.	n.a.
Hungary	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Iceland	78	78	78	n.a.	n.a.	71	71	74	n.a.	n.a.
Korea	n.a.	n.a.	n.a.	1	n.a.	n.a.	n.a.	n.a.	49	n.a.
Mexico	10	n.a.	n.a.	n.a.	n.a.	78	n.a.	n.a.	n.a.	n.a.
New Zealand	3	3	3	3	3	62	40	33	27	50
Norway	205	205	204	204	n.a.	71	66	64	65	n.a.
Poland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Switzerland	5	5	5	5	n.a.	98	92	94	96	n.a.
OECD (a)	303	293	291	214	n.a.	72	68	67	65	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

Licenses on demand

This method is the second most widely used means of administering tariff-quotas, accounting for approximately a quarter of total tariff quota lines (**Table 2.10**). It involves use of import licenses to administer imports within the tariff-quota quantity. Licenses are often provided before the imported items physically enter the country. In this way, conditions for entry are known. Licenses on demand include licenses issued on a first-come-first-served basis and those systems where license requests are reduced *pro rata* when they exceed available quantities.

This method has many of the same effects as the first-come-first-served approach. In general, however, this method would provide a greater degree of certainty to importers on the precise tariffs and entry conditions. As such, it may be able to overcome the seasonality problem that arises in first-come-first-served systems. However, import license systems could result in additional administration costs. Moreover, if tariff-quotas are allocated to imports from specific countries, the suppliers may be able to appropriate market rents if they can suppress competition among themselves (Podbury and Roberts, 1999).

Table 2.13. "Licenses on demand" administration method

Member	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Canada	6	6	6	6	n.a.	65	74	75	82	n.a.
European Union	37	56	57	22	16	73	70	66	65	64
Hungary	66	67	67	67	65	55	52	45	43	41
Japan	12	12	12	12	9	55	58	57	56	60
Korea	20	21	21	21	n.a.	53	55	50	49	n.a.
Norway	1	1	1	1	n.a.	23	10	40	98	n.a.
Poland	10	12	14	13	17	47	54	61	44	35
Switzerland	6	4	4	4	n.a.	87	65	65	70	n.a.
OECD (a)	158	179	182	146	n.a.	60	59	56	51	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

Examination of fill rates of tariff-quotas using this method were around 56% over the 1995-98 period. These rates are somewhat below the overall average (**Table 2.10**). During the period, over a half of the tariff-quotas in this category were filled to 60% or less and approximately 40% were more than 80% filled (**Table 2.13**). The below average performance could be attributable to a number of factors including non-reallocation of licenses, restrictive conditions, insufficient demand and excess supplies in the domestic markets.

Historical importers

With this method, allocation of import licensing is on the basis of past imports of the product concerned. It is applicable in cases of established markets with a number of active importers. Allocation on this basis allows importers and exporters to maintain established contacts and prevent speculators from winning control of licences. In many instances, importers are able to capture the quota rents.

Over time, however, historical licensing could introduce rigidities in the market. License holders retain their licences, including the potential quota rents associated with them, whether or not they continue to actually trade or are effective in marketing the product, and are likely to strongly resist reallocation of licences. Under such circumstances, new exporters will be discouraged from entering the market.

This method is used in **Korea, Norway, Canada, the European Union, Switzerland, Mexico and Australia**. **Australia** administers a tariff quota on imports of certain types of cheese. The tariff quotas are allocated to importers on the basis of historical trade performance, although no licensing system is maintained. New importers are able to obtain an allocation only on transfer from an existing holder. Allocations apply for a twelve months period and are revised every two to three years on the basis of trade performance.

In **Norway**, quotas for turkey roll and meat of deer, elk and other game are shared out on the basis of past import performance. Tariff quota entitlements for apples and pears are seasonal and are based on import performance during the past three years, but “commencement” quotas may be granted to new importers.

In most instances where import entitlements are allocated on an historical basis, there has been a well-established trade and this is reflected in high average fill rates of around 91% over the 1995-98 period (**Table 2.14**). This method has the second highest proportion of tariff-quotas with fill rates more than 80% and less than 5% of the tariff-quotas were filled below 60%.

Table 2.14. “Historical importers” administration method

Member	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Australia	1	1	1	1	1	98	95	79	82	78
Canada	6	5	5	5	n.a.	94	97	98	100	n.a.
European Union	6	6	6	2	2	99	94	93	82	83
Korea	17	17	17	16	n.a.	96	94	88	83	n.a.
Mexico	1	n.a.	n.a.	n.a.	n.a.	100	n.a.	n.a.	n.a.	n.a.
Norway	8	6	6	6	n.a.	87	89	79	83	n.a.
OECD (a)	39	35	35	30	n.a.	94	94	89	86	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

Auctioning

With auctioning the right to import is allocated on the basis of a competitive bidding system (**Annex I.3**). The bidding firms compete to purchase the quota rent arising from the difference between the supported domestic market price and import prices plus the in-quota tariff. Auction of import licenses is often advocated in the economic literature as being the most effective and efficient method to allocate quotas because it minimises trade distortions inherent in tariff-quota schemes (Josling, Tangermann and Warley, 1996, Haniotis, 1998).³⁹

The major arguments in favour of auctioning are *equity* and *increased transparency*. If quota licenses were auctioned, traders would be expected to bid up the price of the licenses to the difference between the selling price of the imported good within the protected market, and the cost of the good on the world market, which is the profit they would earn if they could import. Competition among bidders would thus

transfer the full quota rent to the government. The equity issue is whether the quota rent should go to the government thereby benefiting all citizens rather than to specific private citizens (assuming that governments are the custodians of public interest).

The transparency argument asserts that as traders are willing to bid for the licenses, protection will become more transparent because the degree of restrictiveness of the quota system will be revealed.⁴⁰ Auction quotas are more transparent than allocated quotas because they maximise the use of market mechanisms and price signals within a basically restrictive system, revealing the degree of protection to all parties. This transparency is viewed as beneficial because, once the degree of restrictiveness of the quotas is revealed by the bids, the inefficiencies associated with quotas will become known which in turn, could encourage liberalisation.

Government auctioning of import licenses mitigates the problem of vested interests, since quota rents accrue to the government rather than to the importer. Auctioning can promote quota fill, since it is likely that any importer who invests in a license will actually import. There are fewer obstacles than under other systems to new importers and exporters participating in the market.

Advocates of quota auctions claim that the auction proceeds could be used to fund adjustment programmes, particularly to facilitate and encourage relocation of labour out of protected industries, with the ultimate goal of reducing and eliminating protection.⁴¹ Nevertheless, auctioning of quota licenses is not a panacea and several substantive criticisms have been made in the literature. One objection is that quota auction, by forcing traders to bid and pay for the quota increases costs and thus increasing prices to consumers.⁴² In particular, the issue of whether the price paid at the auction for acquiring a licence constitutes an additional import charge.⁴³ Moreover, an auctioning system could be subject to manipulation if producer groups purchase all or part of the available licenses to ensure that the imports do not actually occur. Quota auctions could also be a “bureaucratic nightmare” that could create uncertainty, disrupt normal trading relationships, and would result in “panic bidding” by firms needing to obtain quota in order to stay in the market. An additional criticism centres on the impact of auctioning on market structure as auctions could foster monopoly, or at least increased concentration because large firms could afford to bid higher in the auctions and would be able to capture most of the market, while smaller firms would be squeezed out.

Other concerns regarding auctions concern international relations. Quotas could be prolonged or use of them even increased because governments want to retain the revenue. Furthermore, quota auctions could act as a “beggar-thy-neighbour” policy harming trading partners by altering the terms of trade and lowering welfare. As such, unilateral imposition of quota auctions could provoke retaliation from the affected exporting countries and could seriously thwart efforts for trade liberalisation. There are also concerns that, under an auctioning system, countries that have been granted specific access volumes on the basis of broad foreign policy or development assistance considerations, would be deprived of such access and would lose market share.

The auction mechanism for allocating import licenses has been used only by four OECD countries (Iceland, Korea, Norway and Switzerland). **Korea** applies auctioning for ten products, including pork, chicken and milk powder. In **Norway**, the URAA minimum access quotas are allocated to the highest bidder at quota auctions.

Although the auctioning of import quota licenses is generally deemed a very efficient method in allocating the right to imports, **Table 2.10** indicates that the uptake of the within tariff-quota quantities at auction has been the lowest for any group of arrangements, with the unweighted average fill rates ranging from 31% in 1995 to 51% in 1998 (**Table 2.15**). However, the average fill rate has steadily increased over time. Over the 1995-97 period, around two-thirds of the tariff-quotas in this category were less than 60% filled.

Most of the poorly filled tariff-quota rates in this category are administered by **Norway** and **Iceland** suggesting that the low uptake could be related to specific arrangements in these countries, although it should also be noted that market conditions may be playing a role. One possible reason is the additional

Table 2.15. "Auctioning administration" method

Member	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Iceland	10	9	9	n.a.	n.a.	25	35	39	n.a.	n.a.
Korea	7	6	6	4	n.a.	69	61	61	33	n.a.
Norway	10	10	10	10	n.a.	6	16	15	44	n.a.
Switzerland	2	2	3	3	n.a.	51	98	99	97	n.a.
OECD (a)	29	27	28	17	n.a.	31	38	41	51	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

costs imposed on potential importers to obtain information and to participate in the auctions, when the quota volumes are small. Auctioning is used for a number of livestock products, including meat of bovine animals, meat of swine, sheepmeat, poultrymeat, eggs and butter. Two characteristics of the tariff-quotas auctioned in **Norway** are that the quota quantities were very low at the commencement of the implementation period and that limits apply to tariff-quota shares for each importer or shipment (Podbury, and Roberts, 1999). Moreover, both in **Iceland** and **Norway** although the quota is allocated according to the higher bids, the quantity allocated to each bidder may be limited. Also parts of the quota are sometimes reserved for the domestic food processing industry. In **Korea**, import rights are distributed to the bidders who offer the highest price at an auction held by a government agency. There are no qualification requirements to participate in the auction. If the importer cannot fulfil the import quota within the specified period, the agency holds the auction for the remaining quota again, the rent accrues to the government and importing firms that won the importing right get the sales revenue (e.g. skimmed milk powder and sesame). Part of the tariff-quota for skimmed milk powder and sesame oil is administered by private trading companies with import licenses.

State trading enterprises

Under this arrangement, licenses are allocated entirely or mainly to a state trading enterprise which imports or has direct control of imports, of the product concerned. As with historical importers, imports undertaken or controlled by state trading enterprises tend to be a continuation of long established trading arrangements.

Basically, the key issue with state enterprises is that they can fully control the quantities that are imported/exported and can restrict imports/exports below the level that would otherwise occur. Hence, they could distort agricultural markets. Moreover they could adversely affect competition through the establishment of price mark-ups for products imported under tariff-quotas and control the processing and distribution of imported goods (OECD, 2001).

There is a broad spectrum of state trading enterprises, which are set up for many reasons, with varying powers and degree of government involvement. In **Canada**, tariff-quota imports for butter are entirely allocated to the Canadian Dairy Commission for the use of processors and further processors. In **Japan**, in-quota imports for rice, wheat, barley, skimmed milk powder, butter and raw silk are handled by state-trading entities. For FY 1995, actual in-quota imports for such products as wheat, meslin, and barley and its processed products, as well as for certain dairy products, were well over the respective current access commitments. Among the remaining products subject to tariffication, notably skimmed milk powder and groundnuts fell well short of their current access commitment levels.

In **Korea**, seven importing state trading enterprises handle seventeen agricultural products, including rice, barley, soybeans, buckwheat, groundnuts, oranges, citrus, onions and sesame, which are sold in the domestic market solely by designated state-trading agencies. Tariff quota administration has typically been delegated to the same state-trading entities previously responsible for price stabilisation and other market intervention programmes. For example, the quota allocations for beef are made on

behalf of the MAFF by the Livestock Products Marketing organisation (LPMO), a state-trading enterprise mandated “to stabilise domestic beef markets in the face of diverging domestic and import prices”.

The simple average fill rates for tariff-quotas administered under state trading over the 1995-98 period is the highest, or almost the highest among the different methods, at about 92% (**Tables 2.10** and **2.16**). Around three-quarters of the tariff-quotas in each year were filled. However, these results are based on a limited number of observations. Notwithstanding the high average fill rates for tariff-quotas administered in this way, there is always the possibility that state trading enterprises may be used to restrict imports to below the committed tariff-quota quantities.

Table 2.16. “State trading” administration method

Member	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Canada	1	1	1	1	n.a.	100	100	100	100	n.a.
Japan	4	4	4	4	4	100	100	100	100	100
Korea	10	10	10	10	n.a.	87	82	91	93	n.a.
OECD (a)	15	15	15	15	n.a.	91	88	94	95	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

Producer groups or associations

Under this arrangement imports are allocated entirely or mainly to producer groups or associations. An important issue in assessing the effects of this system is that there are trade-offs between the benefits that the producer groups or associations can obtain through importing and benefits that their members could obtain through restricting imports (Podbury and Roberts, 1999). The optimum level of imports for the producer association where it has sole right to import within tariff-quotas is determined at the point where the sum of producer surplus and the rent on imports is maximised.

The simple average fill rates for tariff-quotas administered by producer groups was 100% in 1995 and 1997 (**Table 2.10**). As with state trading the results are based on a limited number of observations. This system covers the smallest number of tariff-quota items of any group.

Others — Lottery

Lottery is one of the other methods used in OECD countries (e.g. butter oil and substitutes, (partly) cheese in the **United States**). The principal advantage of this method is that it removes the problem of vested interests. If licences are allocated on a regular basis, no individual or group can gain control. On the other hand, a lottery invites participation by speculators who are not importers but who acquire licenses for their market value. Relationships between importers and exporters are disrupted, and a secondary market in import licenses can induce uncertainty to importing. Unless there is a penalty for non-performance, there is a danger that imports will not occur if speculators do not succeed in selling their licenses.⁴⁴ Quota rents would normally go to the lottery winners.

Notes

1. Tariffication affected around 14% of OECD agricultural trade.
2. In broad terms, the distortionary impact of a tariff depends on the price elasticity of demand of the product on which the tariff is levied and rises disproportionately with the level of the tariff.
3. If a trade weighted basis was used, the average cut would have been 15% instead of the 36% unweighted average (Roberts, 1997).
4. For example, the reductions for sugar and dairy products in most OECD countries were only 15%.
5. Sectoral tariff averages vary with the definition used. Sometimes agriculture is defined as HSI to HS 24, while the URAA excludes fish and fish products (chapters 3 and part of 16) and includes in its coverage items regarded as "agricultural" from HS chapters 29, 33, 35, 38, 41, 43, 50, 51, 52 and 53 (Annex I of the URAA). Averages can also vary considerably depending on the weights used. In this report, production-weighted averages are reported, although simple (unweighted) arithmetic averages and import-weighted averages have also been calculated. All weighting schemes have their advantages and disadvantages. Although easy to calculate, the main drawback of the simple arithmetic average of the tariff rates is that it takes no account of the relative importance of various products. On the other hand, the use of actual import volumes assigns a small weight to the highly-protected products, thus underestimating the degree of protection. Furthermore, as the weights themselves would tend to be inversely related to a country's tariff rates, the use of variable-import weights can result in spurious movements in weighted averages over time. By contrast, although domestic production weights over represents highly protected products, they avoid the spurious movements often associated with variable-import weights. It can be argued that, conceptually, production-weighted averages of tariffs are closer to producer support estimates (PSEs) and thus provide a measure of the value of transfers from domestic consumers and tax payers to domestic producers.
6. Given the one-third reduction in tariffs envisaged in the URAA, tariff protection of agricultural products would rise under the URAA only insofar as the tariffs were, on average, set at rates 50% greater than the actual tariff equivalents for the non-tariff barriers they replaced at that particular moment in time (Hathaway and Ingo, 1996).
7. In some cases, countries will not apply the full tariff recorded in the schedules, so that the new tariffs can be interpreted as representing maxima. For example, for cereals in the EC a bilateral arrangement limits the landed price to the intervention price plus 55% which is lower than the euro 149 per tonne which is the maximum tariff possible according to the schedule.
8. For **Norway**, the bound in-quota tariff level for most current access quotas is equal to the final bound tariff level. Norway has only a tariff regime for these quotas. The in-quota tariff levels for hey, sheepmeat and cheese are lower than the year 2000 level.
9. As of July 1997, **Korea** has tariffied import restrictions on 35 commodities at the HS 10 digit level, including pigmeat, poultrymeat and oranges.
10. For example, imports of fruit and vegetables in the **European Union** at/or above an established entry price are subject to an *ad valorem* duty only. However, if imports are below the entry price, a tariff equivalent must be paid in addition to the *ad valorem* duty.
11. Strictly speaking, a uniform nominal tariff minimises the net welfare cost of such protection only if import demand elasticities are uniform across commodities and cross-price effects are negligible
12. For example, the duty-paid import price for cereals in the **European Union** should not be more than 155% of the intervention price.
13. Prior to the URAA tariffs were low, as non-tariff barriers were the predominant trade policy instruments.
14. The potential distorting effects on trade are greater if the corresponding "spikes" for similar, that is highly substitutable products, are lower.

15. Tariff escalation is frequently measured in terms of effective rates of protection (ERP). This measure relates the protection granted to the processed product to the value added of the particular process involved and deducts the protection for the input procured externally. Due to data and conceptual problems involved in the measurement of ERPs, nominal rates of tariff escalation are used as a proxy instead. Further, estimates of tariff escalation are usually based on m.f.n. tariffs and therefore do not take into account preferential agreements. If incorporated in the calculations, they would reinforce the escalation effects as the benefits of these agreements (notably GSP) concentrate more on inputs than on processed products.
16. Negative escalation or de-escalation implies lower effective protection for the next stage of processing than is evident from the nominal rates, unless processing industries are able to secure inputs at concessional rates to offset the much higher rates on their material inputs.
17. A number of studies attempted to empirically assess the changes in tariff escalation in the agro-food sector resulting from the URAA after its full implementation (OECD, 1997, 1999; Lindland, (1997). Overall, these studies provide evidence that while tariff escalation has been reduced in some cases, it will prevail in a number of product chains, often those of importance to developing countries such as coffee, cocoa, oilseeds, vegetables and fruit and nuts. Escalation appears to be less significant in meat and dairy products.
18. The **Slovak Republic** is the other country which has used special safeguards.
19. Article 5(4) of the URAA provides the trigger level shall be set according to the following schedule based on market access opportunities defined as imports as a percentage of the corresponding domestic consumption during the three preceding years for which data are available: where market opportunities for a product are less than or equal to 10%, the base trigger level shall equal 125%; where market opportunities for a product are greater than 10% but less than or equal to 30%, the base trigger level shall equal 110%; where market access opportunities for a product are greater than 30%, the base trigger level shall equal 105%. The trigger level shall not be less than 105% of the average quantity of imports over the last three years and if domestic consumption is not taken into account the trigger level is 125% of the average quantity of imports during the three preceding years.
20. The notification states that for 1995/96 the "price-based special safeguard has been made operational" for several HS 96 lines whereas the volume-based special safeguard was not invoked. For 1996/97 the notification states that the "price-based special safeguard has been made operational" for several HS 96 lines whereas the volume-based special safeguard was not invoked. However, the system has been operational for some products in the fruit and vegetables sector".
21. Article 5(5) of the URAA provides that the additional duty shall be set as follows: if the c.i.f. import price of the shipment expressed in domestic currency is no more than 10% below the trigger price, then no additional duty shall be imposed; if the import price is more than 10% but less than or equal to 40% of the trigger price, then the additional duty shall equal 30% of the amount by which the difference exceeds 10%.
22. The **European Union** has taken all the necessary steps to apply special price safeguards in the dairy sector, but as yet no additional duty has been applied to any dairy product.
23. **Japan** has set a trigger level of zero in cases where no imports had been recorded. In some years, for milk and cream (with fat content of between 1 and 6%), the trigger level of the special safeguard was set at zero.
24. In FY 1995, **Japan** invoked price-based special safeguard for other starches, milk powder, and whey and modified whey where the underlying tariff quota was not filled.
25. In one case the special safeguard was levied on a basket of products containing 54 tariff lines from three different tariff chapters.
26. It is often argued that tariff-quotas were selected as a compromise measure between exporting and importing countries to implement both tariffication and market access (Podbury and Roberts, 1999).
27. From a legal WTO perspective, tariff quotas are not quantitative restrictions because they do not limit the quantity which may be imported. One may always import by paying the over-quota tariff. This opportunity is not available under a quota.
28. An empirical study for the pork sector in Philippines shows that the domestic pork price under tariff-quota is more stable than with a pure tariff, but less stable than for a pure quota (Abbot and Paarlberg, 1998).
29. In some instances, in the **European Union** quota imports refer to "effective imports" as reported by the customs services on the basis of authorisations to import and not actual imports.
30. An empirical study found that the **European Union's** minimum access tariff-quotas will increase imports for a limited number of products such as skimmed milk powder and cheese (USDA, 1997).
31. For Case 5, a prohibitive above quota tariff could also be responsible.

32. In the **United States** for example, the number of firms to which import licences for dairy were granted decreased by 25% in 1997 compared to 1996. McCorriston (1996) found that the US cheese import license regime allowed the creation of oligopsony power by US cheese importers.
33. The ability to obtain market rents by exporters would depend on the extent of competition between competing suppliers from within the exporting country. If, for example, there was a single exporter, that body could receive a price for the product within the allocated quantity of the domestic supported price less the in-quota tariff, less payments to importers. If, however, there were many competing exporters from the supplying country, the rents could accrue to a group or groups in the importing country, the specific groups depending on the form of the tariff-quota administration (Podbury and Roberts, 1999).
34. Where there are large number of tariff-quotas, such as with applied tariffs and licenses on demand, there are disparate levels of tariff-quota fill, with applied tariffs being markedly higher. Similarly, where there are small numbers of observations, such as with state trading and auctioning, the fill rates are much higher for state trading than for auctioning.
35. It is argued that imperfect competition in the exporting country, **Australia** and **New Zealand**, specifically, is occurring in the dairy industry (Boughner and de Gorter, 1999).
36. For example, a country has a commitment for pork (HS 0203) but only allows imports under the tariff-quota of heads and feet (0203.19).
37. In cases of over-subscription licenses can be allocated on a *pro rata* basis, but this practice can compound uncertainty for importers, who cannot know what portion they will actually receive of the licenses requested.
38. In several instances (e.g. fruits and vegetables in **Poland**), license holders have not utilised their licenses and, therefore, the tariff-quota was not filled.
39. Some uncertainty exists over the legal status of the auction system as auctioning quota licenses could be viewed as constituting an extra import charge beyond those allowed in a country's URAA schedule. In this case, the importing country would be in breach of its undertakings under the agreement. Some WTO members have raised concerns at the WTO COAG on this point.
40. Pickford (1985) used the auctioning of import quotas as a way of estimating the level of protection afforded by quotas for manufacturing industry in New Zealand as well as the rents captured by government.
41. In **Korea**, revenues from quota auctioning are used to fund rural projects (Choi and Summers, 1998).
42. If the foreign firms have on average lower production costs because they have a comparative advantage, then the government minimises its expected payment by favouring local firms (McAfee and McMillan, 1987, p. 716). However, if local firms have a comparative advantage, minimising the government's expected payment requires that the foreign firms be favoured. Thus an ostensibly non-discriminatory sealed-bid auction results in ad hoc discrimination when the bidder are asymmetric.
43. **Australia** and **New Zealand**, for instance, doubt as to the WTO consistency of the auctioning system as a method of tariff quota administration on the grounds that the price paid through the auction is an additional import tax. In such a case, to be compatible with GATT the in-quota tariff rate plus the auction price should not exceed the in-quota bound tariff. Article VIII: 1(a) states that no additional fees may be charged for revenue purposes, although it is not very clear as to whether it applies to auction preemie or not.
44. This might be less of a problem in the long run, since a market for licenses is likely to develop.

Part III.

DOMESTIC SUPPORT

Background

The domestic support provisions could be regarded as one of the major breakthroughs of the URAA insofar as they explicitly recognise the direct link between domestic agricultural policies and international trade. Binding commitments on the level of support provided through domestic measures were an essential complement to the disciplines on market access and export subsidies.

A key aspect of the domestic support reduction commitments was the distinction between domestic policies which were deemed *i)* not to, or only to a minimum extent, distort trade (“green box”); and *ii)* all other policies, that is, those that distort trade (“amber measures”, “blue box” measures and some other exempt measures) (**Box III.1**). The provisions require countries to reduce agricultural support levels arising from those domestic policies, which most unequivocally have the largest effects on production, such as administered prices, input subsidies and producer payments that are not accompanied by limitations on production.

Box III.1. Summary of domestic support provisions

- Reduction in total trade distorting domestic support aggregated across all commodities, of 20% in six years, from 1986-88 base.
- Reduction by developing countries of trade distorting domestic support by 13.3% in ten years.
- Credit given for reductions since 1986.
- Policies fulfilling certain “green box” criteria need not be counted (research, pest and disease control, training, extension, inspection, marketing and promotion, infrastructure; food security stocks, domestic food aid, income insurance and income safety-net schemes, disaster payments, structural adjustment assistance provided through producer and resource retirement programs, and through investment aids, environmental programs; decoupled income support and regional programmes).
- Developing countries need not count (in addition) rural development programmes, investment subsidies, input subsidies and diversification subsidies and support to encourage diversification from growing illicit narcotic crops.
- If product-specific domestic support does not exceed 5% (10% for developing countries) of the total value of production of a basic agricultural product during the relevant year it is not required to be included in the calculation of the Current Total AMS.
- If non-product-specific domestic support does not exceed 5% (10% for developing countries) of the value of total agricultural production, it is not required to be included in the calculation of the Current Total AMS.

Box III.1. **Summary of domestic support provisions** (*cont.*)

- Direct payments under production-limiting programs are not subject to reduction if they are (a) based on fixed area and yields, or (b) made on 85% or less of base production, or (c) livestock payments made on a fixed number of head.
- Due restraint or “peace clause” provisions state that “green box” policies are not actionable for countervailing duties and other GATT challenges; all domestic support that conforms with commitments, including “blue box” payments under production-limiting programmes is subject to the imposition of countervailing duties but is exempt from other GATT challenges as long as support does not exceed that decided during the 1992 marketing year; and export subsidies within the constraints of the URAA are exempt from most GATT challenge and subject to countervailing duties only if they cause injury. The “peace clause” expires at the end of 2003.

Domestic support reductions are implemented through a commitment to reduce the Total Aggregate Measurement of Support (AMS) for each country. The AMS is an indicator of the support associated with policies considered to have the greatest potential to affect production and trade. It has product-specific AMS and non-product-specific AMS elements, but the commitments themselves are not product-specific but sector-wide applying to Total AMS. Policies deemed to have no or minimal effect on production and trade, are exempt from reduction commitments (“green box”).

As a result of the Blair House Accord, production-linked support related to production limiting policies is exempt from the disciplines if such payments satisfy certain criteria (“blue box”).¹ However, the Due Restraint provision or “peace clause” renders actionable any increase in support, as measured by AMS, or arising from the “production-limiting programmes”, beyond the levels decided during the 1992 marketing year. Finally, support which is below a certain threshold is not required to be included in the calculation of reduction commitments. This is usually referred to as the *de minimis* provision.

A WTO Member shall not provide support in favour of domestic producers in excess of its commitments. Members who do not have a Total AMS commitment shall not provide support to agricultural producers in excess of *de minimis* levels.

Developed countries agreed to a 20% reduction in AMS to be achieved in six equal annual instalments from 1995, while developing countries agreed to a 13.3% reduction over a 10 year period and least developed countries agreed not to increase support beyond the base period level. The base period for Total AMS reductions is 1986-88, and a credit is allowed in respect of actions undertaken between 1986-88. Of the 140 WTO Members (as of December 2000), 28 countries have agreed to phase down the level of support as measured by the total AMS over a specified period of time. Among OECD countries, only **Turkey** does not have domestic support reduction commitments.

This part of the report attempts to address the following questions:

- How effective has the discipline on domestic support been in reducing trade distortions?
- What is the frequency and scale of new measures for which blue and green box status is claimed and what sort of problems have emerged in this area?
- To what extent are green box measures minimally trade distorting?
- What issues have emerged from the implementation of the domestic support discipline?

The analysis is primarily based on country notifications to the WTO for 1995, 1996, 1997 and 1998. The OECD’s PSE estimates are also used to complement the analysis. As of October 2000, all OECD

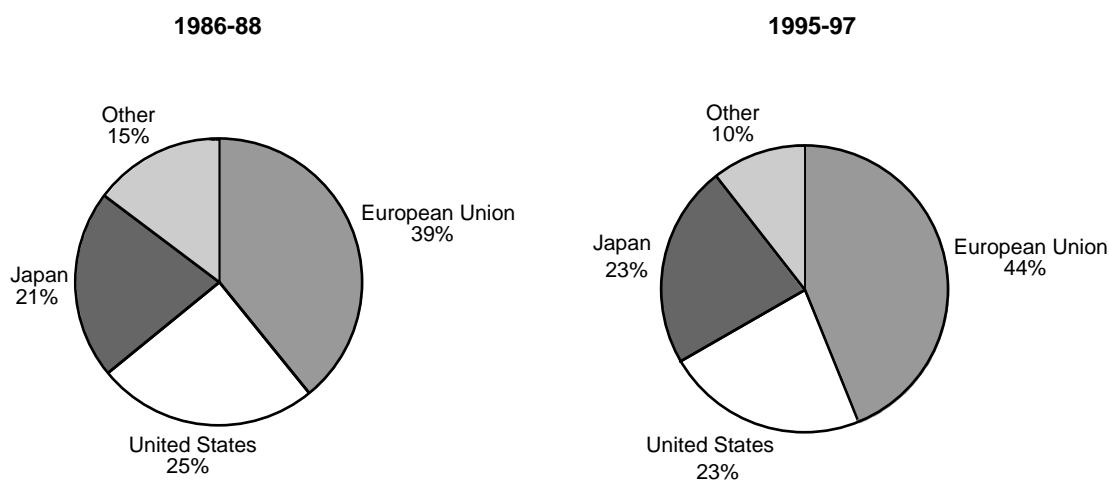
countries, with the exception of **Hungary**, had notified the WTO for the 1995-97 period. For 1998, overdue notifications include **Canada**, the **European Union**, **Hungary**, **Japan** and the **United States**. The **Czech Republic**, **New Zealand** and **Turkey** have notified for 1999.

The part will begin with an analysis of the structure of domestic agricultural policy that has arisen under the URAA by discussing trends and the composition of domestic support. It then assesses the extent to which domestic support commitments are binding and seeks to **evaluate changes** in policies in terms of potential implications for production and trade. The evolution of agricultural support is also discussed and differences between AMS and PSE estimates are outlined. Finally, several issues which have arisen during the implementation period will be highlighted.

Trends in and composition of domestic support as measured by the URAA

Average total domestic support in OECD countries notified under the URAA provisions (AMS, green box, blue box, *de minimis*, and special and differential treatment) amounted to around USD 234 billion in the 1986-88 base period. In 1995, total domestic support for OECD countries is estimated to have reached USD 282 billion, while in 1996 it declined by 7% and in 1997 by further 12% to USD 232 billion. As illustrated in **Figure 3.1**, domestic support is concentrated in three countries (the **European Union**, **Japan**, and the **United States**), which account for 90% of total OECD domestic support.

Figure 3.1. Domestic support by country: 1986-88 and 1995-97

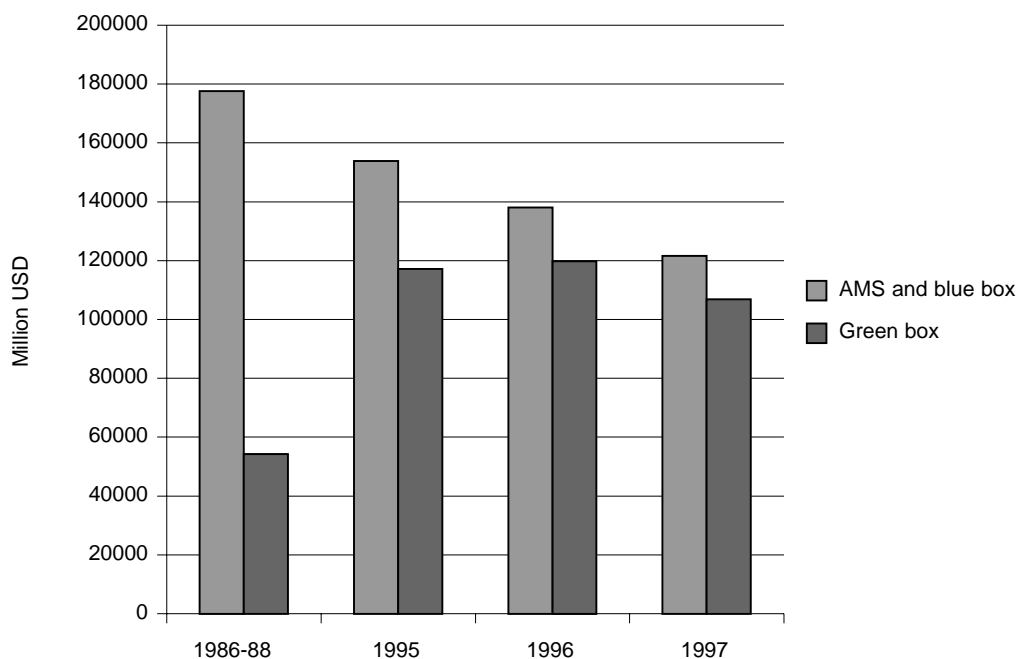


Source: OECD Secretariat calculations based on country notifications to WTO.

In the base period, domestic support was dominated by amber box measures. However, during the implementation period, while the amber box measures were declining, green box measures were increasing (**Figure 3.2**). Green box expenditures were higher than Current Total AMS by 1996. The **European Union**, **Japan**, and the **United States** are by far the largest providers of amber support in absolute terms, accounting for around 80% of the base period total amber box for the OECD countries. During the 1995-97, these three countries/regions accounted on average, for more than 90% of AMS and blue box measures (**European Union** 64%, **Japan** 23% and the **United States** 6%).

From **Table 3.1** it is apparent that green box payments constitute the main category of domestic support in many OECD countries, but their share varies considerably across countries. In **Australia**, **New Zealand**, **Poland** and the **United States**, green box measures accounted for more than 80% of total

Figure 3.2. Composition of domestic support in OECD countries



Source: OECD Secretariat calculations based on country notifications to WTO.

domestic support over the 1995-98 period. Moreover, expenditures on green box measures by OECD countries have been increasing in the implementation period (**Annex Table II.1**). In particular, there have been significant increases in the green box expenditures of the **United States** and **Iceland**, both of which have notified that their blue box programmes have been replaced by green box measures. Expenditures by **Norway** on blue box programmes exceeded green box spending in all three implementation years. In 1995, the **European Union** spent more on blue box measures than on green box measures. However, in 1996 this situation was reversed. Spending on green box measures increased by 15%, while blue box spending remained stable.

Expenditures on blue box measures in comparison to the current total AMS varies among countries. **Iceland's** spending on blue box measures in 1995 was significantly less than spending on AMS. On the other hand, expenditures on blue box measures is high for the **European Union** (approximately half of the Current Total AMS for 1995). **Norway's** spending on blue box measures is high relative to current total AMS expenditures, at approximately 70% for all three years. In 1995, blue box expenditures in the **United States** exceeded Current Total AMS.

Blue box measures

Direct payments under production-limiting programmes are not subject to reduction commitments if the payments are based on fixed area and yields, or if payments are made on 85% or less of the base level of production, or livestock payments are made on a fixed number of head (Article 6.5 of the URAA).

However, support such as premiums for suckler cows, and for beef and veal in the **European Union** which were later classified as "blue box" were included in the calculation of the base Total AMS from which annual AMS reduction commitment levels are determined. Payments under such programmes are assuming importance where compensation is being provided to producers for reductions in administered prices. The most notable examples of blue box policies are the former **U.S.** deficiency

payments and the **European Union** compensatory payments under the 1992 CAP reform. These compensatory payments are made to producers for area sown to arable crops (grains, oilseeds and protein crops).² However, it is a general provision and all countries have access to it. To date, four OECD countries have notified blue box provisions: the **European Union, Iceland, Norway** and the **United States**.³

Table 3.1. **Composition of domestic support by country, 1995-98 (%)**

Country	Total Current AMS	Green Box	Blue Box	<i>de minimis</i>	S&D ¹
Australia	11	89	0	0	n.a.
Canada	18	50	0	32	n.a.
Czech Republic	21	79	0	0	n.a.
European Union	55	21	23	1	n.a.
Hungary	0	39	0	61	n.a.
Iceland	82	16	2	0	n.a.
Japan	53	46	0	1	n.a.
Korea	26	67	0	6	0
Mexico	31	57	0	0	12
New Zealand	0	100	0	0	n.a.
Norway	48	18	34	0	n.a.
Poland	28	71	0	0	n.a.
Switzerland	55	45	0	0	n.a.
United States	10	84	4	2	n.a.
OECD	42	44	11	2	0

Notes: n.a. = not applicable

1. S&D: Special and Differential Treatment - "Development Programmes". Hungary: 1995; Canada, EU, Japan and the United States: 1995, 1996, 1997. Turkey: not included (no domestic support reduction commitments).

Source: OECD Secretariat calculations based on country notifications to WTO.

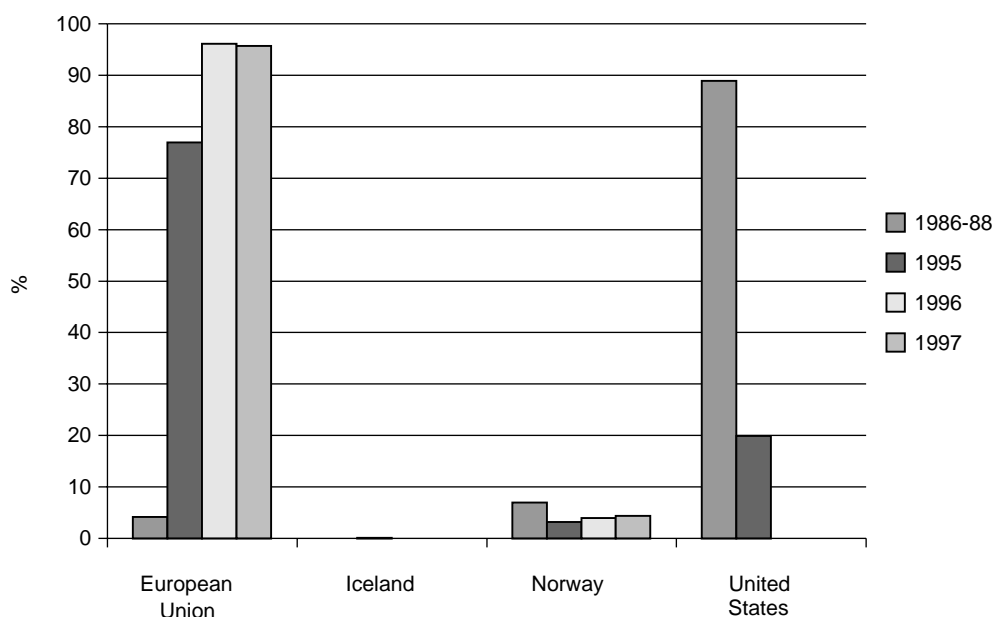
Figure 3.3 and **Annex Table II.2** show that the **European Union** and **Norway** notified blue box measures in the 1995-97 period, while **Iceland** and the **United States** have notified using the provisions only in 1995. The most frequently used blue box measure was production-limiting payments made on 85% or less of production in 1995 and payments based on fixed area and yield in 1996 and 1997. However, in value terms, production-limiting payments based on fixed area and yield were most important in all three implementation years. The main reason for the reduction in production-limiting payments made on 85% or less of the level of production is that the **United States** did not make use of blue box measures in 1996 and 1997.

In the **European Union**, premiums for suckler cows, and for beef and veal were counted as AMS support for the base period and notified as blue box support from 1995 onwards.⁴ The number of, and the expenditures on, these measures were substantially greater in the first three implementation years of the URAA than in the base period (**Annex Table II.3**). As a result of the 1992 CAP reform, market price support to cereals, oilseeds and beef was reduced and direct payments based on historical regional yields, regional base area or fixed animal numbers were introduced. The most important category of blue box measures is based on fixed area and yield, which accounted for over three-quarters of blue box measures.

Figure 3.3 and **Annex Table II.4** show that during the base period there were no support measures provided by **Iceland** that met the blue box criteria. Direct payments for sheepmeat were introduced in the early 1990s to replace consumer subsidies paid at the wholesale level. From 1996, domestic support to sheepmeat producers was modified and was notified as conforming to the criteria for green box, decoupled-income support.

Norway provided support to its agricultural producers using blue box measures in the base period, and in 1995, 1996 and 1997. Expenditures on the acreage and cultural landscape scheme, regional deficiency payments for meat production and headage support have increased in the implementation period relative to the base period. However, expenditures on structural income support to dairy farmers

Figure 3.3. Countries' share of OECD blue box measures (%)



Source: OECD Secretariat calculations based on country notifications to WTO.

and regional deficiency payments to milk production programmes have decreased in the implementation period relative to the base period. Expenditures on acreage and cultural landscapes schemes, which were implemented in 1991, increased by around 20% between 1995 and 1997 (**Annex Table II.5**). The main purpose of the headage and area payments is to maintain landscapes, keep farmers in remote areas, provide incentives for reducing pollution and soil erosion, and maintain food production capacity by providing income support to farmers.

In the **United States**, programmes which met the blue box criteria were notified only in 1995, but have since then transferred to the green box with the advent of the production flexibility programme (**Annex Table II.6**). Payments on US blue box programmes in 1995 were less than those in the base period. Prior to 1996, the United States operated a supply management programme for the “contract crops”, whereby deficiency payments would be made to producers based on the difference between a pre-set target price and the world price. The FAIR Act of 1996 involved a number of important reforms, including the elimination of deficiency payments for wheat, feed grains, cotton and rice. Deficiency payments were replaced by predetermined, degressive, time-limited support based on historical area and yields. Producers formerly enrolled in the contract crop programmes receive fixed direct payments, called production flexibility contract payments (PFC), which decline after 1998 through the year 2002. Farmers receive payments for 85% of their 1996 base acreage and payment is not related to current plantings or to production or prices. Certain compliance conditions must be met in order to be eligible for direct payments, particularly compliance with certain conservation or environmental requirements. However, some WTO members continue to question whether PFC payments meet the green box criteria for decoupled support. In 1998 and 1999, due to unfavourable market developments, large *ad hoc* emergency measures to compensate for market losses and natural disasters were accorded. These measures, which are mainly through payments based on historical support, include in 1998 USD 2.9 billion for market losses and USD 1.5 billion for crop losses due to natural disasters. In 1999, compensation for market losses rose to USD 5.5 billion, while natural disaster assistance was USD 1.2 billion. It is unclear at this stage how these *ad hoc* payments will be classified as the United States has not yet notified its domestic support commitments for 1998 and 1999.

Green box measures

Green box domestic support measures were deemed to be minimally trade distorting and were exempted from domestic support reduction commitments under the AMS approach. Annex 2 of the URAA outlines the types of domestic support measures exempt from reduction and it also provides the policy-specific criteria and conditions for such measures.

The green box comprises a wide range of measures such as general services (e.g. research, inspection, training and extension), domestic food aid, decoupled income support, natural disaster relief, insurance and income safety net programmes, environmental programmes, structural adjustment assistance programmes, and regional assistance (**Annex Table II.7**). To be eligible for inclusion in the green box, policies must be publicly funded, cannot provide price support, and should be non- or minimally trade distorting. In addition, there are policy-specific criteria that programmes must meet.⁵ However, the term “minimally trade distorting” is not defined in the URAA.

While support from policies assumed to have the greatest effects on production and trade has declined in many countries, support by OECD countries from green box policies has increased in the implementation period compared with the 1986-88 base period (green box expenditures more than doubled in 1995 relative to the 1986-88 level). Of the 13 OECD countries reporting green box spending both in the base and in the implementation period, all notified an increase. Most of this increase was concentrated in three countries - the **United States**, the **European Union**, and **Japan** (**Annex Table II.1**). Green box spending was greater for 1996, 1997 and 1998 than in their respective Current Total AMS.

On average, over the 1995-98 period, most of the expenditures on green box policies by OECD countries went for *domestic food aid* and *general services* (**Figure 3.5**). Domestic food aid was the single largest category of green support, totalling USD 113 billion, most of which was spent by the **United States**. U.S. domestic food aid increased by almost USD 18 billion from the base to the average 1995-98 period, because of increases in the Food Stamp Program, and accounted for three-quarters of the US green box expenditures.

Expenditure on *infrastructures* was the second-most important green box category, accounting for around 20% of total green box expenditure over the 1995-98 period. These expenditures are most important in **Japan**, **Korea** and **Poland** (**Annex Table II.7**).

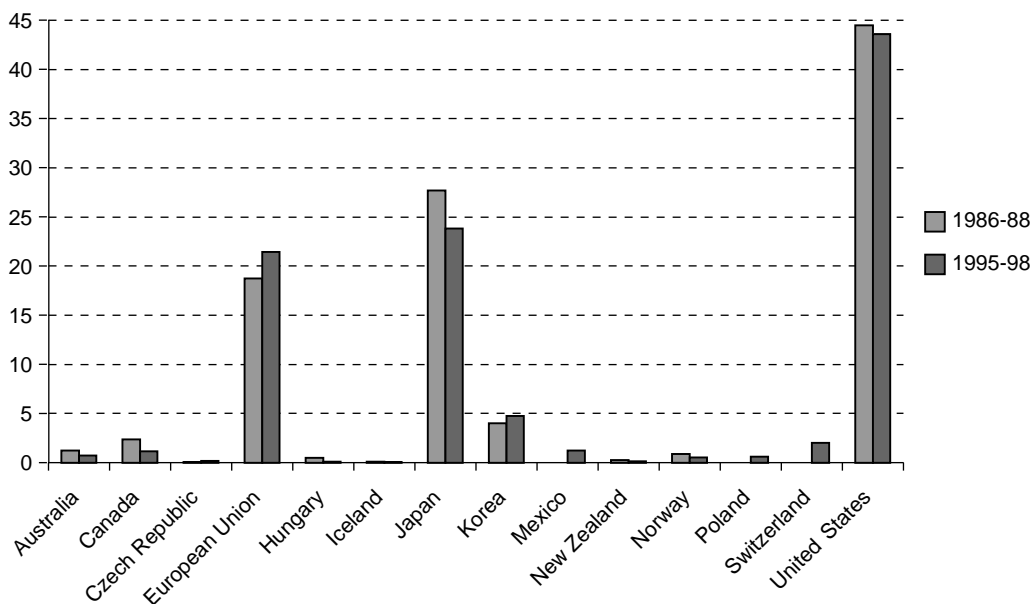
Structural adjustment assistance provided through investment aids was the third most important category, accounting for around 8% of total green box expenditure over the 1995-98 period. These expenditure are most important in the **Czech Republic**, the **European Union**, **Hungary** and **Norway**.

The *decoupled income support* category accounted for only 5% of total green box expenditures for the OECD countries. These expenditures were concentrated in four countries: **Canada**, **Iceland**, **Switzerland** and the **United States**.

Research and development expenditures were the most important green box category in **Australia** and **New Zealand**, although this category accounted for only 2% of the total OECD green box expenditures.

Expenditures on *environmental programmes* were not the dominant category in any OECD country. They accounted for almost 5% of OECD green box expenditures, but their importance has been increasing over time. For example, in **Australia** the share of environmental programmes in total green box expenditures increased from 13% in 1995 to 21% in 1996, in the **European Union** from 15% in 1995 to 19% in 1996 and in **Switzerland** from 12% in 1995 to 28% in 1998. Notably, only Canada in 1996 has notified policies under *the income insurance* and *income safety-net programmes*. *Regional-programmes*, for OECD as a whole, accounted, on average, for less than 3% over the 1995-98 period. However, transparency in reporting sub-national support has come under increasing scrutiny in the WTO Committee on Agriculture, particularly for the **European Community**, **Japan** and the **United States**.

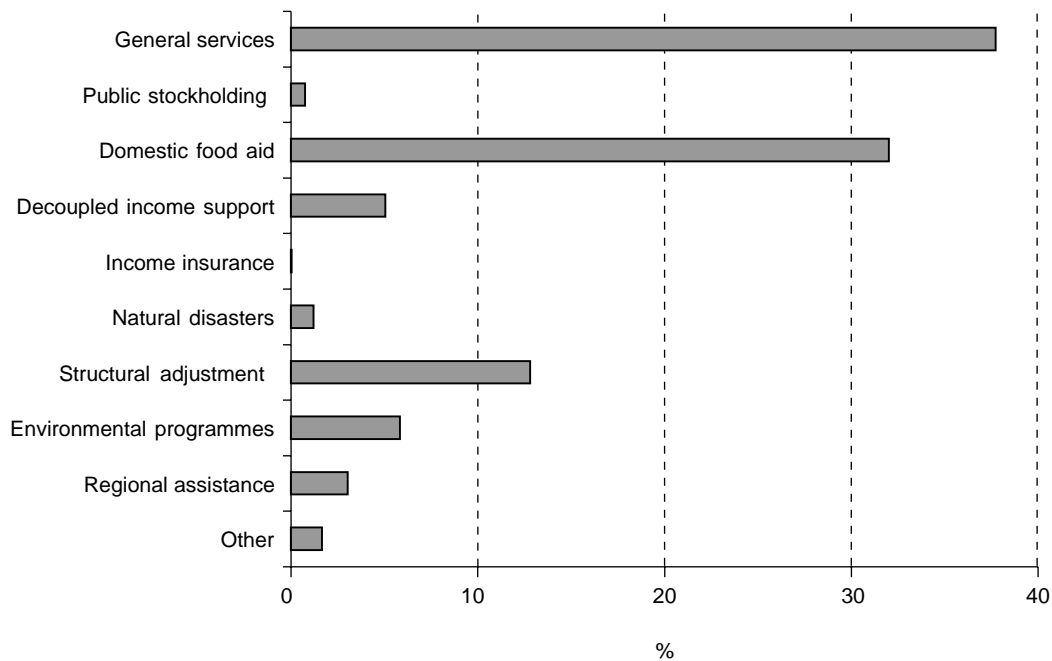
Figure 3.4. Countries' share of OECD green box measures (%)



Notes: Excludes Turkey. Data are not available for Switzerland in the base period. Hungary: 1995; Canada, EU, Japan and the United States: 1995, 1996, 1997.

Source: OECD Secretariat calculations based on country notifications to WTO.

Figure 3.5. Green box measures as a percentage of total OECD green box (%)



Notes: See Figure 3.4.

Source: OECD Secretariat calculations based on country notifications to WTO.

How effective has the domestic support discipline been?

The value of support subject to reduction commitments in OECD countries declined significantly in the first three years of URAA implementation (the years for which the notifications are most complete). The average value of the 1995-97 Current Total AMS for the OECD, US\$108 billion, is equal to about 65% of the AMS level in the 1986-88 base period for these countries. Certain support measures that are included in the base Total AMS were excluded from the Current Total AMS during the implementation period because they met the blue box criteria. Blue box payments, however, were excluded from the AMS in the implementation period even though they were included in the base year. Including them would result in a smaller decline in domestic support. Combining the 1995, 1996 and 1997 blue box payments with the reported AMS, increases the 1995, 1996 and 1997 support level to 83% of the base.

Table 3.2 portrays the distribution of notified current total AMS as a percentage of the relevant commitment levels for 1995 to 1998. It is evident that most OECD countries have met their support reduction commitments. On average, current total AMS as a percentage of the AMS commitment level for the OECD was around 58% in 1995, 1996 and 1997. Most countries have fulfilled their support reduction commitments by a large margin. In fact, in all OECD countries except **Korea**, the 1995 total AMS was already lower than the 2000 bound AMS level. However, in 1998 **Iceland** had problems in complying and its current total AMS, without inflation adjustment, exceeded its permitted level.

Table 3.2. Ranges of notified current total AMS levels in OECD countries, 1995-99

Year	Current Total AMS as a percentage of total AMS commitment levels					
	0-10%	11-49%	50-69%	70-89%	90-100%	>100
1995	Czech Rep. Mexico New Zealand Poland	Australia Canada United States	European Union Hungary ¹	Iceland Japan Norway Switzerland	Korea	
1996	Mexico New Zealand Poland	Australia Canada Czech Rep. United States	European Union	Iceland Japan Norway Switzerland	Korea	
1997	Canada Czech Rep. New Zealand Poland	Australia Mexico United States	European Union	Iceland Japan Norway Switzerland	Korea	
1998	Czech Rep. New Zealand Poland	Australia Mexico		Korea Iceland ² Norway Switzerland		Iceland ³
1999	New Zealand	Czech Rep.				

Notes: Data for 1998 and 1999 are incomplete.

1. De minimis.

2. With inflation adjustment.

3. Without inflation adjustment.

Source: OECD Secretariat estimates based on country notifications to WTO.

Australia has one of the lowest AMS of OECD countries. Its Current Total AMS is around 26% of its commitments. The AMS commitments for the **Czech Republic** entail a reduction in Total AMS from the base level of CZK 17 billion to a final bound level in the year 2000 of CZK 13.6 billion. The Current Total AMS level is less than 10% of the permitted level.

Canada's AMS commitments involve a reduction from the starting level of CAD 5376 million to a final bound level of CAD 4301. The Current Total AMS was only 15% of the commitment in 1995 and 12% in 1996, reflecting the policy reforms undertaken since the base period. These include the elimination of the Western Grain Stabilisation Act, transport subsidies provided by the Western Grain Transportation Act as well as the phasing out of the Gross Revenue Insurance Programme, Feed Freight Assistance and

the National Tripartite Stabilisation Programme. Market price support and direct payments for industrial milk constitute the main component of the Current Total AMS, accounting for 99% of the 1995 AMS. The rest of the AMS consists of direct payments for sheep. The only major categories of support in the non-product-specific AMS are Net Income Stabilisation Account (NISA), crop insurance and some provincial programmes (e.g. fuel tax concessions).

The base period total AMS reported for the **European Union** is ECU 81.5 billion to be reduced to a final bound level of ECU 67.2 billion by the year 2000. Current Total AMS is in the form of product-specific AMS. Non-product-specific AMS measures such as insurance and interest concessions account for less than 5% of the value of total agricultural production and are excluded under the *de minimis* provision. The Current Total AMS levels increased from 64% of the commitments in 1995 to 67% in 1996 and to 68% in 1997. The 1992 CAP reform reduced support prices and increased reliance on direct payments that are linked to production-limiting programmes.⁶ These compensatory payments fall into the blue box category and are excluded from the Current Total AMS. As a result, the European Union was well below its permitted ceiling and the AMS was not a constraint. It could be noted that the sum of Current Total AMS and blue box was below the European Union's AMS commitment level by 10% in 1995 and by 5% in 1996 and 1997. Direct payments to producers of arable crops, beef and dairy as well as rural development payments (farm investments, young farmers, early retirement, disadvantaged regions, areas with environmental restrictions and agri-environment measures) under the AGENDA 2000 reform of the CAP were notified by the European Commission as measures exempt from reduction commitments under Article 18:3.

Hungary's domestic support commitment entails a reduction from HUF 42.3 billion to HUF 33.8 billion by the year 2000. However, all AMS amounts in 1995 were *de minimis*, resulting in a nil Current Total AMS.

To shield against inflation, **Iceland** has bound its Total AMS in terms of Special Drawing Rights (SDR). The domestic support commitment requires a reduction from SDR 162.6 million to SDR 130.1 million in 2000. The current inflation adjusted Current Total AMS increased from 79% of commitments in 1995 to 85% in 1998. However, in 1998 the Current Total AMS without inflation adjustment exceeded the commitment level by 78%. Iceland had the flexibility to include its blue box support expenditures in the 1995 Current Total AMS without exceeding its AMS commitment levels.

Japan's commitments in terms of its Total AMS requires a reduction from the base period of JPY 4966.1 billion to a final bound level in the year 2000 of JPY 3972.9 billion. Japan has had to reform domestic support programmes to comply with AMS commitments by reducing budgetary payments to producers and lowering administered prices. New direct payments to rice farmers were introduced in 1997 and more emphasis has been put on budget measures for investments for structural and rural infrastructure purposes. In the first two implementation years, Current Total AMS levels are around three-quarters of the commitments.

Korea and **Mexico** have developing country status under the URAA as a result of which the Total AMS is to be reduced by 13.3% over 10 years. In addition, in these countries support in the form of development programmes such as investment and input subsidies is exempted from the AMS reduction commitment under the "special and differential treatment" provision.

Korea used a different base period for its Total AMS than other countries (1989-91 for all support except rice, for which 1993 was used). Korea is committed to a maximum Total AMS in 2004 of 1.49 trillion won. However, as the Current Total AMS rose sharply from the base period level of KRW 1.7 trillion in 1989-91 to KRW 2.2 trillion in 1995, the reduction needed from the 1995 level is significantly greater than 14%. Support for rice accounts for over 90% of the Total AMS. The second largest item is barley with 3% of the AMS, the remaining items being beans, maize and rapeseed. Domestic support for a number of products, including soybeans, grapes, apples, beef, pigmeat and citrus fruit, as well as non-commodity specific interest concessions and fertiliser subsidies are excluded from AMS reduction under the *de minimis* clause. Domestic support commitments are becoming binding and Korea has oriented budgetary payments towards improving productivity through land consolidation, market development

and research activities. Noteworthy is that Korea has revised upwards its bound annual commitments for the first nine years of the implementation period in its Schedule.

To mitigate the effects of inflation, **Mexico** has expressed its commitment in constant 1991 pesos. The domestic commitment requires a reduction from 29 billion 1991 pesos to 25 billion 1991 pesos by 2004. Mexico has a large margin of flexibility in complying with the domestic support commitments as already in 1995 its Current Total AMS was less than 5% of its commitment.

In **New Zealand**, as a result of the sweeping economy-wide policy reforms in the mid-80s the current total AMS has become zero since 1995. The relatively high transfers recorded during the base period reflect government write-offs of debts incurred in earlier periods.

In **Norway**, the domestic support reduction commitment involves a reduction in Total AMS from the base period level of NOK 14.3 billion to a final bound level in the year 2000 of NOK 11.4 billion. Current Total AMS levels are lower than the commitments, although they increased from around 70% of the commitments in 1995 to 88% in 1998. It could be noted that the sum of blue box payments and Current Total AMS was higher than Norway's AMS commitment levels in each of the first four-implementation years.

Poland's domestic support commitments are expressed in US dollars, thereby shielding Poland from devaluation of the zloty. The Total AMS is limited to USD 3.3 billion by the year 2000 from the base period level of USD 4.2 billion. Current Total AMS levels are much lower than the commitments, not exceeding 10% over the 1995-98 period.

The AMS commitments by **Switzerland** entail a reduction in Total AMS from the base period level of CHF 5321 billion to a final bound level in the year 2000 of CHF 4257 billion. This commitment is becoming a binding constraint, with the current AMS amounting to 83% of the commitment in 1995. Policy reforms intended to improve the market orientation of the agro-food sector have been implemented and the AMS level was reduced to 71% of the commitment in 1998.

The domestic support reduction commitment for the **United States** involves a reduction of Total AMS from the base period level of USD 23.9 billion to a final bound level of USD 19.1 billion at the end of the implementation period. Deficiency payments, which were in the blue box, accounted for almost USD 10 billion during the base period and have been included in the base and final bound commitments. However, they are excluded from the Current Total AMS calculations. In any event, the United States would be well below its ceiling, even if the blue box had been included in the 1995 Total AMS. Reforms under both the 1990 and 1996 Farm Acts have reduced the amount of budgetary payments included as part of the AMS and increased the amount attributed to the green box. As a result, its Current Total AMS was just over a quarter of the commitments during the 1995-97 period. However, as the 1998 and 1999 US domestic support notifications are overdue, it is still unknown how the large *ad hoc* payments made during these two years will be classified. If such payments were added to the Current Total AMS, the US would be close to its Total AMS levels.

Economic implications of domestic support commitments

On the basis of the results presented above it would appear that support from policies with the greatest *potential* to affect production and trade has decreased significantly since the URAA base period, but the overall *impact* of the domestic support discipline on the degree of trade distortion is difficult to gauge. First, the base period for support reductions is not representative as it was a period of extremely high support. Second, a relatively large set of domestic subsidies is exempted from the reduction commitments, some of which can affect production and trade. Third, there is a risk that the AMS commitment can be weakened through policy-switching. Fourth, despite declining trends in AMS, overall levels of domestic support in OECD countries as measured by the PSE remain high.

Non-exempt from AMS domestic support measures

An important factor weakening the effects of the AMS commitment in reducing production and trade distortion is that support in the base period for the reductions constituted an historic peak for many commodities and countries. Moreover, many countries have availed themselves of a "credit" by adopting

the 1986 level of AMS as the base period level for a commodity in cases where it exceeded the average level for the 1986-88 period. The effect, in many cases, is to significantly exaggerate the final bound level relative to what it would have been had the reduction commitment been applied to the 1986-88 average (OECD, 1995). In addition, inclusion of support in the base period that was subsequently exempted from reduction as “blue box” support overstates the initial AMS, thereby making it easier for countries that claim “blue box” exemptions to fulfil their commitments. Further, countries are not prevented from introducing new trade-distorting support measures as long as annual bound levels are not exceeded.⁷

The AMS, being a basis for calculating specific binding commitments, has four major limitations as an indicator of production and trade distortions. First, because of its aggregate nature, countries can fulfil the overall AMS commitment, while increasing support for some individual commodities. In **Iceland**, for example, the Current Total AMS has declined by some 27% between the base period and 1997, while support to milk in nominal terms increased by 240%.

Second, the exclusion of price support in cases where no administered price exists provides wide flexibility to governments in choosing policy instruments.⁸ Third, the AMS only includes support provided through domestic measures and it does not capture distortions arising from trade measures that are excluded from the AMS provisions (e.g. tariffs and export subsidies). Fourth, AMS is independent of changes in domestic or world prices. If world commodity prices continue their secular decline over time, actual support will increase but AMS will not be affected as the reference prices used are fixed at their 1986-88 levels. Likewise, if world prices increase, actual support will fall but AMS will not be altered.

The OECD work on monitoring and evaluation of agricultural policies shows that support to agriculture in many OECD countries is characterised by wide disparities in support levels across commodities. In some cases, the policy changes which have occurred could alter relative support levels by commodity in such a way as to increase disparities among commodities. As shown in **Table 3.3**, the dispersion of the per unit Producer Support Estimate (PSE) in most OECD countries during the 1995-98 period was greater than that of the 1986-88 base period.

Exempt from AMS domestic support measures

In OECD countries, the main categories excluded from domestic support reduction commitments are policies in the blue box, the green box and policies under de minimis provisions. Exempt policies account for over 60% of the total support for the OECD countries as a whole. As expected, the OECD PSE is greater than the AMS and, in many instances, the difference is increasing over time (Table 3.4).

Table 3.3. Changes in the dispersion (standard deviation) of per-unit PSE across commodities

Country	1990-94	1995-99
Australia	-	-
Canada	+	-
Czech Republic	-	-
European Union	+	-
Hungary	-	+
Iceland	+	+
Japan	-	-
Korea	+	+
Mexico	+	+
New Zealand	-	-
Norway	+	+
Poland	+	+
Switzerland	-	-
Turkey	+	+
United States	+	-
OECD	+	+

Notes:
 - = indicates that dispersion of per unit PSE for the period is less than the 1986-88 average.
 + = indicates that dispersion of per unit PSE for the period is greater than the 1986-88 average.
 Source: OECD PSE Database, 2000.

Blue box programmes are considered to be less trade distorting and more transparent than price support measures. Nevertheless, despite the constraints production may be distorted because of input substitution and because the payments may induce higher headage or acreage than would otherwise have occurred. Further, if the measures to limit production are not very effective (when, for example, farmers set aside their least-productive land, thereby minimising the effect on production) economic distortions may not be reduced. More importantly, these payments require farmers to produce in order to be eligible for the payment. Payments may be directly dependent on production so long as the volume does not exceed 85% of production in the base period or based on fixed area and yields. Moreover, the level of support associated with these measures is very significant.⁹

Likewise, the application of the *de minimis* provision has led to exclusion of measures which are potentially highly distorting. In OECD countries, the *de minimis* provision includes product-specific support as well as non-product-specific support, particularly input subsidies. In **Hungary**, Current Total AMS is nil as all product-specific and non-product-specific support are *de minimis*, while in **Canada** *de minimis* support accounted for 30% of total support. In **Canada**, out of the twenty-two product categories with product-specific non-exempt direct payments, twenty products are exempt under the *de minimis* provision, as was the non-product-specific AMS. Likewise, many input subsidies, which *a priori* are highly distorting, have been exempted from the AMS commitment (e.g. in the **European Union, Hungary and United States**).

Green box policies are assumed to have the smallest effects on production and trade. In fact, the fundamental criterion for green box exemptions is that they have “no, or at most, minimal” effects on trade and also “shall not have the effect of providing price support to producers.” Thus, changes in the mix of domestic policies away from reliance on AMS policies and toward more green box policies might lead to expectations of a reduction in production and trade distortions.

However, the question of whether all payments reported in the green box have no, or at most, minimal trade and production effects requires further investigation. The total amount of the payment as well as the detailed design and implementation of a programme are critical factors for determining the impact of green box policies on production and trade.

The URAA provisions establishing criteria for green box policies focus attention on the way that policies are implemented, but do not limit the amount of the subsidy. Moreover, there is no general requirement that “green box” measures must not be commodity-specific.¹⁰ In addition, the interpretation of what is a “minimal” trade or production effect is not specified.

Work at the OECD has identified some of the characteristics that support measures should have in order to qualify as minimally production and trade distorting payments consistent with the objectives expressed in the 1987 OECD Ministerial Principles. The OECD has examined ways in which direct payments may be used as less economically distorting policy instruments in the areas of structural adjustment of the agricultural sector, the stabilisation of farm income, minimum income guarantees for farm households, and the provision of environmental public goods and externalities by the agricultural sector (OECD, 1994).

This work (OECD, 1994) suggests that, in order to avoid creating production incentives, direct payments should either be fixed, or if variable, should be related to a parameter which is outside the farmer's control. Ideally, direct payments should not be determined by current or future levels of production or levels of input use. Payments would be better targeted to a particular policy objective rather than attempt to achieve multiple, and sometimes conflicting, objectives and care should be taken to not adversely affect the achievement of other policy goals. In general, the more carefully a given measure is targeted, the greater is the possibility that it will achieve its objective at least overall cost. The OECD also recommended voluntary participation in direct payment programmes. Moreover, apart from the fundamental requirement that such measures should not be commodity-specific or input-specific, it is also important that they should be granted within a general context of reduced assistance.

There is very wide variation in the extent to which payments in the green box reflect the characteristics and recommendations summarised above. Some measures remain closely linked to production or factors of production while in others a significant degree of production neutrality appears to have been achieved. Some of the measures included in the green box, in particular under structural adjustment assistance provided through investment aids, disaster relief, agri-environmental payments and payments under regional assistance programmes, although in conformity with the specific-policy criteria set for these programmes, may provide a significant incentive to produce.

Table 3.4. Evolution of aggregate measure of support (AMS) and producer support estimate (PSE) (USD billion)

Country	1986-88			1995			1996			1997			1998		
	AMS (1)	PSE (2)	(1)/(2) (%)	AMS (1)	PSE (2)	(1)/(2) (%)	AMS (1)	PSE (2)	(1)/(2) (%)	AMS (1)	PSE (2)	(1)/(2) (%)	AMS (1)	PSE (2)	(1)/(2) (%)
Australia	0.4	1.2	35	0.1	1.6	7	0.1	1.6	7	0.1	1.6	6	0.1	1.3	6
Canada	4.1	5.6	72	0.6	4.0	14	0.5	3.6	12	0.4	3.1	12	n.a.	3.6	...
Czech Republic	1.2	4.6	26	0.0	0.6	8	0.1	0.6	10	0.0	0.4	9	0.0	0.9	4
European Union	80.7	95.2	85	65.4	131.0	50	64.7	118.4	55	56.9	112.3	51	n.a.	122.9	...
Hungary	0.9	3.0	29	0.2	0.8	21	n.a.	0.6	...	n.a.	0.4	...	n.a.	0.7	...
Iceland	0.2	0.2	106	0.2	0.1	131	0.2	0.1	129	0.1	0.1	117	0.3	0.2	210
Japan	33.8	53.6	63	37.3	78.4	48	30.6	62.4	49	26.2	50.5	52	n.a.	50.0	...
Korea	2.1	12.3	17	2.7	26.7	10	2.4	25.1	10	2.0	20.9	10	1.1	12.3	9
Mexico	9.6	1.7	570	0.5	0.8	60	0.3	1.8	16	1.1	5.0	21	1.3	4.9	26
New Zealand	0.2	0.5	44	0.0	0.1	0	0.0	0.1	0	0.0	0.1	0	0.0	0.1	0
Norway	2.1	2.6	80	1.5	2.9	54	1.6	2.8	58	1.5	2.7	56	1.4	2.7	54
Poland	4.2	3.9	105	0.3	3.3	8	0.2	4.4	5	0.3	3.5	8	0.3	3.8	8
Switzerland	3.4	5.0	67	3.6	6.3	57	3.0	5.7	52	2.4	4.9	48	2.3	5.0	45
United States	23.9	41.9	57	6.2	22.8	27	5.9	29.6	20	6.2	30.5	20	n.a.	48.4	...
Total	167	231	72	119	279	42	110	257	43	97	236	...	n.a.	257	...

Note: Mexico: 1991 US dollars; n.a. = not available.

Source: OECD Secretariat calculations.

The URAA policy-specific criteria for decoupled direct payments include the status of recipient as farmers, the delinking of payments from production decisions, prices and inputs, and the condition that no production shall be required in order to be eligible for the payments (paragraph 6 of Annex 2). Measures that are fully decoupled will not be linked to current or future production decisions, use of factors of production, or domestic or world commodity prices. However, it is doubtful if there are any policies that really do not affect production decisions. Any policy that transfers income to producers could conceivably have some effect on production decisions by increasing farm incomes and farmers' wealth, by reducing income risk and by altering farmers' expectations (Hennessy, 1998). Income support based on past performance could affect current production decisions as such payments could lead to higher investment, input use, adoption of better technology and reduction in debt constraints than otherwise would have been the case without the direct income support.¹¹ The reduction in risk due to such income transfers and the increase in wealth may result in a higher level of input use than otherwise (OECD, 2001b).

Similar issues arise in the case of other categories in the green box such as payments for crop insurance and disaster, payments for structural adjustment and agri-environmental payments. Unlike the URAA criteria for decoupled payments, the policy-specific criteria for income insurance and safety-net programmes of the URAA implicitly recognise that this type of support is potentially distorting and place strict limits on the amount of support that can be provided (paragraph 7, Annex 2). Crop insurance programmes allowed in Annex 2 cover only relief of natural disasters, for which strict limits are also provided (paragraph 8, Annex 2).

The green box permits the provision of structural adjustment assistance through producer retirement programmes, resource retirement programmes and investment aids (paragraphs 9, 10 and 11 of Annex 2). Several factors determine the effects of such programmes. If large enough, land retirement programmes can drastically reduce production of specific commodities. The resource and producer

retirement programmes are likely to be most effective in promoting adjustment if payments are transitional and targeted to specific impediments to adjustment. The effects on production and trade of structural assistance through investment aids are likely to be more pervasive than producer and resource retirement programmes because the productive resources funded through investment aids will stimulate future production.

Concerning regional payments, the WTO Agreement on Subsidies and Countervailing Measures states that regional aids are non-actionable provided that they are not limited to specific enterprises or industries within the region. The green box of the URAA, however, allows support that is specific to agriculture providing that the payments are not tied to current or expected production or prices, and that the assistance is generally available to producers within the region (paragraph 13, Annex 2). The green box criteria state that “where related to production factors, payments shall be made at a degressive rate above a threshold level of the factor concerned”. This provision could potentially have a distorting effect on production.

The URAA would also appear to provide considerable scope to implement agri-environmental programmes which are linked to production or productive resources and the choice of environmental policy instruments may critically affect international comparative advantage. Eligibility for payments depends on “the fulfilment of specific conditions..., including conditions related to production methods or inputs” (paragraph 12 of Annex 2). Different agri-environmental policy measures could lead to similar environmental outcomes, but could lead to differing impacts on trade (OECD, 1998).¹² A specific environmental objective can be achieved through a wide range of policy instruments providing either incentives or disincentives, but the effects on production, trade and the financial transfers involved depend on how the instruments are designed and implemented. The relative efficiency of alternative environmental policies in an international context would depend on the extent to which the environmental outcomes sought are linked to agricultural production and on whether markets exist to remunerate farmers or have them bear the cost of negative externalities associated with their farming activities. (OECD, 2001c).

Another issue for consideration is the extent to which the exemption from reduction commitments is consistent with the long-term objective of achieving substantial progressive reduction in support and protection. As has been noted in the preceding section, it is virtually impossible for domestic support measures to be fully delinked from production and trade. With relatively moderate support levels the associated effects may be small and therefore of limited consequence. However, at much higher support levels, the production and trade effects of seemingly benign domestic support measures could become significant. Thus, large increases in the level of support could undermine the fundamental requirement of paragraph 1 in Annex 2.

Table 3.5 compares the OECD (PSE) and the WTO (blue and green box) classification of selected measures. A salient feature of the table is that several blue and green box measures in WTO classification are included in the OECD PSE calculation some of them as payments based on outputs. The following section briefly discusses the evolution of agricultural support by country as measured by the AMS and PSE.

Evolution of agricultural support

Table 3.4 illustrates the evolution in PSEs and Total AMS in the 1986-88 base period and over the 1995-97 period for the OECD countries. Although there are significant differences in the way AMS and PSE are calculated and in the coverage of the two measures (**Annex I**) a number of useful insights can be gained.

Over the base period, the PSE was higher than or very close to the AMS estimates for all OECD countries, exempt **Mexico**. This would tend to suggest, *prima facie*, that in contrast to tariffication, the AMS calculated by countries was not higher than their actual level of domestic support.

The same pattern is observed over the 1995-97 implementation period, with the PSE being higher than the AMS in almost all countries. Moreover, in many instances (e.g. **Australia, Canada, the Czech Republic, Korea, Mexico, New Zealand, Poland** and the **United States**) the difference between AMS and PSE estimates has become larger. Notwithstanding differences in the calculation, both AMS and PSE are dominated by market price support.

In **Australia**, the PSE was almost thirteen times larger than the AMS over the 1995-97 period. The main reason for this divergence is attributable to the fact that the AMS includes only support to milk, together with the inclusion in the PSE of a number of green box measures. The PSE, half of which is accounted for by the market price support for milk, includes in addition payments based on input use (20%), particularly pest and disease control, payments based on overall farm income (around 15%) such as disaster payments and payments based on output (4%) such as the Rural Adjustment Scheme (RAS) investment and productivity enhancement payments. Moreover, the milk PSE market support estimate is much higher than the milk AMS estimate.

In **Canada**, the difference between AMS and PSE is due to the fact that the AMS includes only market support for milk (fluid and industrial) and non-exempt direct payments for milk and sheepmeat. Product-specific AMS for others products is excluded from the current total AMS because of the *de minimis* provisions. However, in both AMS and PSE estimates, market price support accounts for more than half of the support. Moreover, payments based on input use, particularly interest concessions, feed freight support and fuel tax concessions are also important.

In the **Czech Republic**, the average PSE was almost twelve times higher than the AMS over the 1995-97 period, while in the base period the PSE was around 4 times higher. The AMS consists of four non-product specific payments only (payments on agricultural services, operation, maintenance of seed and livestock genetic potential). In contrast in the PSE calculations, market price support accounted for more than half of the PSE.

In the **European Union**, the difference between the PSE and AMS estimates increased during the implementation period, although it is not significant compared to other countries. The totality of the AMS is due to product-specific AMS as the non-product specific AMS such as insurance subsidies and interest concessions fall within the *de minimis* provisions. The AMS excludes payments in the blue box in the implementation period. In the PSE, these payments are classified as payments based on area or animal numbers. Further, a number of policies which are classified in the green box such as compensatory allowances in less favoured areas, afforestation and set-aside are included in the PSE. In both AMS and PSE, market price support is the predominant means of support.

In **Hungary**, the 1995 PSE is about five times higher than the AMS. However, both product-specific and non-product specific AMS fall within the *de minimis* provisions.

In **Iceland**, the AMS (without inflation adjustment) and PSE estimates are almost equal both in the base and during the 1995-97 implementation period. However, there are important differences in the classification of payments. All AMS support is product-specific and like the PSE is dominated by market price support. The AMS also includes non-exempt direct payments that are accorded to milk and to a much lesser extent to sheep. A number of payments on input use are classified as green box.

In **Japan**, the divergence between AMS and PSE is not large. The AMS is commodity specific, with about three-quarters accounted for by rice. Non-product specific AMS, agricultural insurance scheme, falls in the *de minimis* provision. More than 90% of support both as measured by AMS and the PSE is in the form of market price support. Green box payments are dominated by payments on infrastructural services for agriculture and rural areas.

In **Korea**, the PSE was ten times larger than the AMS over the 1995-97 period. The AMS consists of product-specific support for three products, rice, barley and maize. Product-specific AMS for other products and the non-product specific AMS (input subsidies, subsidy for farmland associations, loan interest subsidy for farming) were notified as being *de minimis*. However, support on rice, which is in the

form of market price support, accounts for more than 95% of total AMS.¹³ Payments on infrastructural services such as irrigation and drainage are the most important measures in the green box.

In **Mexico**, although the PSE was lower than the AMS in the base period it was higher during the 1995-98 implementation period. The main reason is that the PROCAMPO programme is included in the green box and a number of investment subsidies such as interest concessions and insurance premiums are notified as development programmes and are exempted from reduction commitments under the special and differential treatment provision. Mexico's AMS consists mainly of product-specific AMS for milk, corn and wheat. PROCAMPO payments accounted for more than 70% of payments in the green box. Market price support, payments based on historical entitlements and payments on input use (irrigation, interest concessions and feed) were the most important components of support as measured by the PSE, each accounted for about a third of PSE.

Table 3.5. Classification of selected blue and green box policies in the URAA and OECD PSE

Country	Policy	PSE	WTO Notifications
Australia	RAS: investment interest subsidies and productivity enhancement Pest and disease control Disaster payments	Payments on constraints on a set of inputs Payments on use of on-farm services Payments on overall farm income	Green box: structural assistance through investment support Green box: general services Green box: relief from natural disasters
Canada	Western Grain Transition Payment Program: direct payment Prince Edward Island Agricultural Insurance	Payments on historical plantings Payments on overall farm income	Green box: decoupled income support Green box: income insurance
Czech Republic	Support for dairy cows Support for sheep walk in less favoured areas Farmer programme addressing the settlement of restitution and transformation claims made on co-operative farms Payments for landscape maintenance Support for ecological agriculture	Payments on unlimited animal numbers Payments on unlimited animal numbers Payments on used of fixed inputs Payments on farm income level Payments on constraints on a set of inputs	Green box: decoupled income support Green box: regional assistance Green box: structural assistance through investment support Green box: environmental programmes Green box: environmental programmes
European Union	Per hectare compensatory payments for arable crops Suckler cow, special and deseasonalisation premia; ewe and goat premia Set-aside Young farmers Compensatory allowances in less favoured areas Afforestation	Payments on limited area Payments on limited animal numbers Payments on constraints of fixed inputs Payments on use of variable inputs Payments on limited area or animal numbers Payments on constraints on fixed inputs	Blue box Blue box Green box: resource retirement programme Green box: investment aids Green box: regional assistance Green box: environmental programmes
Hungary	Interest subsidy for structural re-organisation and privatisation	Payments on use of fixed inputs	Green box: investment aids
Iceland	Direct payments to sheep farmers	Payments on historical animal numbers or production	Green box: decoupled income support
Japan	Irrigation, drainage, land consolidation	Payments on use of fixed inputs	Green box: general services

Table 3.5. Classification of selected blue and green box policies in the URAA and OECD PSE (cont.)

Country	Policy	PSE	WTO Notifications
Korea	Irrigation and drainage	Payments on use of variable inputs (50%)	Green box: general services
Mexico	PROCAMPO	Payments on historical entitlements	Green box: decoupled income support
	Insurance premiums	Payments on use of variable inputs	Development programmes
	Capital grants	Payments on use of fixed inputs	Development programmes
New Zealand	Soil conservation	Payments on use of fixed inputs (25%), payments on use of farm services (25%)	Green box: environmental programmes
Norway	Acreage and cultural landscape	Payments on use of variable inputs	Blue box
	Structural income support to dairy	Payment on limited output	Blue box
	Headage support	Based on limited animal production	Blue box
	Regional deficiency payments to milk production	Payments on limited output	Blue box
	Investment subsidies through the Agricultural Development Fund	Payments based on constraints on a set of inputs; on use of fixed inputs	Green box: investment aids
	Fixed area support to ecological production	Based on unlimited area	Green box: environmental programmes
	Acreage support to mountain farmers	Payments on use of variable inputs	Green box: environmental programmes
	Vacation and replacement scheme	Payments on use of fixed inputs	Green box: environmental programmes
	Natural disaster payments	Payments on unlimited area or animal numbers	Green box: relief from natural disasters
Poland	Drainage	Payments on use of fixed inputs	Green box: general services
Switzerland	Milk supplement cheese production	Payments on limited output	Green box: regional assistance
	Payments to owners of cows who do not market milk	Payments on unlimited animal numbers	Green box: decoupled income support
	Payments for organic farming; integrated production	Payments on unlimited area or animal numbers	Green box: environmental programmes
	Payments for summer pasturing	Payments on unlimited area or animal numbers	Green box: environmental programmes
	Payments for renewable raw material	Payments on unlimited area or animal numbers	Green box: environmental programmes
	Payments for extensive cereal production	Payments on unlimited area	Green box: environmental programmes
	Non-silage allowances	Payments on limited output	Green box: regional assistance
	Allowances for the costs of cattle owners in mountain and hill areas	Payments on limited animal numbers	Green box: regional assistance
United States	Crop disaster payments	Payments on unlimited area	Green box: relief from natural disasters
	Production flexibility contract payments	Payments on historical support programmes	Green box: decoupled income support
	Conservation reserve programme	Payments on constraints on fixed inputs	Green box: resource retirement
	Farm credit, ownership, operating loans	Payments on variable and fixed inputs use	Green box: investment aids
	Emergency conservation programme	Payments on use of fixed inputs	Green box: environmental programmes
	Environmental quality incentive programme	Payments on constraints on a set of inputs	Green box: environmental programmes
	Wetland reserve programme	Payments on constraints of variable inputs	Green box: environmental programmes
	Livestock indemnity programme	Payments on unlimited animal numbers	Green box: relief from natural disasters

New Zealand's current total AMS was nil in each year between 1995 and 1998. The PSE, which has been one of the lowest in OECD countries since the sweeping economy-wide reforms in the mid-80s, is basically due to a *de facto* market price support for poultry due to border measures such as SPS and a maximum tariff of 6.5% and some payments on animal disease control.

In **Norway**, although the gap between PSE and AMS increased somewhat in the 1995-98 implementation period compared with the gap in the 1986-88 base period, the PSE is less than twice the AMS. The AMS consists mainly of product-specific AMS in the form of market price support. Non-exempt direct payments, particularly deficiency payments, are accorded to milk, beef, sheep and potatoes. The non-product specific AMS is negative due to taxes on fertilisers and pesticides. The main forms of agricultural support as measured by the PSE are market price support (around 40%), payments based on output (just over 20%) and payments based on input use (about 25%). It is noteworthy that some payments which are in the blue box or green box are payments based on output or on area and animal numbers.

In **Poland**, the PSE was equal to the AMS in the base period 1986-88. However, over the 1995-98 implementation period the PSE was more than 14 times higher than the AMS. The dominant component of AMS is non-product-specific such as interest concessions and subsidies on fertilisers. The remaining part of AMS is product-specific AMS, mainly market price support for common wheat. In the PSE, however, market price support is also very important for other products, including pigmeat, poultry, eggs and milk. Market price support is the main form of support as measured by the PSE, accounting for around 85% of the total with the remainder of the PSE being in the form of payments on input use.

In **Switzerland**, the gap between the PSE and AMS increased somewhat between the two periods under consideration. The PSE was less than double the AMS in the 1995-98 period. The AMS is wholly product-specific AMS in the form of market price support. Milk and dairy products accounted for almost a third of the average current total AMS, followed by pigmeat (22%) and bovine meat (18%). Market price support accounted for more than half of agricultural support, as measured by the PSE. Moreover, the importance of payments based on area planted or animal numbers and payments based on historical entitlements have been increasing. Such payments were notified as green box.

In the **United States**, the difference between the PSE and the AMS increased, with the PSE being, on average, more than five times higher than the AMS during the 1995-97 period. The AMS is accounted for by four commodities (dairy, sugar, cotton and peanuts). Non-product specific AMS and product-specific AMS for other commodities fall within the *de minimis* provision. Dairy accounts for more than 70% of the AMS and sugar around 15%. Market price support accounts for half the agricultural support measured by the PSE. Payments based on historical entitlements, most of which are included in the green box, have increased as a result of the FAIR Act and substantial additional pro rata payments accorded in 1998 and 1999. Payments based on input use are also important, accounting for about 15% of PSE.

Implementation issues

Aggregation

A major limitation that has been identified with the current discipline stems from the aggregate nature of the reduction commitment. The use of a sector-wide AMS rather than individual commodity estimates as a benchmark for reduction commitments allowed countries to meet the overall commitment by adjusting policy in a limited number of sectors while maintaining unchanged regimes in others. It has also made it possible to actually increase support for some products while still complying with annual aggregate reduction commitments.

Market price support calculation

The estimation of the market price support component of the current total AMS requires the calculation of the gap between the applied administered price and a fixed external reference price based

on the years 1986 to 1988 (**Annex I**). In some cases, however, modified external reference prices have been used. In particular, external reference prices have been modified to adjust for inflation and for exchange rate movements. In other cases, the external reference price has been expressed in a different currency (e.g. SDR or USD) rather than national currency or a reference period different than 1986 to 1988 has been used. These factors affect the magnitude of the price gap. Noteworthy that while the URAA has provisions for members to take into account excessive rates of inflation on a country's ability to meet its reduction commitments, there are no established provisions for unilateral adjustments to external reference prices or other components of the AMS calculations.

Another issue that influences the estimation of market price support is the quantity of eligible production used. The difference between the administered price and the external price is multiplied by the quantity of production eligible to receive the applied administered price. In most instances where administered prices are used, price support is not limited to a specific quantity, but is generally available to all production. In such cases eligible production is total production and not the quantity actually purchased by government. In a number of cases it appears that countries used actual government purchases. Sometimes a zero eligible production level is notified. In addition, AMS in some cases excludes the share of the raw material not used for the production of the products for which administered prices are set. For example, in the **European Union** the AMS for milk is based on butter and skim milk powder production and ignored the milk used in other products such as cheese, yoghurt and for drinking milk.

Use of negative figures when calculating Current Total AMS

In the calculation of both product-specific and non-product-specific AMS, negative values may arise. This could, for example, occur when the applied administered price is lower than the fixed external price in the calculation of market price support of a product-specific AMS. A negative AMS figure implies that a country is, in effect, taxing that product. How negative numbers are treated in the calculation of the total (sector-wide) AMS is important because use of negative figures allows positive and negative amounts to partially offset each other at the level of product-specific or non-product-specific AMS. In such cases, the Current Total AMS is lower than it would have been if negative support was excluded. This practice enables countries to effectively increase support to levels higher than their scheduled commitment levels, thereby undermining the objective of providing for substantial progressive reductions in trade-distorting agricultural support. This practice has been disputed in the WTO Committee on Agriculture. Although the practice is more often used by developing countries, **Norway** has also used it to deduct levies on fertilisers and pesticides.

Transparency of notifications

Notifications are often not detailed enough to determine the nature of the measures, particularly with regard to those provisions for which exemption is claimed (green box, blue box, special and differential treatment, *de minimis*). Inclusion of more information in the notification such as the total value of production, description of the measure with reference to the criteria in the relevant annex or article would increase transparency.

Peace clause

The potentially difficult assessment of whether policies conform to the blue box or to green box criteria has a bearing not only for measuring Current Total AMS and assessing whether commitments have been fulfilled. It also has implications for the applicability of the peace clause to these measures (Article 13). For example, if green box policies are found to be not in conformity with the "green box" criteria, they are to some extent actionable under the relevant provisions of the GATT 1994 and the Agreement on Subsidies and Countervailing Measures. The peace clause expires at the end of 2003.

Notes

1. In addition to the exemption from disciplines for green and blue box policies, and *de minimis* exemption, developing countries also received “special and differential” exemptions for certain input and investment subsidies.
2. **European Union** compensatory payments were established to compensate producers for the loss of income caused by the reduction of intervention, or support prices after 1992. Payments are based on fixed, historical yield in each region, and the total area eligible to receive compensatory payments is also fixed. Producers with an area planted to arable crops sufficient to produce more than 92 tonnes of grain must set aside part of their area in order to receive compensatory payments.
3. Also, one non-OECD country, the **Slovak Republic**, has notified using the blue box provisions.
4. More precisely, this refers to support under measures that from 1995 counted as blue box support as the blue box category of support did not exist in 1986-88.
5. The detailed list and characteristics of measures which are exempt from the reduction commitments are given in Annex 2 of the URAA.
6. The share of market price support in PSE decreased from 85% in 1986-88 to 63% in 1999 [OECD, 2000a].
7. The URAA only requires that countries notify new or modified policies claimed as green.
8. For example, it opens up the possibility to alleviate the domestic support commitment by eliminating the administered price for those products which had an administered price in the base period, but continuing to provide the same level of support through border measures, providing that the specific commitments on tariff bindings and export subsidy are not breached.
9. The preliminary results of the OECD pilot project “Policy Evaluation Matrix” (PEM) for arable crops show that for marginal changes, the effects of a given amount of support may differ substantially among support measures. Area payments, even when assumed to be implemented with a requirement to plant, were found to be relatively less trade distorting than market price support, payments based on output, or payments based on variable input use (OECD, 2000c).
10. However, the policy-specific criteria for decoupled income support do specify that the payments shall not be related to, or based on, the type or volume of production in any year after the base period (Annex 2, paragraph 6).
11. It could be argued, however, that part of the increased production corrects for market failures like incomplete insurance markets, and imperfect capital and information markets.
12. In general, the production and trade effects of voluntary agri-environmental payment-*cum*-farming-restriction-programmes can be more pronounced than those of mandatory ones, because of indirect liquidity and income effects.
13. There is a large difference between the estimates of market price support as calculated by PSE and AMS. This is due to the fact that in the AMS market price support is calculated as the gap between domestic producer prices and administrative prices multiplied by government purchases rather than total production.

Part IV.

EXPORT SUBSIDY

Background

Export subsidies allow countries to export goods on the world market at a price lower than that prevailing in their domestic markets. This alters incentives for domestic producers and encourages higher domestic production than otherwise would be the case. Consequently, international trade patterns are distorted. Export subsidies will depress world prices, particularly if the countries' subsidised exports account for a significant share of world trade. This penalises domestic consumers, other net agricultural exporters and producers in importing countries, and benefits consumers in unprotected food importing countries. Moreover, export subsidies often provide opportunities for rent seeking by importers of subsidised products (Brander and Spencer, 1985).

Prior to the URAA, export subsidies were an important policy instrument in agricultural trade, particularly for trade in grains and dairy products. The URAA imposed disciplines on agricultural export subsidies. While they were not outlawed, limits were established on the volume of subsidised exports and on budgetary expenditure. Countries that employed export subsidies are committed to reduce the volume of subsidised exports by 21%, and the expenditure on subsidised exports by 36% (**Box IV.1**). These reductions are to be made from the 1986-90 base period level over a six-year implementation period (10-year period for developing countries), on a product-specific basis. Moreover, export subsidies on products not subsidised in the base period are banned.

The URAA discipline on export subsidies is considered to be one of the most important accomplishments of the agreement and the one that was expected to have the most immediate trade implications. Not surprisingly, acceptance of a specific discipline on export subsidies was one of the most contentious issues not only in the agricultural negotiations but in the Uruguay Round as a whole (Josling and Tangermann, 1999).

This part of the report attempts to address the following questions:

- How important are export subsidies in OECD countries?
- How effective has the discipline on export subsidies been in reducing trade distortions?
- What issues have emerged from the implementation of the export subsidy discipline?
- How can the implementation of the export subsidy discipline be improved?

The analysis is primarily based on country notifications to WTO for 1995, 1996, 1997 and 1998. As of October 2000 all OECD countries, except **Iceland**, had notified for the 1995-98 period. **Japan** and **Korea** do not have export subsidy reduction commitments because they did not subsidise any exports during the base period. Throughout this part, export subsidies refer only to export subsidies which are subject to reduction commitments under the URAA and are notified to WTO (**Box IV.1**). Further, the time period in the report is the reporting period of country notifications to WTO.

Box IV.1. Summary of export subsidy provisions

The main provisions concerning export subsidies are as follows:

- Reduce the volume of subsidised exports by 21% over six years from a base period level in each of 22 product categories (14% over a 10-year period for developing countries).
- Reduce the value of export subsidies by 36% over six years from the base period level in each of 22 product categories (24% over a 10-year period for developing countries). Zero reduction for the least developed countries.
- Reductions are made in equal annual instalments on a commodity-specific basis from the 1986-90 base or from average 1991-92 levels if higher than the base period.
- A country may provide export subsidies in any of the second through fifth year of the implementation period in excess of the corresponding annual commitment levels provided that:
a) the cumulative amounts of budgetary outlays and quantities of subsidised exports, from the beginning of the implementation period through the year in question, does not exceed the cumulative amounts that would have resulted from full compliance with the relevant annual outlay and quantity commitment levels specified in the country's Schedule by more than 3% and 1.75%, respectively, of the base period levels; b) the total cumulative amounts of budgetary outlays for such export subsidies and the quantities benefiting from such export subsidies over the entire implementation period are no greater than the totals that would have resulted from full compliance with the relevant annual commitment levels specified in the country's Schedule; c) the country's budgetary outlays for export subsidies and the quantities benefiting from such subsidies, at the end of the implementation period, are no greater than 64% and 79% of the 1986-90 base period levels, respectively. For developing countries these percentages shall be 76% and 86%, respectively.
- Export subsidies that are subject to reductions include direct export payments by governments to firms, industries, or producers of agricultural products contingent on export performance; subsidised stock exports; producer-financed export subsidies; export marketing costs subsidies; export-specific transportation subsidies; and subsidies on goods incorporated into exports.
- Export subsidies may not be extended to commodities that were not subsidised in the base period.
- Other export subsidies should not be applied in a way that would undermine the cuts in export subsidies.
- Widely available export market promotion and advisory services are exempted from reduction commitments.
- Officially supported export credits and credit guarantees to be covered by a separate agreement.
- Food aid is exempt from reductions.

This part begins with a brief discussion of the relative importance of notified export subsidies in OECD countries. An assessment of the effectiveness of the export subsidy reduction commitments in reducing trade distortions is then attempted, highlighting in particular the extent to which export subsidies, both in volume and budgetary outlays terms, have been used by OECD countries. The main policy changes implemented in response to the reduction commitments are described, some outstanding issues are highlighted and, finally, some of the implementation issues that have arisen are discussed.

How important are export subsidies?

Export subsidies became an important policy instrument in the 1980s when domestic support policies generated excess supplies mainly in Europe and in North America. Until 1985, most subsidised exports were from the **European Union** and were applied to a number of products such as dairy, cereals, beef, wine and olive oil. In 1985, the **United States** embarked on a policy of export subsidisation, particularly for dairy products, wheat and some other cereals and cereal products. More than two-thirds of dairy products export volumes were subsidised over the 1995-98 period (**Table 4.1**).

Table 4.1. **Share of notified subsidised exports in total exports (volume) by product category (%)⁽¹⁾**

Product category ⁽²⁾	1995	1996	1997	1998
Wheat and wheat flower	7	21	22	25
Coarse grains	33	45	43	62
Rice	4	10	7	7
Oilseeds	0	0	0	0
Vegetable oils	0	0	0	0
Oilcakes	0	0	0	0
Sugar	19	29	30	31
Butter and butter oil	70	76	65	63
Skim milk powder	66	58	46	61
Cheese	65	62	53	44
Other milk products	70	64	64	57
Bovine meat	58	71	61	49
Pigmeat	38	31	20	54
Poultrymeat	25	14	13	12
Sheepmeat	54	40	53	61
Live animals	6	38	46	9
Eggs	52	38	49	48
Wine ⁽³⁾	26	28	23	24
Fruit and vegetables	25	33	31	22
Tobacco	4	1	0	0
Cotton	0	0	0	0
Incorporated products	0	0	0	0
Other agricultural products	55	24	20	23

Notes: (1) Includes all OECD countries with export subsidy reduction commitments.

(2) Flowers are not included.

(3) HI.

Source: OECD Secretariat calculations based on country notifications to WTO.

Relatively few countries account for most export subsidies and therefore for most of the export subsidy reduction commitments (**Annex Table III.1** and **Table 4.2**)². Around 92% of the total volume reduction commitment by OECD countries for wheat and wheat flower is accounted for by just three countries, namely, the **European Union** (34%), the **United States** (34%) and **Canada** (23%). For coarse grains, almost 60% of the volume reduction commitment is accounted for by two exporters, the **European Union** (45%) and **Canada** (14%). Almost three-quarters of the agreed reduction in the volume of subsidised beef, butter and cheese exports is accounted for by the **European Union**. Two exporters, the **European Union** (56%) and the **United States** (18%) also accounted for three-quarters of the volume reduction commitment for skimmed milk powder.

The main export reduction commitments were made by OECD countries (**Table 4.2**)². **Of the OECD countries that have export subsidy reduction commitments in their schedules, the European Union** accounted, on average, for 90% of actual export subsidies notified to the WTO for the 1995-98 period (**Figure 4.1**)³. The **European Union** employs export subsidies for a wide range of agricultural commodities and processed products. It is most reliant on subsidies for cheese, other milk products, bovine meats, sugar, and feed grains. Dairy products accounted for 30% of export subsidy budgetary outlays in the 1995-1998 period. Beef meat accounted for 22%, sugar 12%, grains 13% and incorporated products 11% (**Annex Table III.1**). All notified export subsidies are direct export subsidies, except those of sugar which are producer financed.

Table 4.2. Notified subsidised exports, 1995-98 (USD mn)

A) By country					
	1995	1996	1997	1998	1999
Australia	0	0	0	1	2
Canada	37	4	0	0	n.a.
Czech Republic	40	42	40	42	35
European Union	6 386	7 064	4 943	5 968	n.a.
Hungary	41	18	10	12	13
Iceland	0	0	0	0	n.a.
Japan	0	0	0	0	0
Korea	0	0	0	0	0
Mexico	0	0	16	2	n.a.
New Zealand	0	0	0	0	0
Norway	83	78	102	77	n.a.
Poland	0	16	9	14	18
Switzerland	447	369	296	292	n.a.
Turkey	30	17	39	29	28
United States	26	121	112	147	n.a.
OECD	7 090	7 729	5 566	6 583	n.a.
B) By product					
	1995	1996	1997	1998	
Wheat and wheat flower	167	403	201	561	
Coarse grains	397	494	311	855	
Rice	40	92	37	29	
Oilseeds	0	0	0	0	
Vegetable oils	0	0	0	0	
Oilcakes	0	0	0	0	
Sugar	496	682	908	902	
Butter and butter oil	353	727	365	322	
Skim milk powder	236	317	225	352	
Cheese	637	409	271	227	
Other milk products	1 273	1 218	1 100	1 077	
Bovine meat	1 972	1 939	960	728	
Pigmeat	133	91	96	401	
Poultrymeat	157	93	87	102	
Sheepmeat	1	1	4	1	
Live animals	27	16	5	1	
Eggs	20	11	18	21	
Wine	72	76	42	33	
Fruit and vegetables	126	106	59	65	
Tobacco	24	4	0	0	
Cotton	0	0	0	0	
Incorporated products	642	718	627	641	
Other agricultural products	318	330	252	264	
OECD	7 090	7 729	5 566	6 583	

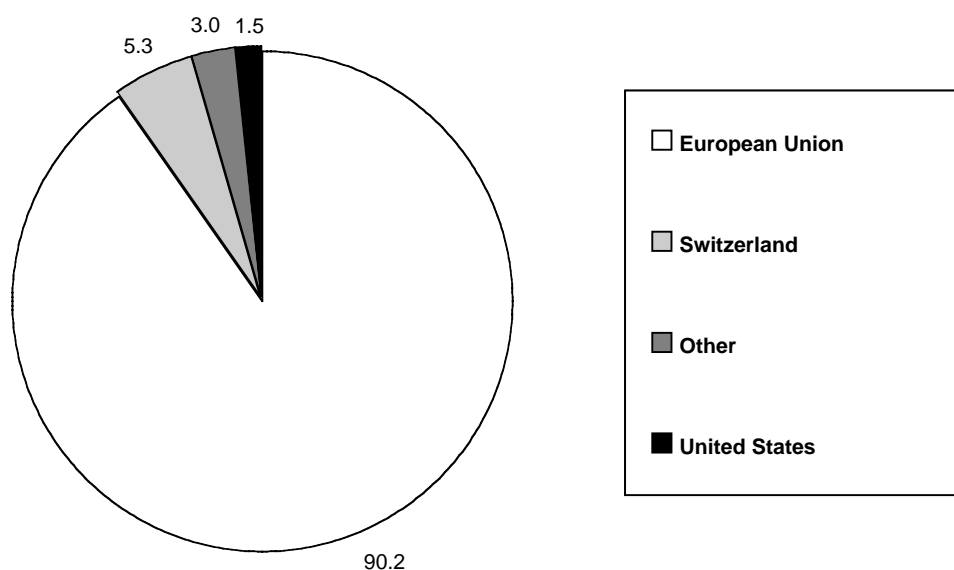
Source: OECD Secretariat calculations based on country notifications to WTO.

Switzerland was the second largest user of export subsidies in OECD countries in the first three years of implementation (5%). Export subsidies are granted mainly on dairy products, processed food products, livestock, potatoes and fruit. Export subsidy reduction commitments were made on an aggregate basis rather than on a product-by-product basis, thus leaving some discretion to switch subsidies among individual products. Export subsidies are mainly in the form of direct export subsidies.

The **United States** accounted for less than 2% of the export subsidy expenditures of OECD countries over the 1995-98 period. Export subsidy reduction commitments are dominated by wheat, dairy products and coarse grains. On average, 95% of its export subsidy expenditures over the 1995-98 period were allocated to dairy products, mostly skimmed milk powder (78%), and the remainder to poultry meat.

Canada has made export subsidy reduction commitments under the URAA for a number of products, including cereals, mostly wheat and wheat flour, oilseeds, oilseed and vegetable oils, and dairy products, particularly skimmed milk powder. However, according to the notifications to WTO, only butter and

Figure 4.1. Notified subsidised exports in OECD countries (value), 1995-98 (%)



Source: OECD Secretariat calculations based on country notifications to WTO.

skimmed milk powder received modest export subsidies in the first two years of the URAA. Export subsidies for butter and skimmed milk powder have been financed by producers. However, a WTO panel concluded that Canada's milk pricing system is inconsistent with the URAA's export subsidy provisions. This is not at present reflected in revised notifications.

Japan does not make use of export subsidies and consequently does not have export subsidy reduction commitments. However, it is bound not to introduce export subsidies in the future.

Export subsidy commitments in **Australia** are almost entirely for the dairy sector, while in **New Zealand** they are not product-specific. However, during the first four years of the implementation period only Australia provided export subsidies and only in 1998/9.

In **Norway**, exports of meats, eggs, dairy products, fruit and vegetables, honey and processed agricultural products were subsidised during the base period. Export subsidies continue to be funded through producer levies and government transfers through the Agricultural Agreement. However, the share of government funding has diminished.

Iceland had abolished export subsidies in advance of the conclusion of the URAA, but reinstated them on sheepmeat during the first three years of the URAA. This was possible because export subsidies had existed in the base period. The subsidies are financed by producers.

The **Czech Republic**, **Hungary** and **Poland** accounted for less than 1% each of the export subsidy budgetary outlays of OECD countries over the 1995-98 period. The **Czech Republic** is committed to reduce export subsidies on dairy products, mainly butter and milk powder, beef and potato starch. In **Hungary**, direct export subsidies are granted on a range of key agricultural products such as wheat, maize, dairy products, pigmeat and poultry. In **Poland**, export subsidies are usually used for sugar. In 1998, export subsidies were also used for potato starch for the first time.

Turkey grants export subsidies on a number of primary and processed agricultural products, particularly grains and fruits and vegetables. Although the number of products exported with subsidies increased over time, Turkey accounted for less than 1% of the export subsidy expenditures in OECD countries over the 1995-97 period. For primary agricultural products, export subsidies are usually in the

form of rebates, paid as cash grants, ranging between 10 and 20% of the export value. For processed agricultural products, export subsidies are provided to producers or exporters in the form of deduction of their debts to public corporations (taxes, social insurance premium costs, energy costs, and telecommunication costs) from their subsidy entitlement.

Korea has no export subsidy reduction commitments as there were no export subsidies during the base period. However, new export subsidies to reduce the marketing costs for exporters who buy from small-sized producers and domestic transport were introduced in 1991 for fruits and flowers.⁴

Mexico is committed to reductions, at the rates applying to developing countries, in export subsidies on relatively small volumes of wheat, maize, sorghum, beans and sugar.

How effective are the export subsidy reduction commitments?

The effectiveness of the export subsidy reduction commitments in reducing distortions in international trade depends on a number of factors, including the degree to which export subsidies were actually used relative to commitments, the representativeness of the base levels from which reductions were negotiated, the level of support accorded by export subsidies as well as the extent to which dispersion of the rate of export subsidy across commodities changed over time.

Use of export subsidies

Use of export subsidies is measured by notified subsidised exports as a percentage of the corresponding annual commitment levels. **Table 4.3** and **Table 4.4** summarise the use of export subsidies in relation to annual volume commitments for the first four years of the implementation period by product group and by country, respectively. **Table 4.5** shows the utilisation of export subsidies in relation to budgetary outlay commitments. The full details by country and commodity are contained in **Annex Table III.3** and **Annex Table III.4**.

Table 4.3. Export subsidy volume commitments and use by product in OECD countries⁽¹⁾

Product category ⁽²⁾	1995		1996		1997		1998	
	Commitments ('000 t)	Share used (%)	Commitments ('000 t)	Share used (%)	Commitments ('000 t)	Share used (%)	Commitments ('000 t)	Share used (%)
Wheat and wheat flower	56 105	8	52 293	28	48 959	27	45 623	31
Coarse grains	20 015	33	19 216	62	18 418	48	17 619	84
Rice	435	23	382	59	330	47	277	52
Oilseeds	2 350	0	2 265	0	2 180	0	2 094	0
Vegetable oils	701	0	608	0	514	0	421	0
Oilcakes	265	0	255	0	246	0	236	0
Sugar	1 827	47	1 743	77	1 660	113	1 576	107
Butter and butter oil	611	25	583	49	554	34	526	32
Skim milk powder	686	57	653	54	620	46	587	63
Cheese	540	82	512	83	484	72	456	55
Other milk products	1 507	88	1 351	92	1 295	94	1 239	85
Bovine meat	1 162	88	1 098	107	1 033	92	969	75
Pigmeat	547	69	527	54	507	43	487	153
Poultrymeat	471	94	440	92	409	97	378	92
Sheepmeat	6	30	6	15	6	24	6	14
Live animals	207	1	199	7	191	8	184	2
Eggs	153	69	144	50	135	81	126	93
Wine ⁽³⁾	2 851	76	2 742	111	2 633	115	2 523	98
Fruit and vegetables	1 788	62	2 148	70	2 054	66	1 949	53
Tobacco	190	6	174	1	158	0	143	0
Cotton	..	..	..	..	..	..	..	..
Incorporated products	..	..	..	..	..	..	..	..
Other agricultural products	2 940	39	2 658	16	2 390	24	2 110	39

Notes:

(1) Includes all OECD countries with export subsidy reduction commitments. According to the URAA, commitment levels represent the maximum level of export subsidies which may be granted.

(2) Flowers are excluded.

(3) hl.

Source: OECD Secretariat calculations based on country notifications to WTO

The number of products which were subsidised during the 1995-98 implementation period was much less than the number of products eligible for subsidy under the URAA. For many products, the notified volumes of subsidised exports were below WTO limits in all four years (**Table 4.3**). Cereals, particularly wheat, were well below the ceilings, reflecting high world prices in 1995, 1996 and 1997 as well as policy changes since the base year in key exporters such as the **European Union** and the **United States**. In contrast, volume commitments for livestock products, particularly cheese, other milk products and bovine meats have been used more extensively. For oilseeds, oilcakes, vegetable oil and cotton export subsidies have not been used by OECD countries. In the fruit and vegetables category, including both unprocessed and processed products, almost two thirds of the available subsidy commitments were used in the first four years. It is worth noting that in a number of cases, subsidised export quantities exceeded permissible levels.⁵ As pointed out earlier, rollover is not permitted in the last year of the URAA implementation and subsidised quantities must not exceed the final commitment levels nor may the total value of all years exceed the total commitments in the Country Schedules.

Six OECD countries resorted to the rollover of unused export subsidy quantity or budgetary outlay entitlements over the 1995-98 implementation period (**Table 4.5** and **Annex Table III.3**). Carryovers on volume commitments were more frequent than carryovers on value commitments. The largest volume carryover was by **Norway** for poultry meat in 1995, followed by **Poland** for sugar in 1997, the **European Union** for rice in 1996 and the **United States** for skim milk powder in 1998.

Table 4.4. Use of export subsidy volume commitments by country (%)⁽¹⁾

Country	1995	1996	1997	1998	1999
Australia	0	0	0	1	2
Canada	7	1	0	0	n.a.
Czech Republic	42	29	33	36	41
European Union	53	80	72	79	n.a.
Hungary	16	12	10	7	9
Iceland	48	8	1	0	n.a.
Japan	0	0	0	0	0
Korea	0	0	0	0	0
Mexico	0	0	17	60	n.a.
New-Zealand	0	0	0	0	0
Norway	59	57	88	86	n.a.
Poland	1	116	123	99	98
Switzerland	65	57	52	55	n.a.
Turkey	76	35	84	63	61
United States	10	9	15	20	n.a.
OECD	48	71	64	71	n.a.

Note:

1. Weighted by the value reduction commitments for all product groups in the WTO notifications.

Source: OECD Secretariat calculations based on country notifications to WTO.

The discipline on budgetary outlays for export subsidies are generally less binding than the volume constraints, even though the percentage reduction is higher. This is because reductions in domestic support prices and increases in world market prices in the first years of the implementation period reduced the subsidy required per tonne.⁶ The reduction in domestic support prices, in part, resulted from the restructuring of support for some commodities by replacing some of the price support that was previously provided through export subsidies with partial compensation payments (e.g. the **European Union**) and budgetary payments that were deemed decoupled (e.g. the **United States**). As pointed out in the previous Part, these payments were exempt under the blue and green box criteria.

Nevertheless, export subsidy budgetary outlay commitments have been binding in a number of cases. The largest expenditure carryover in percentage terms was by **Hungary** for corn in 1995, followed by **Poland** for milk powder in 1999, **Norway** for poultry meat in 1995 and by the **European Union** for pigmeat in 1998 (**Annex Table III.4**).⁷

In the **European Union** less than 50% of the permitted volume of subsidised exports was used for wheat and coarse grains (1995) and butter (1995 and 1997). Due to tight grain markets during the 1995/96 marketing year, the European Union taxed exports of wheat and barley for much of the marketing year. The European Union was just under its 1995 limits on subsidised export volume for cheese, fresh fruits and vegetables, other milk products, olive oil, poultry meat, and beef. Of these commodities, export subsidies were applied to more than 80% of olive oil, beef meat, other milk products and cheese exports, while around 50% of poultry and fresh fruit and vegetable exports were subsidised. For 1996, the European Union overshot its annual export volume entitlements for rice, olive oil, beef meat and wine. For wheat, subsidised exports were roughly 13.6 million tons, which is equivalent to three-quarters of the 1996 commitment level. For subsidised coarse grains exports were less than 13 million tons, also less than the European Union's 13.1 million tons 1996 subsidised export volume commitment. For 1997, the European Union exceeded its annual permitted volume for sugar, wine, poultry meat and other milk products. For 1998, the European Union exceeded its annual permitted volume levels for coarse grains, sugar, pigmeat and eggs.

Budgetary outlay limits in the **European Union** were not exceeded in 1995. Overall, European Union export subsidy expenditures were very low in the first year of URAA implementation, almost half of the 1986-90 average level, mainly reflecting high world grain and butter prices. The European Union was closest to its 1995 limit for processed and fresh fruits and vegetables, wine, poultry meat, beef and olive oil (**Annex Table III.5**). However, the European Union overshot its budgetary outlay entitlement for rice and wine in 1996, for sugar in 1997 and for sugar, pigmeat, alcohol and incorporated products in 1998. European Union export subsidy budgetary outlays increased by 14% in 1996 over 1995 to ECU 5.6 billion and decreased in 1997 by 31% to ECU 3.8 billion.

Given the state of world grain markets in the first three years of the URAA implementation period, the **United States** has had no difficulty meeting export subsidy commitments for wheat. In fact the Export Enhancement Programme (EEP) has not been used at all for wheat in the first four years of URAA implementation. The United States, however, reached export limits for the marketing year 1997 for cheese and exceeded the limits for skimmed milk powder in 1997 and 1998 and for other milk products in 1998. United States export subsidy budgetary outlays increased by 475% in 1996 over 1995 to USD 121 million and decreased in 1997 by 8% to USD 112 million and increased by 31% in 1998 to USD 147 million.

Switzerland, the second largest user of export subsidies in OECD countries, exceeded its volume commitments for cattle for breeding and horses in 1995. **Norway** overshot its annual export volume commitments on a number of products in 1995, 1997 and 1998, and its budgetary outlay commitments in 1995 for poultry meat, in 1997 for sheep and lamb meat, and cheese and in 1998 for cheese. **Poland** overshot its export volume commitments on sugar in each year over the 1996-98 period, while **Turkey** fully used its export volume and budgetary outlay allotments for a number of products, particularly fruit and vegetable products and eggs. Moreover, in **Turkey** the number of subsidised products has increased over time.

Representativeness of the base period

The 1980s marked the peak of a rising trend in the subsidisation of exports of agricultural products. By that time, a substantial proportion of world trade in agricultural products consisted of products exported with subsidies. Subsidised wheat exports rose sharply during the 1986-89 period, then were maintained at high levels until 1994-95. Subsidised cheese exports increased steadily throughout the 1980s and into the early 1990s. Subsidised exports of both butter and skim milk powder experienced a huge upsurge to peak in the 1987-89 period, after which they declined significantly (although there was a secondary surge for skimmed milk powder in 1992 and 1993).⁸

In the case of the **European Union**, in particular, subsidised exports of butter and skimmed milk powder were large in the base period. Consequently, permitted subsidised exports were larger in the implementation period than actual subsidised exports in the first half of the 1990s. Permitted subsidised levels in the final implementation year are still above the actual average exports in the five years before the implementation period.

Table 4.5. OECD countries overshooting annual export subsidy commitments

	Country	Commodity	Subsidised exports as a share of commitments (%)	
			Volume	Value
1995	Hungary	Corn		282
		Red pepper meal		147
	Switzerland	Cattle for breeding and horses	111	
	Norway	Poultry meat	214	243
1996	European Union	Rice	144	141
		Olive oil	104	
		Beefmeat	110	
		Wine	111	111
	Hungary	Red pepper meal		141
	Poland	Sugar	116	
1997	European Union	Sugar	118	122
		Rice	103	
		Other milk products	102	
		Poultry meat	105	
		Wine	115	
		Norway	Swine meat	106
		Sheep and lamb meat	142	112
		Egg and egg products	117	
		Cheese	102	113
	United States	Skimmed milk powder	104	
	Poland	Sugar	149	
	1998	European Union	Coarse grains	123
Sugar			112	134
Pigmeat			154	155
Eggs			104	
Alcohol				106
		Incorporated products		107
Norway		Cheese	122	117
		Bovine meat	105	
		Sheep and lamb meat	106	
Poland		Sugar	119	
United States		Skim milk powder	154	
		Other milk products	107	
1999		Poland	Milk powder	107	246
	Carcasses of swine		117	

Source: OECD Secretariat calculations based on country notifications to WTO.

Table 4.6. Use of export subsidy budgetary outlay commitments, by country (%)

Country	1995	1996	1997	1998	1999
Australia	0	0	0	2	4
Canada	7	1	0	0	n.a.
Czech Republic	24	27	33	38	36
European Union	42	51	43	58	n.a.
Hungary	25	14	10	15	20
Iceland	21	3	1	0	n.a.
Japan	0	0	0	0	0
Korea	0	0	0	0	0
Mexico	0	0	21	124	n.a.
New-Zealand	0	0	0	0	0
Norway	57	59	94	86	n.a.
Poland	0	36	18	30	42
Switzerland	82	75	74	81	n.a.
Turkey	53	35	76	59	59
United States	2	12	12	18	n.a.
OECD ⁽¹⁾	39	47	41	54	n.a.

Note: 1. Weighted by the value reduction commitments for all product groups in the WTO notifications.

Source: OECD Secretariat calculations based on country notifications to WTO.

Considering the high levels of permitted subsidised exports for butter and to a lesser extent skimmed milk powder under the URAA, particularly in the **European Union**, relative to representative pre-implementation period levels, the representativeness of the base period used in the URAA could be questioned. It could be argued that the provisions of the URAA even allow leeway for an increase in trade distortions, particularly for dairy products.

Moreover, some countries availed themselves of flexibility provisions (i.e. the “front loading” option of the URAA), under which reduction commitments in specified cases could start from the higher levels of 1991-92 rather than the 1986-90 base. Recourse to these provisions allowed higher subsidised exports in all but the final year of the implementation period (**Box IV.1**). Thus, the effectiveness of the export subsidy discipline in reducing trade distortions was less than would have been the case if the initial 1986-1990 base period had been retained. The “front-loading” provision has been used by the **European Union** for wheat, beef and poultry meat, by the **United States**, for other milk products, eggs, and vegetable oils, by **Norway** for beef, cheese, whey powder, fruit and vegetables and by **Switzerland** for incorporated products.⁹

Export subsidy rates

In contrast to tariffication, which requires the per unit (specific) duty or the percentage *ad valorem* duty to be bound, the discipline on export subsidies does not entail an upper limit to the per unit export subsidy. This implies that the volume and value constraints on export subsidies do not bind simultaneously. Consequently, changes in world prices are not fully transmitted to the domestic markets of the exporting countries. As in the case of import protection in the market access provisions, it can be argued that, from an economic standpoint, equal percentage rates of export subsidy are preferable to differential rates because the more relative prices on the domestic market are distorted relative to those on the world market the higher are the overall economic distortions associated with export subsidies.

Export subsidies per unit vary across commodities, countries and over time (**Annex Table III.5**). In order to gauge the resource misallocation induced by export subsidies, export subsidy equivalents were calculated for the first three years of URAA implementation and for the base periods 1986-90 and 1991-92. Export subsidy equivalents were calculated as the ratio of unit export subsidies to world f.o.b. prices, in percentage terms.

As discussed above, the resource misallocation associated with a country's support policies depend not only on the average level of support, but also on the variance in these rates across products within a country. Thus, the more disparate the levels of support, the more some sectors are favoured at the expense of others and the greater the economic distortions likely to be associated with any given level of support. Wide and increasing disparities in support can normally be regarded as indicating a highly distortive support structure that increases the potential for efficiency losses.

A salient feature of **Table 4.7** is that despite the downward trends in the rates of export subsidy, there is a great disparity across commodities and over time within a country. In the **European Union**, for instance, the average 1995-97 export subsidy equivalents range from 15% of world prices for wheat and eggs to 173% for pigmeat.

Export subsidy reduction commitments and policy changes

Despite the fact that the URAA disciplines on agricultural export subsidies are considered to be the most binding, very few countries have changed their policies substantially to conform to their export subsidy commitments. The combination of strong commodity prices, particularly for grains in the first two years of implementation, and the high base levels from which cuts were required, have permitted most countries to accommodate required reductions under their current policies. However, since 1997 the export subsidy commitments are becoming more binding as export subsidy allowances are declining and world commodity prices are weakening. This is necessitating policy changes in some countries.

Table 4.7. Export subsidy rates (%)

Country	Products	1986-90	1991-92	1995	1996	1997	1995-97
European Union	Wheat and wheat flour	104	131	36	15	10	15
	Coarse grains(Barley)	142		49	26	28	32
	Rice	226		191	130	148	145
	Sugar	195		146	151	164	154
	Butter and butteroil	248		102	138	112	118
	Skim milk powder	106		36	40	43	39
	Cheese	86	85	60	38	29	43
	Beef meat	102	106	63	57	49	57
	Pigmeat	111		135	127	378	173
	Poultry meat	44	32	29	16	16	20
Hungary	Eggs	54		20	11	14	15
	Pork	105		25	16	6	13
	Sheep meat	30		11	7	5	8
Norway	Broiler chicken	95		40	16	23	26
	Bovine meat	201	245	143	141	207	166
United States	Swine meat	336		169	125	160	163
	Sheep and lamb meat	300		89	128	98	116
	Egg and egg products	354		354	150	162	200
	Butter	127		81	98	90	89
	Cheese	184	201	149	151	155	152
	Butter and butter oil	136		0	117	30	58
United States	Skim milk powder	114		12	68	53	44
	Cheese	98		28	37	53	39

Notes: The ratio of per unit export subsidy to world prices multiplied by 100. World prices are fob prices from the PSE data base, except for dairy products which come from the AGLINK data base.

World prices for butter, cheese and skim milk powder are North European fob prices.

Per unit export subsidies were calculated as the ratio of subsidised export budgetary outlays to subsidised export volumes. The data on subsidised exports come from the country notifications to WTO.

Source: OECD Secretariat calculations.

In the **European Union** subsequent to the URAA, reform of the CAP has rendered the export subsidy constraints redundant for some products, such as tobacco and rapeseed. However, limits on the **European Union's** export subsidies for a number of agricultural commodities were exceeded in 1996/97, 1997/98 and 1998/99. These excesses were covered by "unused" amounts brought forward from previous years. Moreover, because of extensive use of the roll-over flexibility provision, export subsidy budgetary outlays in the first four years of the implementation were above the final bound levels in 2000/01 for a number of commodities, particularly sugar, pigmeat, other milk products, alcohol and incorporated products. This would tend to suggest that in the prevailing market conditions, the **European Union** may have difficulty meeting its export subsidy commitments.

In fact, for the **European Union** through the end of URAA implementation, the OECD AGLINK model projects a continued reliance on export subsidies. For cereals, beef, cheese and other dairy products the European Union will be at URAA limits in 2000/01. For butter and skim milk powder subsidised exports will also be significant, though not at URAA limits. Domestic support prices will be such that substantial gaps between production and consumption will continue for these commodities, and domestic prices will be above world prices, even given a weak Euro against the US dollar.

One of the reasons for the Agenda 2000 CAP reform agreed in March 1999 was the **European Union's** export subsidy commitment. Agenda 2000, which deepens the 1992 CAP reform, entails reductions in the support prices for cereals, beef and dairy, thereby reducing the associated need for export subsidies. It is doubtful, however, whether the Agenda 2000 CAP reform is sufficient to resolve the problem of exportable surpluses in future years. Even with the Agenda 2000 CAP reform, export subsidies are likely to be required for some products. The OECD AGLINK projections suggest that as a result of this reform, given rising world prices and under the assumption of a continuation of a weak Euro against the US dollar, the European Union will be able to export wheat without export subsidies from 2005 (OECD, 2000b).

The European Union, however, would be at or close to its URAA export limits over the medium term for other products, in particular for coarse grains, beef and dairy.¹⁰ Agenda 2000 does not tackle the issue of reliance on export subsidies for all products, notably sugar. In fact, if world sugar prices continue to be low, there is a possibility that export subsidy reduction commitments might become binding by the end of the implementation period.¹¹

Two forms of export subsidy operated by **Canada** in the base period were subject to reduction commitments: internal transportation subsidies for Western grains conditional on export and producer-funded export subsidies on dairy products. The long-running transportation subsidies through the Western Grains Transportation Act were terminated in 1995.¹² For dairy, in contrast, Canada in 1995 replaced its system based on export subsidies financed by levies on producers with a pricing arrangement for milk. Under this system, milk used in the export of manufactured dairy products is made available to processors at lower prices than milk used domestically. However, subsidies on some exports of butter and skim milk powder were provided in 1995-96 and 1996-97 during the transition period from the previous regime.

Currently, Canada's notifications to the WTO include only those dairy product exports that have been subsidised with funds obtained from producer levies. **New Zealand** and the **United States** have challenged Canada's milk pricing system through the WTO's dispute settlement mechanism and a panel was established in March 1998. The Appellate Body report, released in October 1999, concluded that Canadian measures are inconsistent with the export subsidies provisions of the URAA. Canada's milk pricing system was found not to be in compliance with WTO obligations because exports under this programme exceed URAA quantity commitments.

For the **United States**, the 1996 FAIR Act continued authorisation for export subsidies under the EEP, the main export subsidy programme. Under the EEP, cash bonus payments are made available to exporters of specific commodities such as wheat and wheat flour, barley and barley malt, rice, poultry, eggs and vegetable oils. The FAIR Act limits EEP expenditures to USD 350 million in fiscal year 1996, USD 250 million in 1997, USD 500 million in 1998, USD 550 million in 1999, USD 579 million in 2000, and USD 478 million each in 2001 and 2002. The 1996-99 total value of the EEP is about USD 1.6 billion less than the URAA export subsidy ceilings for 1996-99. In addition, up to USD 100 million annually can be made available for the sale of intermediate-value products to attain the volume of intermediate agricultural products exported by the US during the UR base period years of 1986 through 1990.

However, mainly due to the rise in world prices since the base period of the URAA, and more particularly in the first two years of implementation, the EEP was not used since mid-1995 for wheat, and until FY 1998 for coarse grains. In FY 1998 EEP expenditure was USD 2.1 million for one sale of barley and another of frozen poultry. The support given in response to the decline in prices in 1998 was mostly in the form of direct payments. However, authorised EEP outlays were increased by 10% to USD 550 million in FY 1999.

In contrast, the Dairy Export Incentive Programme (DEIP), which subsidises exports of US dairy products, has continued to be utilised. The FAIR Act made no real change to export provisions for dairy products and extended the DEIP until 2002. Support prices for dairy products will be abolished by the end of 2000. Total expenditure on export subsidies under the DEIP increased substantially from USD 20 million in FY 1996 to USD 140 million in FY 1997 as the programme is operated to ensure the maximum amount of exports that are allowed by the URAA. DEIP expenditure decreased by over 9% to USD 110 million in FY 1998 over FY 1997.

Currently, the **United States'** notifications to WTO do not include export subsidies which are provided through the US Foreign Sales Corporation (FSC) scheme. The **European Union** has challenged the FSC provisions through the WTO's dispute settlement mechanism and a panel was established in July 1998. The appellate Body report, released in February 2000, ruled that the FSC constituted a prohibited subsidy under the Agreement on Subsidies and Countervailing Measures. It also found that

the United States acted inconsistently with its obligations under the URAA by applying export subsidies which threatened to result in circumvention of its export subsidy commitments.

In 1995, **Australia** modified its export subsidy programme on dairy to be more consistent with WTO rules. Under these arrangements, the levy on milk used in the manufacture of dairy products consumed domestically was paid by product manufacturers, and support for manufacturing milk was paid directly to dairy farmers by the Australian Dairy Corporation. The system was not technically an export subsidy in terms of WTO but it provided a similar level of incentive to export, and assisted manufactured dairy products. It was terminated on 30 June 2000.

In 1998, **Switzerland** announced the Agricultural Policy 2002 programme (AP 2002) which sets out the general framework and direction for future agricultural policy reform. AP 2002 entails, *inter alia*, the abolition of the state sanctioned foreign trade monopolies for certain cheeses and butter in 1999. Afterwards, private companies will engage in all dairy product trade. As the reform of dairy policy will not be completed until 2002, it is uncertain whether it will be sufficient to allow it to respect the export subsidy commitments.

Outstanding issues

Officially supported export credits

Agricultural exports are often assisted by officially supported export credits (henceforth export credits). Broadly defined, an export credit arises whenever a foreign buyer is allowed to defer payment on more favourable than actual market terms. Export credits may take one of several forms, including guarantees for loans, subsidised interest rates, or longer terms of repayment or grace periods than the market would offer, and, potentially, freight coverage (OECD, 1999). Export credit guarantees could expand import demand and can alleviate foreign exchange and financial constraints in the importing country.

In the agriculture sector, the use of officially supported export credit programmes, particularly export credit guarantees, is widespread and expanding (OECD, 2000*d*). However, these programmes have come under increasing scrutiny because they might have similar effects on trade as direct export subsidies. They could, for instance, result in cost discounts for buyers, affect prices and quantities of exports, and, by targeting individual countries or regions, influence the direction of trade.

Available data, based on a survey by the Participants to the Export Credit Arrangement, suggest that the use of officially supported export credits for these countries as a whole increased from USD 5.5 billion in 1995 to USD 7.9 billion in 1998. The largest users are the **United States** (averaging 46% of the total), followed by **Australia** (25%) and the **European Union** (16%). The **United States** is also the main user of export credits for terms longer than one year, which are considered to be potentially more trade distorting. In terms of commodities, cereals account for over a third of export credits.

In the same way as agricultural export subsidies are excluded from the GATT Agreement on Subsidies and Countervailing Measures, agricultural export credit programmes are excluded from the international agreement that governs officially supported export credits for manufactured goods. In the Uruguay Round the issue of export credits in agriculture was raised because of concerns that these schemes may be used to subsidise exports if terms of financing, including fees reduce total costs, but it was not possible to agree on constraints. As part of the URAA, an understanding was reached that governments should "work towards the development of internationally agreed disciplines to govern the provision of export credits, export credit guarantees or insurance programmes". Uruguay Round negotiators agreed to continue talks in the OECD and an Arrangement which would place limits on export credit conditions and terms and the length of credit extension is being negotiated. As of March 2001, no arrangement had been concluded.

Negotiations in the OECD to establish disciplines on agricultural export credit guarantees are continuing, but differences between the negotiating parties remain. In the Communiqué from the OECD Council Meeting at Ministerial Level held on 26-27 June 2000, OECD Ministers:

"...strongly regretted the failure of the Participants to the Export Credit Arrangement to reach agreement on an Understanding covering agriculture as mandated in the Uruguay Round. They called, for the negotiations to be resumed and successfully concluded by end of July if possible and by the end of 2000 at the latest."

The contentious issues revolve around the degree to which export credits may or may not subsidise exports. This depends on concessionality of the credit, which depends in turn upon the length, the level of guarantee, fees and allowable interest rates. Given the still unresolved issue of agricultural commodity export credits and the potential for market distortions from these policies, they are included in the Secretariat's ongoing work on export competition issues (OECD, 2000*d*). One of the objectives of this work is to assess the extent to which export credits distort trade.

Export taxes and export restrictions

The issues of taxes and export restrictions on agricultural exports were not given prominence in the Uruguay Round negotiations, perhaps because it was not considered likely that they would be used during the implementation period of the agreement.¹³ However, following an upsurge in world prices in 1995-96, the **European Union** used export taxes for wheat and barley to prevent domestic prices from rising along with world market prices. Also, **Turkey** imposed export taxes on hazelnuts. Temporary quantitative restrictions on a range of cereals were introduced by the **Czech Republic** (1996, 1997), by **Hungary** (1996 and 2000) and **Poland** (1996).

Restraints on exports and export taxes are as trade distorting as restraints on imports and have an immediate and harmful impact on developing country food importers. In periods of tight supply the effect of export restrictions is to exacerbate the shortage.

Export taxes are imposed for a variety of reasons. They are often used as a government revenue-raising device or as a means to provide protection to a domestic processing industry. They are also used as a measure associated with domestic price stabilisation and to conserve exhaustible natural resources. They may also be used by countries which account for a significant share of world trade in the product concerned as a means of raising the price of exports and improving their terms of trade.

Taxes on exports in times of high world prices induce trade distortions as much as export subsidies that operate when prices are weak. Although export taxes have the opposite effect of export subsidies on domestic prices, output, exports and world prices, they insulate the domestic market from international price changes and undermine importers' confidence that adequate supplies will always be available from exporting countries.

Export taxes on a domestically produced input of a processed product can have the effect of encouraging a domestic processing sector as such taxes can have the same effect as an export subsidy on the processed product. Export taxes can also have spillover effects in other industries as, for example, they can lower the domestic price of inputs relative to what they would otherwise be, thereby providing indirect support to other agro-food sectors. Export taxes, like quantitative restrictions, have an immediate and harmful impact on developing country food importers.

Furthermore, export taxes have the same effects on relative prices as tariffs.¹⁴ This implies that if a reduction in tariff rates, for example through tariffication, were accompanied by an equivalent increase in export taxes, relative prices of traded goods and market access would remain unaltered.

Implementation issues

Rolled-over unused export subsidies

The URAA does not provide strict limits on both quantities and values of subsidised exports for individual years. This provides countries with flexibility which enables them to carry-over unused export subsidies and to cumulate them with their annual commitments in subsequent years (Article 9:2(*b*)). This

implies that subsidised exports could exceed annual ceiling commitments during the second to the fifth year of the implementation period (**Box IV.1**). However, the total cumulative amounts of budgetary outlays and quantities benefiting from export subsidies over the implementation period as a whole must not exceed that which would have resulted from full compliance with the relevant annual commitment levels. Accumulating unutilised export subsidies for use in later years undermines the effectiveness of the export subsidy discipline in those years.

However, the above interpretation of the flexibility provisions on export subsidies in the agreement has been challenged by a number of WTO Member countries. It has been argued, for example, that the flexibility provisions are meant only to deal with situations where a country exceeds its limits and has to pay back rather than as an opportunity for countries to cumulate unused subsidies. It should be noted that as of the year 2000, the second last year of the implementation period, transfers between years are no longer permitted.

As shown in **Annex Table III.6**, the **European Union**, **Norway**, **Poland** and the **United States** have carried over unused subsidies. The **European Union** rolled-over unused export subsidies from 1995 for rice, olive oil, beef meat and wine to make up for its overrun in 1996. In the marketing year 1997/98, the European Union carried-over unused export subsidies for sugar, rice, other milk products, poultry meat and wine and for coarse grains, sugar, pigmeat, eggs, alcohol and incorporated products in 1998. **Norway** has carried-over unused subsidies in 1998 for cheese, beef and sheepmeat, in 1997 for swine meat, sheep and lamb meat, egg and egg products and cheese, and for poultry in 1995. **Poland** has resorted to rolled-over unused subsidies for sugar in three consecutive years from 1996 to 1998 and the **United States** for skimmed milk powder in 1997 and 1998, and for other milk products in 1998.

Other exempt policies

The URAA defined several types of export subsidies that are subject to reduction commitments (**Box IV.1**). It also sets out that export subsidies which are not subject to reduction commitments must not circumvent or threaten to circumvent export subsidy commitments. Notwithstanding efforts to define export subsidies as precisely as possible in the URAA, there are policies that can perpetuate market distortions and that may not be sufficiently clearly disciplined. Examples include the case of price discrimination with revenue pooling arrangements, such as those that might be practised by some state trading exporters and through marketing orders. Moreover, not all export-marketing measures are included in the URAA definition of export subsidy. International food aid and widely available export market promotion and advisory services are exempt from reduction commitments. International food aid shipments, for example, are sometimes tied to commercial exports of agricultural products to recipient countries. Such arrangements could have effects similar to taxpayer financed export subsidies which are not exempted from the URAA export subsidy provisions.¹⁵

More work is required to identify the export subsidy elements of all these measures. International rules need to be strengthened to ensure that if such measures are deemed to distort export competition, they will be counted against the reduction commitments for the country concerned.

Component subsidies

Another contentious issue that has arisen during the implementation period is the use of component subsidies. In particular, the **European Union** has granted export subsidies on processed cheese by utilising subsidies on component products. That is, the European Union has exported processed cheese using subsidies drawn against the URAA export subsidy commitments for its constituent component skimmed milk powder and butter rather than for cheese, for which the European Union has exhausted the ceiling for subsidised exports.¹⁶ This leads the European Union to subsidise more cheese than was agreed upon in the URAA. The transferring of subsidies from one product category to another weakens the URAA's export subsidy commitments, which, in turn, depend on specific commodity definitions.

Traditionally, under the European Union's inward processing arrangements, third country products were imported duty-free, processed in the European Union, and then re-exported without subsidy. Products originating from inward processing were not considered as exports of the country concerned and neither finished product nor components of the finished product benefited from an export subsidy. The European Union claims that cheese exports under inward processing arrangements should not be counted against the European Union's export subsidy commitments on cheese since the cheese was partly manufactured with ingredients originating in third countries. However, a number of countries, including **Australia, Canada, New Zealand** and the **United States** allege that the European Union inward processing arrangements for cheese constitute circumvention of the export subsidy disciplines of the URAA. Intensive consultations have taken place with interested countries and the issue has been analysed in depth. No further action has been taken by these countries to date.

Data issues

As in the case of the market access and domestic support notifications, a number of issues have also arisen concerning export subsidy notifications which hinder transparency, consistency and effectiveness of commitments. The methodology used in the UR negotiations resulted in export subsidy commitments being taken on the basis of product groups which aggregated a number of products. However, the degree of aggregation differs. Examples of broad product groups include coarse grains, other milk products, and fruit and vegetables. Moreover, some countries, like **Switzerland**, lump together all dairy products which are eligible to receive export subsidies.

There is lack of consistency in reporting periods. The notification tables for export subsidies require countries to specify the reporting period (calendar year, marketing year, etc.). In some cases, different reporting periods are used for a single product group, within and between notification tables. For example, there are notifications where quantity and outlay commitments for the same product group were reported for different periods.¹⁷ In other cases, total exports for a product group were notified for a different period than that used to notify budgetary outlay and quantity commitments for the same product group.

There is also lack of consistency in measurement units. A number of notifications have employed differing units of measurement in their export subsidy notifications. For example, a notification used carcass equivalent weight and product weight measurement units for reporting subsidised and actual volumes of beef exports, respectively.

Further, some notifications (e.g. the **European Union**) have reported subsidised exports on the basis of approval or awards given to exporters rather than actual export subsidies. A major drawback with this practice is that the actual level of export subsidies used in a reporting period cannot be determined, as award levels could be different from actual levels. This could happen if awarded entitlements are not utilised due to changes in market conditions or previously unused entitlements are reallocated and used but the reallocated award is not notified as belonging to the later period.

Notes

1. Only 25 of the 140 WTO Members (as of December 2000) have agricultural export subsidy reduction commitments as a result of the URAA. Of these 25 countries, only half used export subsidies for more than half a dozen product groups.
2. Twelve non-OECD countries have export subsidy reduction commitments, of which the more important include **Brazil** (vegetable oils, beef and veal, and poultry) and **Indonesia** (rice).
3. The **European Union** is also the largest user of export subsidies of the 25 countries that have export subsidy commitments in their WTO schedules.
4. This is permitted to developing countries during the implementation period under Article 9.4 of the URAA. The outlay on subsidised exports on fruits and flowers was won 1.18 billion in 1995 and 2.40 billion in 1996.
5. Throughout the report, export subsidies in excess of the corresponding commitment levels refers to the cumulation of unused export subsidies [Art. 9(b)].
6. The **European Union**, for example, reduced its cereal prices by around 30% between 1992 and 1995, and this allowed export subsidies per tonne to decline by more than double that percentage.
7. On 22 October 1997, **Hungary** was granted a waiver from its export subsidy commitments and set revised export subsidy commitments. Hungary argued that its base period export subsidies were miscalculated, mainly due to trade conducted in non-convertible currencies. Hungary argued that its base outlay level should have been set at USD 1 billion instead of USD 423 million. Hungary claimed that its export subsidy schedule did not permit subsidies to a level that would maintain Hungarian market share of its agricultural exports and requested that revised commitments be put in place until 1 January 2002. Hungary is required to submit annual reports on the waiver's anniversary date that explain how it has applied the waiver. The annual notice is supplementary to Hungary's export subsidy notification.
8. The difference in the levels of subsidised exports among commodities over time mainly reflects the relative contributions of the **European Union** and the **United States** to subsidised exports for the various commodities. The European Union, for example, dominates subsidised cheese exports, while both the European Union and the United States contributed significantly to the level of subsidised wheat, skimmed milk powder and butter exports over the 1986-94 period.
9. In the **European Union** front loading has added 8.3% to the total volume of allowable subsidised exports of wheat during the implementation period, 6.2% for beef and 11.7% for poultry meat. In the **United States**, front loading has added 99% of allowable subsidised exports of other milk products, 72% to rice, 59% to eggs, and 57% to vegetable oils (Tangermann, 1998).
10. However, the European Commission's own assumption in Agenda 2000 was that coarse grains (barley) would still require export refunds (EC, 1998). Also for beef, butter and skimmed milk powder, the EC is forecasting the new support prices to be higher than world prices.
11. The **European Union** notifications for sugar exclude C sugar as well as exports of sugar of ACP and Indian origin. This explains the discrepancy between total sugar exports (4 536 thousand tonnes) and subsidised exports (1 200.3 thousand tonnes) declared in 1996/97.
12. This reform had long been debated domestically, but pressure from the Uruguay Round limits on export subsidies was critical in implementing the reform.
13. GATT 1994 Article XI: 1 prohibits export prohibitions or restrictions other than duties, taxes or other charges. However, as a specific exception from this general prohibition. Article XI: 2(a) permits quantitative export restrictions or prohibitions to be "temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party". Article 12 of the URAA on disciplines on export prohibitions and restrictions states, *inter alia*, that the Member instituting such measures shall give due

consideration to the effects on importing Members' food security and that it shall provide information on their nature and duration.

14. This argument is known as Lerner's symmetry theorem, which states that under the assumption of a zero balance of trade, an *ad valorem* export tax has the same effects as an *ad valorem* tariff at the same rate on the importable.
15. The URAA has placed limits on taxpayer and producer financed export subsidies but not much attention was paid on "consumer financed" export subsidies. Consumer financed subsidies increase supply and decrease demand like a taxpayer financed export subsidy except that the consumer financed export subsidy distorts trade more for a given domestic price (Schluep and de Gorter, 1998).
16. The **European Union** exported about 3 000 metric tons of processed cheese using this scheme in 1995/96. Processed cheese exports treated in this way increased to 17 000 tonnes in 1996/97 and to an estimated 65 000-70 000 tonnes in 1997/98.
17. The **United States** quantity commitments for poultry meat are for the period 1 July to 31 June, while budgetary outlay commitments are on a fiscal year basis beginning on 1 October each year. This implies that it would be possible not to have concordance between outlays and quantities in one year. This was the case in 1997, where the outlays were not associated with corresponding quantities as EEP poultry awards were made after 30 June 1998.

Part V.

OVERALL APPRAISAL OF RECENT TRADE DEVELOPMENTS

Background

Although it is extremely difficult to identify the combined effects of the three pillars and separate them from the effects of other factors, the trade liberalisation impacts resulting from the URAA should be to expand market access and to reduce trade, consumption and production distortions. The ultimate effects should be an increase in world import demand for agricultural products, and higher and more stable world market prices than otherwise would be the case.

Whether the URAA is successful in liberalising trade in agricultural products depends on the expectations arising from this agreement. There are some clear positive effects that have emanated from the URAA. For example, the rules in the URAA are substantially tighter and more transparent than those under the previous GATT as applied to agriculture. Market access to importing countries has increased for markets that were closed, and export subsidies have been capped and are below levels that applied before the agreement was concluded. Further, there are elements in the URAA which encourage governments to re-orient their arrangements for delivering agricultural support away from highly price and production distorting policies. In this way, the effects of support in distorting trade can be reduced.

The purpose of this Part is to provide an appraisal of the evolution of a number of trade openness indicators, as concerns both immediate trade implications and the more general effects of the URAA. The aim is to provide some empirical evidence on external openness to agricultural trade by comparing trade openness indicators for periods prior to and following the start of the implementation of the URAA. This requires the choice of appropriate benchmarks as well as trade performance indicators. Both of these choices involve practical problems; the results should be treated with caution, and only tentative conclusions can be drawn.

There are considerable difficulties associated with conducting an evaluation of the effects of trade liberalisation and the task of quantifying and attributing the impacts of the URAA on agricultural trade flows and world market conditions. A comprehensive assessment of the implications of the URAA would require information and analysis which are beyond the scope of this study. It would require, *inter alia*, the comparison of a number of trade-performance indicators during and after the implementation period with the counterfactual situation of what would have happened in the absence of a successful conclusion of the URAA. Such an approach is cumbersome, requiring the construction of sophisticated econometric models. Moreover, the complexity of the URAA package, the linkages between the policy instruments that are subject to reform and the options for their implementation by countries make quantification difficult, irrespective of the analytical tools used.

The trade enhancing effects of liberalisation are unlikely to be instantaneous and real trade growth will respond to liberalisation with a time lag, which in itself will depend on a number of factors, including the nature of the liberalisation, the extent of pre-existing distortions and the flexibility of markets. Hence, it is too early to gauge the full impact of the URAA. An additional issue that has to be confronted is the difficulty of disentangling the effects of trade reforms from those of other policy shifts and exogenous factors, such as technological change and the business cycle. For example, some pre-existing policies are unlikely to be sustainable and would change irrespective of the URAA.

The next question concerns the choice of the time period before and after the URAA. Calculations were initially made either since 1990 or, in some instances, 1986, but to limit the effects of year-to-year fluctuations more emphasis is given to results based on a three-year timespan.

Concerning the choice of trade performance indicators, it should be emphasised that although the concept of trade openness is simple in theory, there is no widely accepted method for measuring it. For the purpose of this work, the following commonly used indicators were calculated: trade flows as measured by export and import volumes, trade openness calculated as the average share of agricultural imports plus exports in agricultural GDP; import penetration ratios defined as the ratio of agricultural imports to consumption, trade shares, and PSEs and nominal protection coefficients as measures of support and of price distortions, correspondingly. Moreover, the evolution of the levels and variability of world commodity prices is discussed.

Evidence of agricultural trade openness

Evolution of agricultural support and protection levels

For the OECD as a whole, the total value of agricultural support as measured by the Producer Support Estimates (PSE) has changed little in the last thirteen years, averaging USD 246 billion in 1986-88, at the start of the Uruguay Round, rising to USD 283 billion in 1990-94 and declining to USD 270 billion in 1995-99. Relative to the value of gross farm receipts, the %PSE has exhibited a slow downward trend since 1986-88; it was estimated at 35% in 1995-99, down from 39% in 1990-94 and 40% in the period 1986-88. However, by 1999 it had returned to the same level – 40% – as in the mid-80s (OECD, 2000a). Concealed behind these averages are wide national differences in rates of support, ranging from less than 10% in **Australia** and **New Zealand** to 65% or higher in **Iceland**, **Japan**, **Korea**, **Norway**, and **Switzerland**. In 1999, total farm gross receipts were on average across the OECD 66% higher than they would have been had all producers sold their produce at world market prices and received no budgetary support.

Table 5.1 and **Annex Table IV.1** display the evolution of nominal protection coefficients (NPCs) by commodity and by country, calculated as the price gap between domestic and world prices expressed as a percentage of world prices, for the standard PSE commodities since 1986. These results demonstrate that although nominal protection has decreased in the OECD area as a whole over the last 13 years, domestic prices are still much higher than world prices. On average the NPC declined for all commodities between the 1995-99 and 1990-94 periods, with an average decline of 21 percentage points for the OECD as a whole. The largest declines were calculated for maize (85%), sheepmeat (77%), other grains (67%) and wheat (65%).

Table 5.1. **Nominal protection coefficients (NPC) for standard PSE commodities (%)**

Product	Average			Standard Deviation		
	1986-90	1990-94	1995-99	1986-90	1990-94	1995-99
Wheat	74	64	22	29	19	12
Maize	30	29	5	13	10	3
Other grains	104	100	31	42	7	14
Oilseeds	15	14	9	4	5	3
Refined sugar	129	102	100	56	26	42
Rice	429	446	411	78	85	102
Milk	180	162	120	66	16	22
Beef and veal	55	48	39	17	16	10
Pigmeat	29	30	22	8	7	9
Sheepmeat	125	71	16	25	36	14
Poultrymeat	31	25	13	8	4	4
Eggs	30	25	20	6	5	5
All	107	99	78	27	4	18

Source: OECD PSE Database.

Notwithstanding these gradual downward trends, the level of the nominal protection coefficients remains very high for a number of agricultural products. This is particularly the case for rice, sugar and milk which over the 1995-99 implementation period exhibit NPCs higher than 100%. Moreover, for all commodities, with the exception of oilseeds, poultrymeat and sheepmeat, the NPC increased between 1998-99 and 1995-97 (**Annex Table IV.1**). In fact, the 1998-99 NPC for sugar, and for beef and veal are higher than the corresponding average NPCs for the three years preceding the URAA (1992-94). Domestic prices are, on average, almost 80% higher than world prices over the 1995-99 period across the standard PSE commodities.

These results demonstrate that one-year before the completion of the URAA implementation, agricultural protection rates in OECD countries are still high. Moreover, dispersion of protection rates among commodities is higher in some cases than it was before the Uruguay Round. Notwithstanding the gradual shift in the composition of support – from measures that support higher farm prices financed by consumers to payments financed by taxpayers – market price support and output-related payments still dominate. In 1999, around two-thirds of support to producers was provided via market price support, whilst budgetary payments based on output provided another 6%. Together, these two forms of support, which are among the most production- and trade distorting, accounted for almost three-quarters of producer support. Thus, without underrating the achievement of the URAA in bringing agriculture into the mainstream of multilateral trading rules and securing some reform, limited progress has been made over the past five years in reducing agricultural protection and market insulation.

Trade openness

Against the background of a general decline in direct trade restrictions, there has been an increase in market openness for world merchandise trade over the last decade. As shown in **Table 5.2**, world manufacture and agricultural trade increased over the period 1990-98, although agricultural trade expanded less rapidly. In the first year of the implementation of the URAA, world agriculture trade growth was strong, but actually declined in 1996 and 1997 as compared to the previous year. Preliminary data suggest that agricultural trade may have rebounded in 1998 and 1999.

Table 5.2. **World and OECD merchandise trade**
(annual percentage changes)

	Average		1995	1996	1997	1998
	1990-94	1995-98				
World Merchandise Trade ^(a)	5.5	7.8	9.1	6.6	9.9	5.4
<i>of which:</i>						
Agriculture ^(a)	5.0	5.9 ^(b)	24.9	-5.5	-1.5	n.a.
Manufactures trade ^(a)	6.1	8.7	10.1	7.2	11.0	6.3
OECD agricultural exports	5.2	4.6	-1.7	11.1	14.5	-5.4
<i>of which:</i>						
OECD food exports	7.9	4.3	-6.8	13.7	16.1	-5.9
OECD raw material exports	-3.5	7.3	22.5	1.6	8.3	-3.0
OECD agricultural imports	4.4	11.0	34.5	10.8	9.2	-10.7
<i>of which:</i>						
OECD food imports	0.4	15.9	55.6	20.8	-0.4	-12.3
OECD raw material imports	7.7	8.8	24.2	4.7	15.9	-9.7
OECD manufacture exports	9.2	8.9	8.5	11.0	17.6	-1.8
OECD manufacture imports	11.2	18.8	26.6	28.9	23.2	-3.4

Agricultural raw materials comprise SITC Rev 1, section 2 (crude materials except fuels) excluding divisions 22.27 (crude fertilisers and minerals excluding coal, petroleum and precious stones) and metalliferous ores and scrap. Food comprises the commodities in SITC Rev 1, sections 0 (food and live animals), 1 (beverages and tobacco) and 4 (animal and vegetable oils and fats) and ISIC division 22 (oilseeds, oil nuts and oil kernels).

Notes: (a) Growth rates of the arithmetic average of world import volumes and world exports volumes.
(b) 1995-97.

Source: OECD; World Development Indicators, 1999, WDI CD-ROM.

The growth of both manufacture and agricultural exports from OECD countries decelerated during the 1995-98 period as compared to the first half of the 1990s. The sharp slowdown, which began in 1997 and continued in 1998, was more severe in the agricultural sector due to the financial turmoil in Asia, Latin America and Russia which strongly affected world agricultural markets. Moreover, OECD imports for manufactures and agricultural products actually declined in 1998 as compared to 1997.

The evolution of trade openness, as measured by the average share of agricultural exports and imports as a percentage of agricultural GDP, has tended to increase, but to different degrees across countries (**Annex Figure V.1**). Since 1986, agricultural trade openness has increased in the **European Union, Norway, Switzerland** and especially in **Canada**. In **Japan** and the **United States**, it has been quite stable, although increasing in the post-URAA period. These results need to be interpreted with care. It should be noted, in particular, that the indicator is influenced by the magnitude of the economy with an inverse relationship between the size of the domestic economy and the level of trade openness.

Other indicators of market openness, such the import penetration rates, provide additional information (**Table 5.3** and **Annex Table IV.2**). These indicators also show wide variation across countries and commodities. Overall, the import penetration rate was stable or increased for many commodities, although for refined sugar, vegetable oils and whole milk powder it declined. In a number of cases the import penetration ratio declined during the URAA implementation period.

In principle, the URAA should have important implications for international commodity markets and countries' trade shares. As the level of export subsidies and the share of exports receiving subsidies decline during the implementation period, countries with competitive advantage should gain a rising proportion of agricultural trade. Thus, it is expected that as the implementation of URAA proceeds there will be changes in agricultural trade shares among OECD countries. Comparison of country shares in the value of OECD agricultural trade suggests that the **United States'** and **Canada's** export and import shares in the post-URAA period increased as compared to the pre-URAA 1990-94 period, while the export and import shares for the **European Union** decreased (**Annex Table IV.3**). **Australia** and **New Zealand's** shares in OECD agricultural exports decreased, while **Mexico's** share increased. **Korea** increased its import share, while **Japan's** import share declined.

Table 5.3. **Import penetration rates for agricultural commodities in OECD area as a whole⁽¹⁾ (%)**

Commodity ⁽²⁾	1990-94	1995-99	1995	1996	1997	1998	1999
Wheat	10	11	11	12	12	12	11
Coarse grains	11	11	12	11	10	10	10
Rice	14	17	16	17	18	18	18
Sugar refined	25	24	27	26	23	22	21
Oilseeds	31	32	33	34	32	32	32
Oilseed meals	28	30	30	27	29	31	32
Vegetable oils	23	22	23	22	23	21	22
Butter ⁽³⁾	5	5	4	5	5	6	6
Cheese ⁽³⁾	5	5	5	5	5	5	5
Skim milk powder ⁽³⁾	12	13	13	14	15	13	12
Wholemilk powder ⁽³⁾	9	6	5	6	7	7	7
Beef and veal ⁽⁴⁾	14	14	14	14	14	14	14
Pigmeat ⁽⁴⁾	4	5	5	5	5	5	5
Poultrymeat ⁽⁵⁾	3	4	4	4	4	4	5
Sheepmeat ⁽⁴⁾	17	18	18	18	18	18	18

Notes:

(1) Import penetration is defined as the ratio of agricultural imports to consumption in volume terms. A low penetration rate does not necessarily imply import barriers. It may reflect productivity improvement. (2) Net of intra-EU trade. (3) Product weight; (4) Carcass weight; (5) Ready-to-cook weight.

Source: OECD, AGLINK Database.

World prices

Agricultural market price support policies tend to increase domestic production and contract domestic consumption. They would therefore tend to reduce import demand or increase exportable supplies, thereby

exerting downward pressure on world commodity prices. In contrast, trade liberalisation, which reduces domestic production and consumption distortions, should exert upward pressure on world prices.

Moreover, traditional trade theory suggests that trade liberalisation in commodity markets that are characterised by unstable production and demand could lower the degree of international price instability. This is because agricultural support that insulates domestic prices against world price variations prevents producers and consumers from responding to world market signals. Government support policies which buffer domestic markets from variations in international supply and demand therefore tend to destabilise world markets.

By reducing market insulation and increasing price transmission, trade liberalisation would spread the necessary adjustments to changing supply and demand conditions more widely, and thereby reduce the variability of market prices for internationally traded products. Studies by OECD and others indicate that the removal of trade-distorting measures by developed and developing countries would significantly reduce price variability in world markets for agricultural commodities.

In principle, the URAA is also likely to result in more world commodity price stability as it contains elements which have direct price-stabilising effects. Tariffication and the constraints on export subsidies, for example, make it more difficult for governments to shield domestic markets against international price fluctuations. Nevertheless, such responsiveness to world market conditions would by no means be complete. The high levels of initial tariffs resulting from tariffication suggest that part of them may be redundant, thereby continuing to impede full transmission of international price signals to domestic markets.

As shown in **Table 5.4**, world commodity prices have been volatile during the 1995-2000 period. Many commodity prices rose in the first two years of the URAA implementation to near-record levels, then fell to near-historic lows in the last two years of the URAA implementation period. The price rise for some products, particularly cereals and dairy, during the early years of URAA implementation are attributed mainly to depletion of stocks in major exporting countries, in part the result of the gradual reduction in government intervention in these markets. For most other commodities, developments from 1995-98 had to do more with factors such as weather, the phase of the commodity cycle and changing consumer tastes. However, the later weakness in many agricultural prices reflects primarily the financial crises in some non-OECD member countries.

The medium term projections by OECD forecast that agricultural markets will recover gradually through 2005 (OECD, 2000*b*). However, the recovery will be modest and although nominal prices of most major commodities are projected to increase over the 2000-05 period, in real terms they will continue to follow their long-run downward trend. Average world prices for wheat, oilseeds, sugar, beef and pigmeat are projected to be lower in the post-URAA period than in the 1990-94 period; for dairy products, and poultry they are projected to be higher and for rice unchanged. Commodity price variability is projected to be lower over the 2001-2005 period than during the URAA implementation period, and for some commodities, such as rice, beef and pigmeat, it is projected to be lower than the 1990-94 period. However, it should be emphasised that although trends in world prices are influenced by changes in policies as a result of the URAA, robust economic growth in non-OECD economies is the principal stimulus to the recovery in world market prices.

Table 5.4. World commodity prices, 1986-2005(%)

	1986-89	1990-94	1995-2000	2001-05	1990-94	1995-2000	2001-05
	Mean				Coefficient of Variation (%)		
Wheat ⁽¹⁾	141	141	146	137	9	28	9
Maize ⁽²⁾	98	106	112	109	6	27	7
Rice ⁽³⁾	262	282	297	282	8	16	5
Oilseeds ⁽⁴⁾	250	250	248	217	6	19	11
Raw Sugar ⁽⁵⁾	10	11	10	9	18	30	17
Beef ⁽⁶⁾	241	265	234	253	5	5	2
Pigmeat ⁽⁷⁾	147	143	132	120	13	24	3
Poultry ⁽⁸⁾	121	119	131	133	3	4	4
Butter ⁽⁹⁾	130	140	181	168	4	16	7
SMP ⁽¹⁰⁾	127	153	168	166	9	20	9
WMP ⁽¹¹⁾	145	160	178	176	7	14	9
Cheese ⁽¹²⁾	145	185	200	206	8	11	7

Notes:

1. No.2 hard red winter wheat, ordinary protein, USA f.o.b. Gulf Ports (June/May), USD/t.
2. No.2 yellow corn, USA f.o.b. Gulf Ports (September/August), USD/t.
3. Rice Milled, 100%, grade b, Nominal Price Quote, NPO, f.o.b. Bangkok (August/July), USD/t.
4. Weighted average oilseed price, Europe (soybeans, rapeseed, sunflower), USD/t.
5. Raw sugar, New York No 11, spot price, USDc/lb.
6. Choice steers, 1100-1300 lb lw, Nebraska - lw to dw conversion factor 0.63, USD/100Kg dw
7. Barrows and gilts, No. 1-3, 230-250 lb lw, Iowa/South Minnesota - lw to dw conversion factor 0.72, USD/100kg dw.
8. Wholesale weighted average broiler price U.S. 12 cities, USD/100 kg rtc.
9. F.o.b. export price, butter, 82% butterfat, northern Europe, USD/100 kg.
10. F.o.b. export price, nonfat dry milk, extra grade, northern Europe, USD/100 kg.
11. F.o.b. export price, WMP 26% butterfat, northern Europe, USD/100 kg.
12. F.o.b. export price, cheddar cheese, 40 lb blocks, northern Europe, USD/100 kg.

Source: OECD AGLINK Database.

Notes

1. In the literature, two types of measures of openness (trade barriers) have been used: incidence and outcome-based measures (Harrison, 1996; Pritchett 1996; Baldwin, 1989). Each of these has their weaknesses and strengths. Incidence-based measures are direct indicators of trade policy, such as the level or dispersion of tariffs discussed in Part II. Although these indicators are good proxies for inferring the trade policy of a country, they still have two shortcomings: first, they are imperfect because they cannot capture other types of intervention such as non-tariff barriers; second, consistent data on tariffs are not available for many countries and for a sufficient number of years. Outcome-based measures are widely used because they implicitly cover all the sources of distortion and are based on data which are more readily available. Outcome measures can be either price based, such as rates of protection based on price comparison or trade flow based. The most common of these measures is the trade openness of a country measured.

Part VI.

CONCLUDING REMARKS

It is generally agreed that the URAA is a turning point in the reform of the agricultural trade system. However, immediate trade impacts directly attributable to its implementation are difficult to distinguish from impacts due to other events. Nonetheless, the empirical evidence presented in this study indicates that the immediate quantitative effects on trade and protection levels have been moderate.

Overall, reductions in support and protection were limited largely because of weaknesses of many of the specific features of the URAA. Base period levels from which the reductions in barriers to market access, domestic support and export subsidies were negotiated were historically high in most countries. High base levels translate into effective reductions which are smaller than would be the case if more representative base periods were used. In addition, in some countries reforms undertaken in anticipation of the outcome of the negotiations or because of domestic economic considerations were sufficient to fulfil or partially fulfil commitments in some areas of the URAA. Further, some features of the URAA have hindered transparency and predictability, and weakened its potential effectiveness as a catalyst for reform of agricultural policy in the direction of improved market orientation and reduced assistance.

On market access, although tariffication appeared to be a significant step, the process of "tariffication" has produced a number of tariffs which were bound well above applied rates. In contrast to manufacturing tariffs, many of which are now of the order of 5-10%, applied tariffs on agricultural products are, on average, above 40%, with tariff peaks of over 500%. In many cases, the gap between in-quota and over-quota tariffs is very large and as the quota often represents a high proportion of imports, over-quota tariffs are virtually prohibitive. In addition, the absence of a weighting system in reducing tariffs has weakened the impact.

The discipline on domestic support commitments, although also deemed to be a major achievement, proved to be the least binding in most OECD countries and required only relatively minor modifications to domestic support policies to bring them into conformity with the Agreement. Hence, its direct quantitative effect on agricultural trade and markets has been limited. This is partly due to the aggregate nature of the domestic support discipline and partly due to the exclusion from the domestic support reduction commitments of some forms of support that are not trade and production neutral.

The discipline on export subsidies has had the most significant immediate quantitative impact on agricultural trade. The total amount of subsidised exports has been curtailed and the number of products which were actually subsidised during the implementation period was much smaller than the number permitted to receive subsidies under the URAA. However, export subsidies are allowed to continue and a number of policies with the potential to affect export competition were excluded from the discipline.

Nevertheless, a framework for addressing barriers and distortions to trade was developed and the URAA did yield definite improvements to the trading system for agricultural products. In all three major policy domains, i.e. border protection, export subsidies, and domestic support, new and operationally effective rules have been established and quantitative constraints have been agreed. Bound tariffs have replaced non-tariff import measures, export subsidies have been capped and domestic programmes have been codified on the basis of their potential to distort trade. In addition, these measures have been scheduled for phased reductions between 1995 and 2000 (or up to 2004 in the case of LDCs). The URAA,

primarily through the domestic support discipline, has provided an overall framework for a process of re-instrumentation of agricultural support toward less market distorting policies. Importantly, the URAA has also provided the basis for further negotiations.

Article 20 of the URAA foreshadowed a continuation of agricultural trade negotiations at the WTO in the following terms:

“Recognising that the long term objective of substantial progressive reductions in support and protection resulting in fundamental reform is an ongoing process, Members agree that negotiations for continuing the process will be initiated one year before the end of the implementation period, taking into account:

- the experience to that date from implementing the reduction commitments;
- the effects of the reduction commitments on world trade in agriculture;
- non-trade concerns, special and differential treatment to developing country Members, and the objective to establish a fair and market-oriented agricultural trading system, and the other objectives and concerns mentioned in the preamble to this (i.e. the URAA) Agreement;
- what further commitments are necessary to achieve the above mentioned long-term objectives.”

The on-going WTO negotiations on agriculture, commenced in March 2000, provide an important opportunity for furthering the process of agricultural reform and trade liberalisation. The major challenge facing WTO members is to build upon the URAA's foundation to further reduce trade distortions, while allowing governments to address non-trade concerns in a non-or minimally trade-distorting manner. Reform of all measures that distort agricultural trade through the strengthening of disciplines already established under the URAA and re-examination of those features of the URAA which have been identified as weaknesses, together with agreement on emerging trade issues, will reduce trade distortions and foster growth. The foregoing analysis has shown that there is scope to do this, in respect of each of the three pillars.

On market access, negotiations should be more straightforward than in the past as tariffication has already made the level of border protection more transparent. A major question for the current round is what process could be adopted to reduce agricultural tariffs which remain in many cases at a very high level. Related questions concern dispersion of tariff rates and the weighting system to be used for further tariff reductions. Several techniques could be used, each having specific economic features.

Tariff quotas have several negative features, including legitimisation of STEs, generation of quota rents, increasing the scope for discrimination between countries, and they are more trade distorting than tariffs. If elimination of tariff quotas is not feasible market access can be expanded by reducing their restrictiveness by either increasing import quotas, reducing over-quota tariffs, eliminating in-quota tariffs, or a combination of the three.

In this case, more efficient methods of quota allocation could also facilitate agricultural trade. During the implementation period, economic inefficiencies have resulted from the administrative methods adopted to allocate the rights to import and export. Developing rules on the administration of quota licenses in such a way as to promote the use of more efficient allocation methods could expand market access through increased fill rates of tariff quotas.

On domestic support, significant reduction of trade distortions would require careful scrutiny of two main issues: 1) addressing the various weaknesses of the AMS discipline identified in this study, including its sector-wide nature; and 2) strengthening the eligibility criteria for exempt policies to ensure that only least trade distorting programmes are included. As highlighted in this analysis, many exempt policies, while less trade distorting than price or output- and input-based supports, still encourage an expansion of output by reducing risk.

Disciplines on export subsidies have been more effective than the other two disciplines. Further reduction in trade distortions could be achieved by strengthening the URAA export subsidy provisions. Nevertheless, several issues need to be addressed. In particular, the coverage of export subsidies would have to be broadened to embrace all those policies which have the potential to distort export competition. These include, some aspects of parastatal trade agencies, revenue-pooling arrangements, international food aid, export credits, export taxes and export restraints. Moreover, the rules concerning “unused” export subsidy allowances and the definition of export subsidies, and in particular the issue of “cross-subsidisation” among markets, merit re-examination and should be tightened.

There are a number of other potentially important issues for the next round of WTO negotiations, including environmental sustainability, rural development, structural changes in the agro-food sector, food security, food safety, food quality, animal welfare, and special and differential treatment for developing countries. In addition to the more traditional issues addressed under the three pillars of market access, domestic support and export subsidies, these issues provide important challenges for the international policy agenda.

Annex I.

USE OF TARIFF QUOTAS IN OECD COUNTRIES¹

Australia

Australia administers tariff quotas for some types of cheese and their products and for unmanufactured tobacco. The in-quota tariff for cheese is AUD 96 per tonne up to a total of 11 500 tonnes. Imports above this level are subject to an initial rate of AUD 1 294 per tonne, reducing to A\$ 1 220 per tonne in 2000.

For cheese, the tariff quota applies to cheese products originating in all third countries, with the exception of New Zealand, Papua New Guinea and South Pacific Forum Island countries. No licensing system is maintained. Quota allocations are transferable and based on historical trade performance. Allocations apply for a twelve months period and are revised every two to three years on the basis of trade performance.

Canada

Twenty-one tariff quotas are applied, primarily covering imports of cereals, bovine meat, dairy products, poultry and eggs. In-quota imports are subject to relatively low tariffs while the over-quota tariff levels are very high, reflecting the restrictiveness of the quota and licensing schemes they replaced. For example, on chicken, the in-quota tariff in 1996 was 11%, but the over-quota rate was 270%; on cream, the in-quota rate was 16%, but the over-quota rate was 336%; on wheat, the in-quota rate was 0.5%, but the over-quota rate was 71%; on milk, the in-quota rate was 14%, but the over-quota rate was 310% (WTO, *Trade Policy Review: Canada*, 1996). In total, over 100 over-quota rates exceed 50%. Imports of wheat, barley and their products from the NAFTA area, are counted against the tariff-quota for these products, whilst continuing to benefit from preferential NAFTA tariff rates. Once the global quotas are exhausted, imports from the US and Mexico still benefit from the NAFTA preferential rate of duty.

For dairy, a total of 11 quotas have replaced the previous system of quantitative restrictions. The Canadian Dairy Commission has a virtual monopoly on the import of butter. Butter imports are sold to processors and further processors. Any over quota supplies carry an *ad valorem* tariff of around 300%. For milk powder no quotas have actually been opened for either skimmed milk or whole milk powder. In other cases (condensed and concentrated milk, powdered buttermilk), one historical importer has the exclusive right to in-quota imports. For four dairy tariff quotas, all or part of the tariff quota has been reserved to specific supplying countries, including New Zealand, Australia and the European Union.

For chicken, turkey and eggs, a single global quota is opened for each product at a volume equal to the greater of Canada's URAA tariff quota commitments or the quantity provided for under NAFTA. In 1998, the URAA tariff quota quantities were 39 844 tonnes for chicken, 5 140 tonnes for turkey and 17 951 dozen for eggs and egg products. The NAFTA quantities are set as percentages of the previous year's domestic production: 7.5% for chicken, 3.5% for turkey, and 2.988% for eggs and egg products. Imports up to the quantity of the annual global quota may enter at m.f.n. tariffs slightly over 11%, or the applicable duty for other trading partners, but over-quota imports from all sources are dutiable at around 300%. No country-specific quota allocations have been made under the import regime. In 1998, although the in-quota imports exceeded the quota quantities, all imports occurred at duty free rates under NAFTA

(Annex Table I.17). As of January 1996, the allocation of the chicken tariff quotas is being shifted gradually from a primarily historical basis to a system relying on current market shares.

Czech Republic

Tariff quotas were established on twenty-four groups of products, including some meat products, dairy products, oilseeds and wine. There are also preferential tariff quotas agreed under regional trade agreements. The affected products include some meat products, some fruits and vegetables, beer, wine and a number of processed food products. The preferential rates may be less than or greater than the in-quota tariff rate, and the volume of imports under tariff preferences is usually unlimited. The in-quota tariff rates are usually expressed as a percentage of the m.f.n. tariff rate and thus are reduced as the m.f.n. rate declines over the course of the URAA implementation period.

As of January 1996, allocation of tariff quotas for live and meat of swine and sheep, meat offal, yoghurt, rapeseed, pasta, waters containing added sweetening animals, wine of grapes and ethyl alcohol (not exceeding 80% vol.) is on a global basis. The changes in the administration of tariff quotas also relate to the withdrawal of one country specific allocation for potatoes and to the reduction of quantity reserved for one supplying country on milk and cream. Of the 1 528-tonne tariff quota on milk and cream in 1997, 1 000 tonnes were reserved for the European Union; of the 29 570-tonne tariff quota on potatoes in 1997, 15 000 tonnes were reserved for the European Union. In 1997, the tariff quota for sunflower seeds expanded by 13 299 tonnes to a total yearly volume of 15 000 tonnes imported at a reduced in-quota rate of 10%. The tariff quota for wine of grapes also increased in 1997 to a total annual volume imported at the in-quota rate of 25%, of 541 905 hl.

Tariff-quotas are allocated through licences, which are usually granted on a first-come-first-served basis. Licences are not transferable. Tariff quotas are administered such that preferential imports are counted within the quota limits and, in some cases, portions of the tariff quota are actually reserved for preferential suppliers.

European Union

Tariff quotas were introduced for 45 categories of agricultural products. In-quota tariffs may be either *ad valorem* term, ranging from zero to 20 %, or as specific. The lowest specific tariffs are for cereal residues (euro 30 per tonne) and the highest are for some cheeses (over euro 1000 per tonne) (OECD, 1999a). There are also tariff quotas under preferential arrangements, such as those under the European Agreements. In these cases, the European Union URAA Schedule indicates that when the preferential duty rate is the same as the in-quota tariff rate, preferential imports are counted against the WTO commitments.

The right to import within a quota is normally determined by means of licenses issued by the national authorities acting as agents. For raw cane sugar (for refining), allocation of tariff quotas is on a country specific basis. Licenses are issued by the competent authorities in the European Union Member states. Entitlement under the tariff quota is conditional on the presentation of a certificate of country of origin. Applicants must be refiners. The allocation is made on the basis of the origin of imports over a three-year reference period. Import licences are valid until 30 June of the quota year.

For husked (brown) rice, allocation of tariff quotas is on a country-specific basis. Licenses are issued by the competent authorities in the European Union Member states. Applicants must have been engaged in the trade of rice in at least one of the three years preceding the date of submission of the application. The quota is allocated according to the volume of requests. If there is excess demand, a reduction coefficient is applied to the quantities requested. Import licenses are valid until the end of the second month following the date of issue.

For fruits and vegetables, allocation of import quotas is on a global country basis. The quota is administered by the European Commission. Drawings are granted by the European Commission in order of date of acceptance of declarations of entry for free circulation by the Member State's custom

authorities. If the quantities applied for are greater than the quota, allocation is made *pro rata* to applications.

For fresh bananas, tariff quotas are allocated to specific countries (Ecuador, Costa Rica, Colombia, Panama and others). Import licenses are issued by the competent authorities in the European Union Member states. Ninety-two per cent of the licences are allocated to historical importers on the basis of actual imports in the reference period and 8% are allocated to new comers. Import licenses are valid for four months. However, the European Union arrangements have been successfully challenged in the WTO and their future status is unclear at this stage.²

With respect to bovine meat, the allocation of import licenses is subject to the submission of a certificate of authenticity issued by the exporting country. Import licenses are valid for three months. For butter, meat of swine, poultry and turkey, licenses are allocated to historical importers. Retailers are barred from access to the quota.³ The quota is allocated in proportion to requests. If there is excess demand a reduction coefficient is applied. Import licenses are usually valid for 150 days.

For durum wheat, licenses are allocated to historical importers. The quota is allocated in proportion to requests. If there is excess demand a reduction coefficient is applied. Import licenses are valid for seven days.

Hungary

According to its Notification concerning imports under tariff quotas during the calendar year 1998, tariff quotas are applied on 67 (4-digit HS) agricultural product groups. High tariff rates apply to ethyl alcohol (128%), butter (102%), vermouth (85%) and bovine carcasses (72%) (OECD, 1999a).

Tariff quotas are, in general, allocated on a global basis, except for quantities allocated to the European Union, Poland and Slovenia. For example, for bovine animals and meat 3 660 tonnes is reserved for the European Union and 750 tonnes is for Poland; for swine, 3 646 tonnes is for the European Union; for poultry, 210 tonnes is for the European Union, 3 250 tonnes for Poland and 50 tonnes for Slovenia.

Tariff-quotas are allocated through licenses, which are usually granted on a first-come-first served-basis (e.g. live horse, sheep and goats, poultry, butter, eggs not in shell, vegetables preserved, dried fruits, wheat, rye, barley, sugar beet, malt, sunflower seed, margarine, wine, unmanufactured tobacco, etc.) In most cases a maximum quantity limit is set for individual importers. Further application may be made by an importer if the part of the quota allocated to it was fully utilised.

Iceland

Iceland's notifications concerning imports under tariff quotas make a distinction between minimum access and current access tariff import quotas. In principle, tariff quotas apply to 320 lines in the agriculture sector; in practice, however, they are used only for products for which Iceland made minimum access commitments in the Uruguay Round and for live plants and flowers. Over-quota tariff rates are seldom used and imports generally take place at in-quota or lower tariff rates. In-quota tariff rates are set at relatively high levels, ranging between 0 and 180%. In-quota tariff rates are particularly high for cereals (175-180%), cereal grains for feed and preparations, and oil-cakes, while the highest over-quota tariff applies to butter (573%) (OECD, 1999a). Grains imported for human consumption often enter duty free. It is worth noting that in-quota tariffs are higher than out-quota tariffs in some products, particularly grains. For example, in-quota tariffs are 180% for wheat, barley, rye, oats and maize, while the over-quota rate is 175% (OECD, 1999a).

Tariff quotas are allocated on a global basis through licenses. They are usually granted on an auctioning basis. The Minister makes allocations for Agriculture on the basis of recommendations made by a special Committee of representatives from the Ministries of Agriculture, Finance and Commerce. This Committee is charged with the responsibility of administering imports of agricultural products.

Applicants must have a wholesale permit. If applications exceed the quota quantity, the quota is allocated to the highest bidders at quota auctions or on a lottery basis. For livestock products, licences are valid for a minimum of 60 days, with the possibility of extension for a whole year. Parts of the quota may be reserved for the domestic food processing industry. For crops, seasonal variations in domestic supply are taken into consideration in quota allocations.

Japan

Japan introduced tariff quotas on 19 product groups (dairy products and other grains, vegetables and tubers, and silk), as part of its commitment under the URAA to tariff quantitative import restrictions. For some items, particularly in the dairy sector, similar products fall under different quota restrictions depending on the intended use of the imported product (OECD, 1999a). Skim milk powders, for example, with a similar fat content, fall under different quota headings depending on whether they are destined for use in school lunches, animal feeding or other purposes.

The over-quota tariffs are in most cases the in-quota *ad valorem* rates plus a specific tariff. Grains (excluding rice) and vegetables are subject to in-quota tariffs between zero and 40%. Over-quota tariffs are in some cases much larger than in-quota tariffs. For groundnuts, the over-quota tariff *ad valorem* equivalent was estimated at nearly eight times the world price, while the in-quota rate was only 10% (WTO, *Trade Policy Review: Japan*, 1998, p. 10).⁴

Rice has been a special case in Japan exempted from tariffication with the "special treatment" provision in return for a higher minimum access quantity. In December 1998, the Japanese Government notified the WTO that Japan would cease to apply special treatment under Annex 5 of the URAA in respect of rice as from 1 April 1999. The quantitative restriction on rice was abolished and replaced by tariffs. The applied rate will be the equivalent of USD 2 680 per tonne for the fiscal year 1999 and will be reduced to USD 2 605 per tonne for the year 2000.

All tariff quotas are allocated on a global basis. For many agricultural products tariff quota allocations are based on previous business records and business plans of applicants. For whey and skimmed milk powder for other purposes, tariff quotas are allocated to producers and producer organisations of mixed feed or sellers. For certain products such as prepared edible fat and dried leguminous vegetables, quota applications exceeded the available quota levels. According to the Japanese authorities, quotas were not completely allocated because of a lack of sufficient demand, for example, in the case of school-lunch skimmed milk powder and for feed. There is no system for reallocation of unused quotas, and unused quotas cannot be sold. In most cases, quota allocations are valid within a fiscal year.

Korea

In accordance with its URAA commitments to tariff quantitative restrictions, Korea introduced tariff quotas for 67 categories of agricultural products. All over-quota tariffs are expressed in *ad valorem* terms. Over-quota tariffs range from 9% to 887%. The highest rates are on some animal feed products (manioc, oats) (OECD, 1999a).

Korea's traditional import ban on rice was lifted in 1995. Instead of tariffication for rice, Korea accepted a bigger minimum access commitment; rice imports will rise from 1 to 4% of domestic consumption over a 10-year period as Korea benefits from developing country status. The in-quota tariff rate was set at 5%. There is no over-quota rate. For beef, the date for abolition of quantitative restrictions was extended from 1997 to 2001 in exchange for increased quota levels and a relatively low final tariff rate. Beef imports are to expand from 123 000 tonnes in 1995 to 225 000 tonnes by the year 2000. The relevant duty was set at 43.6% in 1995 and is to fall to 41.6% in 2000. In January 2001, the tariff for unlimited import quantities will be 41.4%, falling to 40% by 2004. Tariff quotas for pigmeat, poultrymeat and white silk were phased out in 1997 and only a m.f.n. tariff rate applies.

The tariff quota for fresh oranges, was set at 15 000 tonnes in 1995, rising to 20 000 tonnes in 1996 and 25 000 tonnes in 1997. Subsequent expansions are at an annual rate of 12.5%, allowing for 57 017 tonnes

by 2004. In-quota imports face a 50% tariff rate, while over-quota imports are subject to an initial rate of 99%, falling to 50% by 2004. For orange juice, the initial import quota was set at 50 000 tonnes, rising to 55 000 tonnes in 1996 and, prior to abolition, to 30 000 tonnes for the first six months in 1997. The 50% tariff on in-quota imports was replaced by a 58.2% m.f.n tariff rate as of July 1997. This rate is to fall gradually to 54% by 2004.

For rice, barley, potatoes, beans and a number of other products, Korea has reserved its right to apply an import mark-up in addition to the in-quota tariff. The import mark-up on beef will be eliminated in 2001.

All tariff quotas are allocated on a global basis. Their administration involves associations of domestic industries producing products competing with the imported products covered by the quotas or using these imported products. The allocation of access to the tariff quotas and possible adjustments in the volume of the quota (opening of a quota, increase, decrease) or in the applied rate are made on the basis of "recommendations" issued by these associations. For skimmed milk powder, whole milk powder, other milk and cream tariff quotas are allocated according to the highest price bidders at quota auctions held by the Livestock Products Marketing Organisation. Licenses for these products are normally valid for 90 days. Auctioning was also used for pigmeat and poultrymeat until 1997.

Mexico

Tariff quotas were established for 11 products, although Mexico's notifications concerning import quotas and their administration include only one product (milk powder). This is because more favourable terms of access were applied to the remaining products than the terms of access in the UR Schedules. In addition to the tariff quotas agreed under the URAA, Mexico operates autonomous import quotas for 15 agricultural products (8-digit HS level) for which tariffs are less or equal than those bound in the URAA and no quota licenses are required. For milk powder, quota allocations are made to importers on the basis of historical imports.

New Zealand

New Zealand uses no tariff quotas; the tariff quotas on hops, fresh apples and fresh pears listed in its Uruguay Round Schedule have not been implemented because the applied rates of duty on imports of these products is zero.

Norway

Ninety-one tariff quotas under global or preferential agreements were opened as a result of the URAA. Both in-quota tariffs and over-quota tariffs are expressed in *ad valorem* and specific terms, often at relatively high levels.

Norway's notifications concerning market access and imports under tariff quotas distinguish between minimum and current access quotas. Under the current access, 600 tonnes of sheepmeat quota is allocated to Iceland. For cheese and curd, the total import quota for the European Union, following the accession of Austria, Finland and Sweden to the European Union, is increased to 2 560 tonnes, while the quota of 14 tonnes from Switzerland is maintained.

For most products, quotas are allocated by auctioning. For other products such as apples and pears, quotas are allocated on the basis of the past three years import performance. A "commencement" quota may be granted for new importers. In general, minimum access quotas are allocated by auctioning, while current access quotas are mostly allocated by an applied tariff only regime.

Poland

Tariff quotas are established for 44 agricultural product categories, comprising livestock products, some crops and spirits. High over-quota tariffs (over 100%) are calculated for ethyl alcohol, tobacco and

tobacco products, milk and dairy products, and potatoes (OECD, 1999a). Tariff quotas were originally included into the Polish schedule at 4-digit HS level and were further divided into 9-digit HS level in 1997 and 1998.

Tariff quotas are allocated on a global basis through licenses, and are granted on a first-come-first served-basis. From 1 January 1998 to 28 May 1998 some tariff quotas (apples, cucumbers) were divided among historical importers on a *pro rata* basis. For fruit and vegetables, tariff quota imports are divided into different period when specified varieties can be imported.

Switzerland

Twenty-eight tariff quotas were opened as a result of the URAA (157 tariff lines at the 6-digit HS). As from 1 January 1996, the HS96 system is used for the notifications.

In the fruit and vegetable sectors previously subject to seasonal tariffs or import prohibitions, tariff quotas are defined on a seasonal basis. In 1995, in-quota tariffs on all dairy products were estimated to average around 250% as against 350% on out-quota imports; for butter, the out-of-quota tariff exceeded 800% (WTO, *Trade Policy Review: Switzerland*, 1996, page 24).

For livestock products, tariff quotas are combined to form several meat categories such as meat essentially produced on the basis of coarse fodder (beef, sheep, goat and horses) and meat produced on the basis of concentrated feeds (pigmeat, poultrymeat). Such arrangements provide considerable scope for influencing import flows in individual market segments.

An import license is required for tariff quota imports. The licences are non-transferable and may be granted to individuals, businesses and organisations that are established in Switzerland. Alternative mechanisms relate to traders' past imports, an auction procedure, the first-come-first-served principle, or pro-rata allocation. For some products, a combination of these methods is used. An importer meeting the requirement to purchase a fixed proportion of domestic product may import at the in-quota tariff rate even if the tariff quota has been exhausted.

Under the *pro-rata* approach, importers are informed of the global volume available and may apply for shares. If the sum of requested shares exceeds the total volume, applicants obtain import entitlements in proportion to their request. Actual entitlements amounted to less than 2% of the requested quantities in 1995. This prompted the authorities to double the tariff quota for 1996 and switch to a first-come-first- served system. In the first two days of 1996, however, nearly all quota was filled, and only 201 of the 800 licensed importers got a chance. In early March 1996, the Government decided to reduce the over-quota tariffs by almost 50% for white wine bottles.

The allocation of quota shares for beef, veal and pork and most processed meat categories is partly based on the importers' previous performance. The allocation of the tariff quota established for eggs in shell is governed by a "prise en charge" system. Traders are required to purchase eggs from small domestic farms equivalent to 40% of the quantities imported. These purchases are at guaranteed prices, while other production is sold at market prices.

Under the tariff quotas for wine, meat and dairy products, specified quantities are reserved for individual supplying countries claiming "historical rights". For example, 300 tonnes of beef are reserved for US suppliers, and 170 tonnes of dried or otherwise prepared bovine meat allocated to Italian exporters (the total tariff quota for beef, horse, sheep and goat meat is 22 500 tonnes). Out of the 49 000 tonnes tariff quota for pork and poultry, 3 470 tonnes are earmarked for European Union producers. The tariff quota for fresh milk is entirely reserved for French suppliers; and 2 624 tonnes of cheese are allocated to European Union suppliers at a lower tariff rate.

United States

The United States has notified 54 tariff quotas, covering 1.9% of all tariff lines. They are used in the case of beef, certain dairy products (i.e. fluid milk and cream, butter, cheese and milk powder), cane sugar and some sugar products, peanuts, green olives, tobacco and cotton. In-quota tariffs are expressed either as specific rates, or in *ad valorem* terms, while over-quota tariffs are generally specific or mixed tariffs. Over 90.8% of the over-quota tariffs are non-*ad-valorem*, compared to 28.3% of the in-quota rates.

For a number of agricultural products, in-quota tariffs are substantially lower than over-tariff quotas. For example, in-quota cream is subject to a tariff of USD 320 per litre, while over-tariff quota cream is subject to USD 863 per litre; in-quota tariffs on peanuts are subject to USD 66 per tonne, while over-tariff quota peanuts are subject to 147.7% *ad valorem*; in-quota tariffs on tobacco for cigarette manufacture range from free to USD 1 130 per tonne, while the over-quota tariff is set at 350%.

The simple average in-quota m.f.n. tariff rate is estimated at 9.5% in 1999, while the corresponding average over-quota m.f.n. tariff is as high as 56% (WTO, *Trade Policy Review: United States*, 1999). High over-quota tariffs are estimated for groundnuts and peanuts and peanut butter.

A number of tariff quotas (e.g. tobacco) are allocated to selected trading partners. The U.S. tariff schedule includes 192 tariff lines to administer product specific tariff quotas, as well as a separate HS Chapter (9906) to administer additional NAFTA tariff quotas.⁵ Tariff quotas are generally allocated to importers on a first-come first-served basis. Exceptions are those for dried milk, butter and some types of cheese, which are allocated on the basis of a mixture of historical performance, designations by the governments of exporting countries and lottery.

Import permits are required for most plants and some plant products to prevent the introduction of pests and diseases and to protect endangered plant species (WTO, *Replies to Questionnaire on Import Licensing Procedures*, G/LIC/N/3/USA/2, 16 October 1998). Permits are only issued to a firm or individual resident in the United States and apply to products from all countries with certain exceptions. To protect U.S. livestock and poultry against the introduction of diseases that do not exist in the United States, certain animals and animal products, organisms and vectors, and veterinary biological products are also subject to import permits. The permit system applies to imports originating in all non-NAFTA countries with some variation resulting from the species, and the disease status of the country of origin. Permits for animal products and organisms and vectors vary in length of their validity, but are generally for about one year. In general, a permit is refused only if it does not meet standard criteria. Permits are not transferable between importers and there is no penalty for non-utilisation of a permit.

For sugar, the raw cane sugar tariff quota is allocated to 40 sugar-exporting countries on the basis of their market shares during the 1975-81 period. A portion of the refined sugar is allocated to Canada and Mexico, while the balance is available on a first-come-first-served basis. There is no penalty for non-utilisation and only licenses issued for re-exporting sugar in refined form can be transferred. Raw sugar may be imported outside of the quota if it is refined and re-exported within 90 days.

For dairy, about one-half of dairy product imports are subject to tariff quotas. Their administration method is highly complex, involving licensing requirements or administration through first-come-first-served basis. The licensing system applies to imports from all supplying countries. Licenses are allocated to importers regardless of whether they are producers of like products. Unused allocations may not be added to the allocation of the succeeding year. Licensees must utilise a specified percentage of licence issued (i.e. 85%) and must voluntarily surrender unused amounts which are then reallocated to other eligible licensees through an application process. Licences are valid for one year and are not transferable between importers. No import licences are required at the over-tariff rate quotas. Imports of certain dairy products subject to tariff quotas are administered on a first-come-first-served basis.

Methodology and data

The structure of each country's tariff schedule is extremely complicated, typically involving around a thousand tariff items, with several different rates applying to particular imported products. There are a number of important conceptual issues related to the construction of summary tariff indicators, notable among which are: a) the appropriate tariff rate; b) the weights, if any, used for aggregation purposes; and c) the appropriate indicators of dispersion in tariff rates.

The main sources of tariff indicators used in this report are the OECD study on *Tariff and non-Tariff Indicators* (OECD, 1997b) and the OECD recent study on Post-Uruguay Round Tariff Regimes (OECD, 1999a). The WTO Trade Policy Reviews were used for m.f.n. applied rates during the implementation period. The advantages of the OECD (1997b) data base is that it contains tariff indicators over time, thereby allowing an analysis of the pre- and post-UR tariff profiles. In addition, averages for the m.f.n. applied tariffs were calculated using alternative weights. This data base, however, does not cover all OECD countries. The OECD tariff data base contains tariff information for all OECD countries, but the indicators are not weighted. Also the tariff indicators are calculated for the final bound tariffs rather than m.f.n. applied tariffs.

In general, the definition of agriculture used in the calculation of all tariff indicators at the country aggregate level reported in Section III is that adopted in the URAA, except for the production-weighted average m.f.n. tariff rate and standard deviation. This definition is based on the Harmonised System (HS). By contrast the production-weighted country average m.f.n. applied tariff rate shown in **Table 2.1** and standard deviations in **Figure 2.3**, were computed from ISIC rev. 2. However, standard deviations by HS Chapter are reported in **Annex Table I.3**.

The data on tariff quotas come from Country Notifications to WTO and from the URAA Country Schedules. The calculation of tariff quota fill rates proved to be cumbersome and time consuming as available data are not always transparent or readily comparable over time. In some instances, there is a divergence between the product coverage in the commitment in the schedules and the coverage of a tariff quota notification. That is, the product coverage indicated by the Harmonised System (HS) codes differs between the schedule and notifications. Schedules were generally prepared using the HS92 nomenclature, while tariffs and tariff rate quotas are frequently being reported using the HS96 nomenclature. Moreover, in some cases the notifications suggest that the tariff quota is applied to fewer products or a more narrowly defined basket of products, than was indicated in the country's schedule. In addition, in some country notifications it is unclear whether imports from preferential agreements are excluded. Further, the reporting periods in the notifications sometimes differ from those indicated in the schedules. There is also inconsistency of reporting measurement units. A number of notifications have employed different units of measurement in reporting the tariff-quota imports than the units indicated in the schedule (e.g. product weight and eviscerated equivalents; product weight, carcass weight or pieces, etc.).

Another problem encountered was that the reporting of tariff-quota imports is not very comprehensive. In many instances it is unclear whether the import volumes reported in the notifications reflect actual imports under the tariff quota or all imports benefiting from the low in-quota rate of duty through a combination of imports under the tariff quota and additional autonomous imports. Further, some countries notify only imports up to the scheduled quantity, that is, a maximum of 100% fill rate, even if imports were above scheduled quantities. In the calculations of average fill rates reported in this report, when the notified imports are greater than scheduled tariff quota quantities the fill rate was set at 100%. Finally, the 1997 European Union Notification concerning tariff quotas is incomplete.

Data for the calculation of *ad valorem* equivalents and nominal protection coefficients come, in general, from the OECD PSE database 2000. For the calculation of *ad valorem* equivalents for wheat in Canada the US PSE reference prices were used. For butter, cheese and skimmed milk powder, for which PSEs are not calculated, the New Zealand export prices adjusted for transport costs to the relevant markets are used. Domestic prices for these dairy products, which are either wholesale or support prices,

are derived from OECD *Agricultural Outlook* data base 2000 or from national sources. The detailed definitions, sources and background data used in the calculations are presented in the **Annex Table I.8**.

Auctioning

What is an auction?

Auctions are among the oldest market mechanisms for price discovery, dating back at least two millennia. They are widely used in many transactions, including artwork, agricultural produce, antiques, mineral rights and treasury bonds.

An auction is a bidding mechanism, described by a set of auction rules that specify how the winner is determined and how much he has to pay. In addition, auction rules may restrict participation and feasible bids and impose certain rules of behaviour (Wolfstetter, 1996). Auctions are used for three main reasons (Wolfstetter, 1996): speed of sale, to reveal information about buyers' valuations; and to prevent dishonest dealing between the sellers' agent and the buyer.

An auction is a market institution with an explicit set of rules determining resource allocation and prices on the basis of bids from market participants (McAfee and McMillan, 1987). The most obvious reason for using auctions rather than other selling devices is that some products have no standard value.

Asymmetry of information is the crucial element in auctioning. The reason a monopolist chooses to sell by auction is that he does not know the bidders' valuations. How the bidders respond to uncertainty depends on their attitudes towards risk. This asymmetry of information, in turn, limits the seller's ability to extract surplus. The seller can exploit competition among the bidders to drive up the price; but usually the seller will not be able to drive the price up so far as to equal the valuation of the bidder who values the item the most, because the seller does not know what this valuation is.

Auctioning can take different forms. Auctions are often used by a monopolist (an individual or government). Sometimes there is a single buyer who wishes to sell/purchase some item from one set of potential suppliers (monopsony). In other cases, there is a double auction where several buyers and several sellers submit bids simultaneously. The double auction is a stylised representation of organised exchanges such as stock exchanges and commodity markets.

What are the types of auctions?

Four basic types are used when a unique item is to be bought or sold:

- i) *the English auction* (also called the oral or open ascending-bid auction): this is the most commonly used auction type. The price is successively raised until only one bidder remains. Its essential feature is that, at any point in time, each bidder knows the level of the current best bid. The English auction is often used for artwork.
- ii) *the Dutch auction* (or descending-bid auction): this is the converse of the English auction. The auctioneer call an initial high price and then lowers the price until a bidder accepts the current price. It is used, for example, for selling cut flowers in the Netherlands, fish in Israel, and tobacco in Canada.
- iii) *the first-price sealed-bid auction*: potential buyers submit sealed bids and the highest bidder is awarded the item for the price he bid. The basic difference between this type and the English auction is that, with the English auction, bidders are able to observe their rival's bids and accordingly, if they choose revise their own bids; with the sealed-bid auction, each bidder can submit only one bid. This type of auctioning is sometimes used in the sales of artwork and real estate as well as for government procurement contracts. Under risk-averse bidders, the first-price sealed-bid yields greater revenue than the English auction.

- iv) *second-price sealed-bid (or Vickery) auction*: bidders submit sealed bids having been told that the highest bidders wins the item but pays a price equal not to his own bid but to the second-highest bid. However, this auction type is seldom used in practice.

Would quota auctions increase prices?

It has been claimed that quota auctions increase consumer prices. In fact, the price to consumers is driven up by the quota itself and consumers have to pay more because of the existence of quotas rather than because of the auctioning of the licenses. The auction premium merely transfers some of the rents from the importer, exporter, or foreign producer to the importing government. Auctioning affects the price only when the quota is under-utilised. Under competitive conditions, firms would still have an incentive to import and fill the quota. The loss they would incur by importing is less than the loss if they did not import at all. It seems unlikely, therefore, that auctioning quota licenses would increase prices.

Would the government obtain the quota rents?

Auctioning of import licenses does not necessarily mean that the government will capture the quota rents. The ability of the government to capture the quota rents depends upon the market structure in importing, exporting, and production abroad, and whether or not the government of the exporting countries react in any way to the policy of auctioning the quota licenses. The government of the country auctioning the quota licenses would be able to obtain the quota rents through an auction if the exporting and importing industries in the sector in question were competitive; and if the governments of the exporting countries refrained from imposing additional restrictions of their own.

Market power on the part of any of the traders along the chain from the producer in the exporting country through to the retailers and final consumers in the importing country can interfere with the government's ability to capture the quota rents through auction. For example, a monopoly exporter or producer abroad, faced with an import quota, could capture the bulk of the quota rent by increasing the price of the product to the point where traders would be willing to bid only a minimal amount for the licenses.

The argument that the government does not capture the quota rents is weaker when import quotas are global, that is, when one overall import limit applies to all exporting countries, rather than sub-quotas allocated to each exporting country. When there is a large number of suppliers, competition among them tends to drive up bids and shifts more of the quota rent to the government.

Would the bids accurately reflect the size of the quota rents?

A quota licence has a scarcity value and the resulting quota rents provide an incentive for firms to bid for import licenses. Competitive firms will tend to bid up to the expected value of the quota rent to obtain quota licenses. Any lower bid would leave firms with windfall profits, which other firms would be willing to eliminate through higher bids. Thus, it would be expected that competitive bidding would escalate the bids up to the full quota rent.

When markets are not competitive, bids will not accurately reflect the true size of quota rents (Krishna, 1993). Even though the total utilisation of licenses remains the same as in a competitive market situation, the price paths may be quite different under imperfect competition. This is due to the fact that the licence price, in addition to the scarcity value, reflects an asset market component. That is, a quota licence can be viewed as an asset, usually with a life of one year, implying that the price of a licence will tend to rise over the year. The implication of this is that bids will not accurately reflect the size of the tariff equivalent of the quota.

In the short run where bidders do not have perfect foresight or in cases where markets are not competitive, bids might either underestimate or overestimate the true size of quota rents, and thus the true size of the tariff equivalent of the quota. Bids, for example, might overestimate the size of the quota rents in situations where firms have fixed costs as such firms would be willing to bid up to the expected

quota rents plus the loss that they would incur if they do not import at all. Fixed costs could be associated with distribution facilities or capital equipment to further process imported intermediate goods or raw materials. This consideration is likely to be relevant to products such as sugar, which, in many countries is refined after importation. If the refineries that process imports cannot, perhaps because of their location, easily utilise domestic raw materials, they will suffer a loss if unable to import.

Would auctioning quota licenses foster monopoly?

Auctioning quotas could result in an incentive to monopolise the import market and exploit that monopoly power by not filling the quota. This could occur when an auction allows a single firm to bid for all of the quota without restriction. Such a firm would maximise profits by importing only up to the quantity at which marginal revenue equals marginal cost.

This profit maximising import level could be either above or below the quota ceiling. If it is above, the importer will fill the quota and the impact on consumers, on the domestic import-competing industry and the level of efficiency losses would be the same as if the monopoly did not exist. If, however, the importer's profit-maximising import level were below the quota ceiling, the quota would not be filled. In this case, the efficiency losses and the protective effect of the quota would be larger than if importing had remained competitive.

Notes

1. This section is primarily drawn from WTO *Trade Policy Reviews* and country notifications to WTO.
2. In an effort to comply with WTO rules, the EU Council of Agriculture Ministers reached agreement in December 2000 to amend its banana import regime to a tariff-only system as of 2006. The level of the tariff would be negotiated under Article XXVIII of the GATT. In the intervening six years, a tariff quota system would remain in place, although a new licence allocation system might be implemented. The two existing tariff quotas would be maintained over the transitional period to 2006 at the current total level of 2 553 million tonnes and at the same Euro 75 (USD 80) per-tonne import tariff. A third quota of 850 000 tonnes would be opened to all suppliers at a maximum rate of euro 300 (USD 276) per-tonne. Banana imports from African, Caribbean and Pacific (ACP) countries will be duty free.
3. For poultry, applicants must prove they have imported not less than 50 tonnes in each of the two calendar years preceding the year of application.
4. It is puzzling that for nearly all the products subject to tariffication for which the above-quota imports occurred, the in-quota commitments remained unfilled.
5. In addition, some 100-tariff lines were added to administer “government use” and “personal use” provisions. These allow for in-quota tariff rates to be applied to such imports while not being included in the quota as provided in the U.S. Schedule.

Annex II.

MEASUREMENT OF SUPPORT TO AGRICULTURE: OECD AND URAA DOMESTIC SUPPORT CLASSIFICATION

The measurement of support to agriculture using the Producer and Consumer Subsidy Equivalent method was adopted by the OECD in implementing the 1982 Ministerial Trade Mandate. The purpose was to estimate the level and composition of support to agriculture, and to evaluate the impact of a progressive and balanced reduction of support using an economic model. The indicator incorporated the monetary value of transfers associated with all policy measures affecting agriculture grouped into four main categories: i) Market Price Support, ii) Direct Payments, iii) Reduction of Input Costs, and iv) General Services. Other transfers associated with agricultural policies, but not covered in these categories, were included in the calculation of Total Transfers (OECD, 1999).

In 1998, it was agreed to replace “subsidy equivalent” by “support estimate” in the names of the indicators, and to use the following nomenclature: Producer Support Estimate (PSE), Consumer Support Estimate (CSE), General Services Support Estimate (GSSE) and Total Support Estimate (TSE) (Annex Box II.1), and to reclassify policy measures according to implementation criteria.

Annex Box II.1. Classification of policy measures included in the OECD indicators of support

- 1) Producer Support Estimate (PSE) [Sum of A to H]
 - A. *Market Price Support*
 - B. *Payments based on output*
 - C. *Payments based on area planted/animal numbers*
 - D. *Payments based on historical entitlements*
 - E. *Payments based on input use*
 - F. *Payments based on input constraints*
 - G. *Payments based on overall farming income*
 - H. *Miscellaneous payments*
- 2) General Services Support Estimate (GSSE) [Sum of I to O]
 - I. *Research and development*
 - J. *Agricultural schools*
 - K. *Inspection services*
 - L. *Infrastructure*
 - M. *Marketing and promotion*
 - N. *Public stockholding*
 - O. *Miscellaneous*
- 3) Consumer Support Estimate (CSE) [Sum of P to S]
 - P. *Transfers to producers from consumers*
 - Q. *Other transfers from consumers*
 - R. *Transfers to consumers from taxpayers*
 - S. *Excess Feed Cost*
- 4) Total Support Estimate (TSE) [1 + 2 + R]
 - T. *Transfers from consumers*
 - U. *Transfers from taxpayers*

PSE and AMS

The PSE is an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farmgate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on farm production or income (OECD, 1999). It consists of market price support and various categories of budgetary payments to producers (**Annex Box II.1**). The PSE is estimated to cover all production (and not only the common set of commodities), but excludes some measures formerly in the General Services category in the formerly titled Producer Subsidy Equivalent and now included in the GSSE (for example, research and development, marketing and promotion).

The PSE is defined as including all agricultural policies, whatever their nature, impact and objective. The AMS, on the other hand, is defined by policies, some of which are included while others are not. Domestic support as defined by the AMS measures domestic support in the sense that it does not include support that is provided only through border measures, and it measures support in the sense that it includes not only domestic subsidies but also price support if provided through an administered price.

The AMS is a narrower concept than the PSE and covers only domestic policies considered to be trade distorting. The AMS excludes explicit trade policies covered by the PSE such as export subsidies and import restrictions. It also excludes certain types of budgetary payments. Moreover, the AMS is not a measure of the current support to agriculture because some of its components are calculated using historical (base period) prices instead of current prices as is done in the PSE calculations.

The AMS combines estimated support levels from all non-exempt policies for all commodities into one overall measure. Non-exempt policies in the AMS include commodity-specific market price supports based on administered prices, non-exempt direct government payments to producers, and other commodity-specific transfers, plus non-commodity specific measures of support received by producers, such as capital, input, and insurance price subsidies. As a domestic measure, the AMS excludes export subsidies and impacts of import restrictions not also tied to domestic administered price programs.

Annex 3 of the URAA specifies the method of calculating the AMS. The method distinguishes between product-specific AMS and non-product specific AMS. It involves the calculation of a product-specific AMS for each product receiving market price support, non-exempt direct payments or other subsidies, including budgetary outlays and revenue forgone by governments. Both national and sub-national support is included. Specific agricultural levies or fees paid by producers are deducted from the AMS. Similarly, support that is non-product specific is included in a non-product-specific AMS.

Market price support

Both PSE and AMS support indicators are dominated by the price gap estimates which attempt to capture the transfers that result from policies which implicitly tax consumers by inflating domestic prices through a combination of domestic measures and border measures. In principle, both indicators include this type of policy although, in practice, there are differences in methodology.

First, while the PSE uses observed domestic prices and observed, actual external prices to measure the price gap, the AMS uses administered prices and a fixed external price (average 1986-88). The fixed external price is defined as the average f.o.b. unit value for the product concerned in a net-exporting country and the average c.i.f. unit value for the product in a net-importing country in the base period (1986-88). The fixed external reference price may be adjusted for quality differences.

Second, in the AMS approach market price support is only calculated when domestic administered support prices exist. This implies that market price support which is provided only through border measures but there is no explicit domestic administered support price is excluded. For example, the domestic producer price may well be above the world market price, as a result of import duties and, if the country is an exporter, export subsidies. In measuring the PSE, this difference between the domestic

producer and the international market price would be included, along with any domestic subsidies which may be granted at the same time.

Budgetary payments to producers

In the PSE, this category of measure covers all measures which generate direct budgetary transfers to producers without altering consumer prices. On the other hand, the AMS exempts from the reduction commitments a large number of measures which are included in PSE. Chief among these are the exemptions from reduction commitments granted to production-limiting programmes (blue box) and several green box measures.

Further, the AMS reduction commitments exempt certain trade-distorting policies (e.g. input subsidies) when the level of product-specific or non-product-specific domestic support falls below a specified *de minimis* level. When the *de minimis* provision is breached such support is included in the Current Total AMS and become subject to the reduction commitments.

General services support estimates (GSSE) and green box measures

The GSSE corresponds to the former General Services in the former PSE, minus the payments associated with on-farm services (for example, extension services) now included in the PSE, plus the payments formerly included only under Total Transfers.

The GSSE includes taxpayers transfers to: improve agricultural production (research and development); agricultural training and education (agricultural schools); control of quality and safety of food, agricultural inputs, and the environment (inspection services); improve of off-farm collective infrastructures, including downstream and upstream industry (infrastructures); assist marketing and promotion (marketing and promotion); meet the costs of depreciation and disposal of public storage of agricultural products (public stockholding); other general services that cannot be disaggregated and allocated to the above categories due, for example, to a lack of information (miscellaneous). Unlike the PSE and CSE transfers, these transfers are not received by producers or consumers individually, and do not affect farm receipts (revenue) or consumption expenditure by their amount, although they may affect production and consumption of agricultural commodities.

On the other hand, the green box is a broader category than the GSSE as in addition to the above payments it also includes measures which it could be claimed affect production and trade. The most important among these are measures such as income insurance and income safety-net programmes, payments for relief from natural disasters, structural adjustment assistance, environmental and regional assistance programmes. As expected, GSSE expenditures are lower than green box expenditures (**Annex Table II.1**).

STATISTICAL ANNEX

Annex Table I.1. **Applied tariffs and protection rates in selected OECD countries (%)**

Country		Applied m.f.n. tariffs (a)	Nominal protection coefficient (NPC)
Canada (1996)	Poultrymeat	278	4
	Milk and cream products	327	82
	Butter	351	147
	Cheese	275	87
	Eggs	266	36
	Wheat	86	0
	Barley	106	0
European Union (1997)	Beef	108	80
	Milk and cream products (c)	59	94
	Butter	12	157
	Cheese	60	98
	Wheat (b) (d)	77	-4
	Maize	49	8
	Rice	92	26
	Sugar	62	100
Japan (1996)	Beef	22	46
	Skimmed milk powder (e)	35	295
	Wheat (b)	46	522
	Refined sugar	74	81
Korea (1995)	Beef	44	245
	Pigmeat	25	89
Norway (1995)	Beef	237	46
	Pigmeat	250	117
	Sheepmeat	296	58
	Poultry meat	200	233
	Butter	202	n.a.
Switzerland (1995)	Sheepmeat	197	368
	Poultry meat	437	603
	Milk and cream products (c)	452	295
	Butter	389	826
	Wheat (b)	102	282
	Maize	202	130

Notes:

(a) Averages take into account *ad valorem* equivalents of specific rates calculated as the simple average of in - and out - of quota rates where applicable.

(b) Includes meslin.

(c) Based on market price support for milk from the OECD PSE data base.

(d) Negative NPC reflects the impositions of export taxes.

(e) Milk and cream, in powder, granules or other solid form, of a more than 5% fat content, not containing added sugar or other sweetening matter

Source: OECD Secretariat calculations; WTO *Trade Policy Reviews*, various issues.

Annex Table I.2. Examples of tariff formulations

Member	Product	Tariff (end of implementation period)
Canada	Sweet corn	2.81 c/kg but not less than 12.8%, + 4.3%
European Union	Cider apples in bulk, from 1 January to 31 March	6.4% cent + 238 euro/t (SSG) <i>Note:</i> The specific rate of duty shall be reduced to zero if the entry price per tonne is not less than 627 euro. In this case, the SSG shall not apply. In addition, the <i>ad valorem</i> base rate of duty shall be bound at 4.0% at the end of the implementation period. <i>Note:</i> The entry price shall be reduced each year by the same amount as that by which the specific amount, constituting part of the rate, is reduced. This reduction shall be made at the beginning of each marketing year
European Union	Other grape juice must be of a density of 1.33 g/cm ³ at 200C	22.4% + 131 euro/hl + 206 euro/t (SSG) <i>Note:</i> The specific rate of duty per hectoliter shall be reduced to zero if the entry price per hectoliter is not less than 242.35 euro/t. In this case, the SSG shall not apply. <i>Note:</i> The entry price shall be reduced each year by the same amount as that by which the specific amount, constituting part of the rate, is reduced. This reduction shall be made at the beginning of each marketing year
Japan	Swine meat: ham, shoulder and cuts Not more than 738yen/kg Other	482 yen/kg (SSG) 4.3% (SSG) <i>Note:</i> In respect of [this product which is] described with a reference to a gate price [* the "gate price" means the lowest level of a c.i.f. price of a product of which an <i>ad valorem</i> duty is to be applied], the gate price shall be reduced annually by the same amount as that of the corresponding annual rate reduction of the specific duty.
Poland	Vermouth	48 min 14 euro/hl + 1.3 euro/hl
United States	Sugar	3.6606 c/kg less 0.020668 c/kg for each degree under 100 degrees (and fractions of a degree in proportion), but not less than 3.143854 c/kg.

Source: WTO Schedules.

Annex Table I.3. Agricultural tariff profile by HS chapter in selected OECD countries

Australia

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	17	100	100	0	0	0	0	0	0	0	0
2	53	100	100	0	0	0	0	0	0	0	0
4	29	100	79	17	0	17	17	7	5	12	31
5	17	100	94	0	0	0	0	2	0	1	5
6	12	100	100	0	0	0	0	1	0	0	0
7	60	100	72	0	0	0	0	4	1	2	8
8	55	100	82	0	0	0	0	2	1	2	5
9	32	100	100	0	0	0	0	0	0	0	0
10	16	100	100	0	0	0	0	1	0	0	0
11	34	100	76	0	0	0	0	2	1	3	8
12	45	100	89	0	0	0	0	1	1	2	5
13	13	100	85	0	0	0	0	2	1	2	5
14	10	100	100	0	0	0	0	1	0	0	0
15	47	100	64	0	0	0	0	4	2	2	5
16	26	100	65	0	0	0	0	6	2	2	5
17	19	100	11	37	0	37	37	12	20	21	46
18	11	100	55	0	0	0	0	7	2	3	5
19	18	100	11	0	0	0	0	5	4	2	5
20	50	100	2	4	4	0	0	7	5	1	8
21	18	100	67	0	0	0	0	4	2	2	5
22	28	100	11	43	0	0	0	8	4	2	5
23	25	100	100	0	0	0	0	1	0	0	0
24	11	100	55	45	27	9	9	12	4	8	24

Source: OECD (1997b).

Annex Table I.3. Agricultural tariff profile by HS chapter in selected OECD countries (cont.)

Canada

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	32	100	44	50	25	13	13	1	42	94	266
2	101	100	32	68	10	28	28	4	59	96	278
4	87	100	0	84	34	47	54	7	198	121	358
5	20	100	85	0	0	0	5	1	2	5	22
6	36	100	53	0	0	0	6	4	5	6	22
7	145	100	38	38	0	0	8	5	6	6	21
8	92	100	61	22	0	0	1	3	4	5	17
9	50	100	60	6	0	0	0	1	2	2	8
10	24	100	33	63	17	13	17	10	15	32	109
11	66	100	9	53	30	12	14	3	22	36	106
12	53	100	79	0	0	0	2	1	2	4	18
13	12	100	92	8	0	8	8	0	6	21	74
14	10	100	100	0	0	0	0	0	0	0	0
15	64	100	23	6	2	3	20	5	13	32	244
16	90	100	11	34	4	13	22	6	39	79	283
17	41	100	10	63	12	0	10	8	7	5	18
18	18	100	33	11	0	11	11	3	38	94	297
19	113	100	10	31	24	4	8	5	20	58	299
20	89	100	30	2	0	0	8	6	7	6	20
21	48	100	10	27	8	15	21	6	39	81	310
22	78	100	4	79	26	3	13	9	11	37	286
23	40	100	68	10	3	5	8	1	10	40	230
24	16	100	6	75	13	0	6	9	9	4	18

Source: OECD (1997b).

European Union

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	32	100	44	50	25	13	13	1	42	94	266
2	101	100	32	68	10	28	28	4	59	96	278
4	87	100	0	84	34	47	54	7	198	121	358
5	20	100	85	0	0	0	5	1	2	5	22
6	36	100	53	0	0	0	6	4	5	6	22
7	145	100	38	38	0	0	8	5	6	6	21
8	92	100	61	22	0	0	1	3	4	5	17
9	50	100	60	6	0	0	0	1	2	2	8
10	24	100	33	63	17	13	17	10	15	32	109
11	66	100	9	53	30	12	14	3	22	36	106
12	53	100	79	0	0	0	2	1	2	4	18
13	12	100	92	8	0	8	8	0	6	21	74
14	10	100	100	0	0	0	0	0	0	0	0
15	64	100	23	6	2	3	20	5	13	32	244
16	90	100	11	34	4	13	22	6	39	79	283
17	41	100	10	63	12	0	10	8	7	5	18
18	18	100	33	11	0	11	11	3	38	94	297
19	113	100	10	31	24	4	8	5	20	58	299
20	89	100	30	2	0	0	8	6	7	6	20
21	48	100	10	27	8	15	21	6	39	81	310
22	78	100	4	79	26	3	13	9	11	37	286
23	40	100	68	10	3	5	8	1	10	40	230
24	16	100	6	75	13	0	6	9	9	4	18

Source: OECD (1997b).

Annex Table I.3. Agricultural tariff profile by HS chapter in selected OECD countries (cont.)

Iceland

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	21	100	100	0	0	0	0	266	0	0	0
2	117	100	0	100	0	100	100	68	30	2	10
4	40	100	5	95	0	95	95	283	29	7	30
5	39	100	100	0	0	0	0	10	0	0	0
6	24	100	17	83	0	83	83	38	31	35	186
7	84	99	11	43	0	89	89	47	26	9	30
8	63	100	100	0	0	0	0	13	0	0	0
9	37	100	100	0	0	0	0	26	0	0	0
10	30	100	63	0	0	37	37	53	20	27	55
11	69	100	65	0	0	32	29	65	17	25	55
12	60	100	97	0	0	3	3	30	2	10	55
13	17	100	100	0	0	0	0	3	0	0	0
14	11	100	100	0	0	0	0	6	0	0	0
15	100	100	96	4	0	4	4	27	7	36	192
16	107	100	4	37	0	37	37	52	17	10	30
17	48	100	79	0	0	21	21	24	6	13	55
18	34	100	29	53	0	26	26	22	12	15	84
19	86	100	43	43	20	27	27	44	22	62	301
20	91	100	75	2	1	24	24	36	13	38	308
21	72	100	46	35	18	36	36	36	19	34	127
22	154	100	93	1	0	7	7	7	1	5	20
23	44	100	43	0	0	57	57	87	31	28	55
24	12	100	0	0	0	83	83	18	27	10	32

Source: OECD (1997b).

Japan

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	28	100	71	21	7	4	11	3	3	7	25
2	108	100	23	20	18	17	18	10	14	17	50
4	146	100	7	32	29	58	59	24	26	11	49
5	34	100	82	0	0	0	0	0	1	2	12
6	17	100	82	0	0	0	0	1	1	2	4
7	110	100	15	8	7	1	4	5	7	5	22
8	99	100	9	0	0	9	29	9	12	9	42
9	71	100	48	0	0	0	13	3	4	6	19
10	42	88	55	31	17	14	17	12	16	32	87
11	90	96	8	33	27	42	63	22	22	11	53
12	82	96	65	5	5	2	2	2	3	7	40
13	23	100	65	9	0	4	9	3	4	7	24
14	21	100	81	0	0	0	0	2	1	3	10
15	82	100	18	44	5	7	12	5	8	7	33
16	101	100	6	3	3	29	29	12	14	11	50
17	49	100	6	61	4	71	73	48	63	65	259
18	31	100	13	6	6	61	68	18	21	11	33
19	132	99	0	20	15	55	77	17	22	6	32
20	231	100	2	5	0	43	68	16	20	9	64
21	103	100	1	14	14	50	54	14	20	8	33
22	52	100	10	52	2	62	73	27	38	49	330
23	42	100	83	10	0	0	0	1	1	3	14
24	13	100	62	0	0	8	15	6	5	10	33

Source: OECD (1997b).

Annex Table I.3. Agricultural tariff profile by HS chapter in selected OECD countries (cont.)

Mexico

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	36	100	22	0	0	3	25	30	11	9	45
2	65	100	2	0	0	28	54	71	73	99	260
4	48	100	2	10	2	31	79	58	45	46	136
5	26	100	8	0	0	0	15	29	11	5	20
6	39	100	28	0	0	0	21	29	9	7	20
7	81	100	4	0	0	2	14	40	16	30	251
8	68	100	0	4	4	1	91	38	20	3	30
9	34	100	0	0	0	12	74	36	24	18	62
10	22	100	9	0	0	27	45	55	37	49	198
11	37	100	0	0	0	5	5	46	21	34	151
12	84	100	63	1	1	1	4	24	5	8	45
13	34	100	6	3	3	0	0	26	10	3	15
14	11	100	0	0	0	0	0	32	10	0	0
15	66	100	2	0	0	5	33	45	21	43	260
16	37	100	0	0	0	0	95	39	20	1	5
17	24	100	33	25	17	8	8	126	19	40	170
18	14	100	7	50	7	43	50	72	60	55	170
19	24	100	0	25	17	8	13	39	21	33	109
20	73	100	0	7	7	0	93	39	20	0	0
21	36	100	3	11	3	17	42	60	34	45	170
22	47	100	0	9	6	2	79	42	19	6	41
23	38	100	11	0	0	0	3	37	11	5	20
24	13	100	0	0	0	92	100	52	50	14	47

Source: OECD (1997b).

New Zealand

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	17	100	100	0	0	0	0	0	0	0	0
2	58	100	50	0	0	0	0	8	5	5	12
4	35	100	40	0	0	0	0	9	5	4	13
5	17	100	100	0	0	0	0	0	0	0	0
6	15	100	80	0	0	0	0	2	2	3	8
7	67	100	31	0	0	0	0	7	5	4	13
8	61	100	80	0	0	0	0	3	2	4	11
9	48	100	56	0	0	0	0	5	4	5	11
10	16	100	88	0	0	0	0	1	1	2	6
11	37	100	32	0	0	0	0	11	7	5	13
12	46	100	96	0	0	0	0	1	1	2	13
13	12	100	100	0	0	0	0	1	0	0	0
14	10	100	100	0	0	0	0	0	0	0	0
15	58	100	76	0	0	0	0	5	3	5	13
16	70	100	33	0	0	0	0	8	6	5	13
17	19	100	63	0	0	0	0	4	4	5	12
18	11	100	27	0	0	0	0	12	9	6	12
19	26	100	8	0	0	0	0	16	12	3	13
20	103	100	12	0	0	0	0	16	10	4	15
21	38	100	45	0	0	0	0	14	6	6	13
22	123	100	55	8	2	6	7	21	8	18	141
23	29	100	69	0	0	0	0	5	4	6	13
24	23	100	57	0	0	0	0	8	4	5	10

Source: OECD (1997b).

Annex Table I.3. Agricultural tariff profile by HS chapter in selected OECD countries (cont.)

Norway

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	27	100	11	78	11	74	74	302	362	183	621
2	66	100	0	100	24	76	76	371	425	42	95
4	36	100	0	94	6	94	94	353	397	102	392
5	30	100	67	33	0	27	27	39	50	84	220
6	38	100	0	24	0	21	37	18	62	100	249
7	141	100	16	82	0	53	57	116	119	127	441
8	109	100	17	83	2	25	30	58	51	98	409
9	34	100	62	35	6	0	0	9	1	1	5
10	27	100	26	74	0	44	44	185	187	210	446
11	55	100	13	85	0	65	73	266	281	216	553
12	76	100	38	59	0	53	53	141	171	176	544
13	14	100	43	0	0	0	0	2	2	2	5
14	10	100	100	0	0	0	0	21	0	0	0
15	123	100	20	54	1	33	38	92	82	110	406
16	51	100	0	96	69	27	27	101	346	136	479
17	36	100	22	78	6	36	42	58	63	100	412
18	16	100	31	69	0	38	63	188	212	255	530
19	38	100	0	97	5	76	89	180	214	142	458
20	98	100	10	87	0	55	56	136	150	157	677
21	46	100	11	67	0	26	57	86	75	134	609
22	44	100	64	36	0	5	5	34	23	93	474
23	53	100	43	57	2	51	51	92	123	123	409
24	11	100	36	64	0	0	18	9	10	15	47

Source: OECD (1997b).

Switzerland

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	42	100	0	100	88	0	0	29	3	2	4
2	164	100	0	100	98	0	0	56	3	1	2
4	80	100	0	100	85	1	0	4	5	3	11
5	31	100	3	97	87	0	0	22	3	3	7
6	53	100	8	92	64	9	0	2	5	4	10
7	359	100	3	97	95	1	0	28	4	6	24
8	128	100	4	96	70	5	2	54	6	5	24
9	38	100	29	71	13	8	0	1	3	4	13
10	93	100	0	100	100	0	0	56	–	–	–
11	157	100	0	100	99	0	0	192	6	–	0
12	197	100	7	93	93	0	0	13	0	0	0
13	18	100	6	94	94	0	0	0	0	–	0
14	12	100	0	100	83	0	0	0	5	0	0
15	164	100	1	99	98	0	0	0	1	1	2
16	58	81	28	72	53	0	0	1	1	1	3
17	49	100	0	100	35	31	29	16	15	16	63
18	35	100	3	97	89	3	0	4	5	5	11
19	84	100	0	100	99	0	0	0	1	–	0
20	151	100	3	97	56	23	17	43	14	11	36
21	45	100	0	100	16	44	36	12	14	9	25
22	71	100	4	96	13	48	21	9	14	13	50
23	69	100	1	99	77	0	0	0	3	1	4
24	15	100	20	80	13	53	47	78	16	16	51

Source: OECD (1997b).

Annex Table I.3. Agricultural tariff profile by HS chapter in selected OECD countries (cont.)

Turkey

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	105	100	47	0	0	0	5	30	3	4	20
2	233	100	0	0	0	3	47	151	15	9	44
4	213	100	2	0	0	3	53	158	17	12	49
5	53	100	9	0	0	0	8	11	5	6	20
6	49	100	0	0	0	0	4	18	6	4	20
7	163	100	9	0	0	0	41	23	12	10	24
8	186	100	0	0	0	6	31	44	12	10	68
9	59	100	0	0	0	0	64	70	23	10	20
10	64	100	20	0	0	0	52	107	15	12	26
11	113	100	0	0	0	0	38	43	17	9	20
12	117	100	3	0	0	15	72	22	19	11	35
13	49	100	0	0	0	0	4	29	4	5	24
14	33	100	0	0	0	0	0	13	3	2	4
15	246	100	0	0	0	22	57	30	19	14	72
16	126	100	0	0	0	63	92	102	31	12	26
17	61	100	3	0	0	16	59	123	21	14	49
18	28	100	7	0	0	0	7	78	11	4	20
19	67	100	1	0	0	22	22	58	16	11	37
20	276	100	0	0	0	93	100	56	59	12	58
21	62	100	0	0	0	24	61	50	24	16	58
22	86	100	0	0	0	44	83	85	42	24	68
23	60	100	3	0	0	0	0	10	9	5	15
24	44	100	0	0	0	20	100	67	37	27	92

Source: OECD (1997b).

United States

Chapter	No. of tariff lines	% Lines Bound	% Lines Duty free	% Lines Specific/Comp/Mixed	% Lines no AVE	% Lines Domestic Spikes	% Lines International Spikes	Simple bound mean	Simple mfn mean (1996)	Standard deviation	Range
1	23	100	48	35	13	0	0	1	2	3	12
2	93	100	20	54	14	13	13	6	7	10	30
4	251	100	1	50	25	11	16	9	10	6	25
5	21	100	71	5	0	0	0	1	1	2	7
6	28	100	21	29	4	0	0	2	3	3	10
7	154	100	10	55	0	10	18	5	8	7	33
8	115	100	21	54	0	4	12	4	6	7	33
9	47	100	70	15	2	0	0	1	1	2	9
10	21	100	19	67	0	0	5	2	3	4	15
11	38	100	16	50	0	0	8	3	4	5	18
12	58	100	50	43	0	7	10	6	12	40	183
13	15	100	60	7	0	0	0	1	2	3	9
14	14	100	57	14	7	0	0	1	1	2	6
15	66	100	27	47	6	8	8	4	5	6	22
16	90	100	17	10	0	2	2	4	5	5	35
17	66	100	3	52	11	0	0	5	7	4	13
18	78	100	9	44	41	0	0	5	6	4	10
19	68	100	13	26	15	0	22	6	9	6	18
20	169	100	6	43	0	12	24	8	14	28	147
21	88	100	8	44	10	6	6	6	8	5	20
22	70	100	6	87	19	10	14	4	8	13	86
23	36	100	33	33	8	0	0	1	2	3	8
24	56	100	36	64	2	32	34	20	71	143	501

Source: OECD (1997b).

Annex Table I.4. Potential application of the special agricultural safeguard by OECD Member and product category (number of tariff items)

Country	Product category												Total
	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	
Australia	–	–	–	5	–	–	–	–	5	–	–	–	10
Canada	51	2	–	34	43	6	1	–	–	–	7	6	150
Czech Republic	10	20	7	35	95	–	57	6	–	–	3	3	236
European Union	76	11	28	110	192	8	12	45	–	–	4	53	539
Hungary	15	6	3	6	18	2	9	37	3	–	13	5	117
Iceland	63	92	37	24	92	5	2	79	–	–	19	49	462
Japan	41	2	–	29	32	–	–	6	–	2	8	1	121
Korea	42	2	–	–	6	1	–	12	–	–	2	46	111
Mexico	44	32	24	37	54	9	44	11	10	–	26	2	293
New Zealand	–	–	–	–	–	–	–	2	–	–	–	2	4
Norway	81	93	22	24	84	6	8	168	–	–	34	61	581
Poland	15	13	4	6	19	2	10	38	3	3	9	22	144
Switzerland	263	138	25	48	94	5	35	219	–	–	49	85	961
United States	15	3	16	73	12	–	1	3	–	6	58	2	189
Total	716	414	166	431	741	44	179	626	21	11	232	337	3 918

Note: For the definition of the product categories and the abbreviations used see Annex Table I.9.

Source: OECD Secretariat calculations based on country notifications to WTO; WTO Secretariat.

Annex Table I.5. Scope of the special agricultural safeguard

Member	HS nomenclature/ year of tariff data	Percentage of agricultural tariff lines covered by SSG
Australia	1988	2
Canada	1988	10
Czech Republic	1990	13
European Union*	1988	31
Hungary	1991	60
Iceland	1988	40
Japan	1988	12
Korea	1988	8
Mexico	1988	29
New Zealand	1991	0
Norway	1988	49
Poland	1989	66
Switzerland	1988	59
United States	1989	9

* 12 Member States.

Note: The percentages represent the *number* of agricultural tariff lines covered by the SSG as a proportion of the number of all agricultural tariff lines of the Member concerned. Percentages are rounded; a percentage of 0 means less than 0.5%.

Source: WTO IDB, CD-Rom, Release 2.

Annex Table 1.6. Volume-based special safeguard use by OECD Member and product category, 1995-99 (number of tariff items)

1995													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
Japan ⁽¹⁾										5			5
Total										5			5
1996													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union ⁽²⁾								47					47
Japan ⁽¹⁾	1			14	42					5			62
Total	1			14	41			47		5			108
1997													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union ⁽²⁾								46					46
Japan ⁽¹⁾	1			4									5
Korea ⁽³⁾	2												2
Poland ⁽⁴⁾								1					1
Total	3			4				47					54
1998													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union ⁽²⁾								27					27
Japan ⁽¹⁾	1			2									3
Korea ⁽³⁾	1												2
Poland ⁽⁴⁾					1								1
United States ⁽⁵⁾					6								6
Total	2			2	7			27					39
1999													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
Japan ⁽¹⁾	1			2									3
Poland ⁽⁴⁾												1	1
Total	1			2								1	4
1995-99													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union ⁽²⁾	0	0	0	0	0	0	0	120	0	0	0	0	120
Japan ⁽¹⁾	4	0	0	22	42	0	0	0	0	10	0	0	78
Korea ⁽³⁾	3	0	0	0	0	0	0	0	0	0	0	0	3
Poland ⁽⁴⁾	0	0	0	0	1	0	0	1	0	0	0	1	3
United States ⁽⁵⁾	0	0	0	0	6	0	0	0	0	0	0	0	6
Total	7	0	0	22	49	0	0	121	0	10	0	1	210

Notes: For the definition of the product categories and the abbreviations used see Annex Table 1.9.

(1) = HS 9-digit item; fiscal year. (2) = HS 8-digit item; marketing year. (3) = HS 10-digit item; calendar year. (4) = HS 4-digit item; calendar year. (5) = HS 8-digit item; calendar year.

Source: WTO (2000), *Special Agricultural Safeguard: Background Paper by the Secretariat*, G/AG/NG/S/9

Annex Table I.7. Price-based special agricultural safeguard action by OECD Member and product category, 1995-2000 (number of tariff items)

1995													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union*			10		1	1							12
Japan**	1			2									3
Korea***	1	2											3
United States*	1	1	2	13			1				6		24
Total	3	3	12	15	1	1	1				6		42
1996													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union*			10		4								14
Japan**								1					1
Korea***	3	2											5
Poland**												2	2
United States*	4		7	24				2		1	11		49
Total	7	2	17	24	4			3		1	11	2	71
1997													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union*				10	4								14
Korea***	1	2						2					5
Poland**			1									2	3
United States*	3	1	11	34				2			23		74
Total	4	3	12	44	4			4			23	2	96
1998													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union*			9		3								12
Japan**	1										1		2
Korea***	2	1						2					5
Poland**	1											4	5
United States*	5		11	35			1	2			20		74
Total	9	1	20	35	3		1	4			21	4	98
1999													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
Hungary***			7										7
Japan**	4			1			2				1		8
Poland**	4		2		96							4	106
Switzerland*					7								7
Total	8		9	1	103		2				1	4	128
2000													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
Japan**	2			1									3
Total	2												3
1995-2000													
Country	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	Total
European Union*	0	0	29	10	12	1	0	0	0	0	0	0	52
Hungary***	0	0	7	0	0	0	0	0	0	0	0	0	7
Japan**	8	0	0	4	0	0	2	1	0	0	2	0	17
Korea***	7	7	0	0	0	0	0	4	0	0	0	0	18
Poland**	5	0	3	0	96	0	0	0	0	0	0	12	116
Switzerland*	0	0	0	0	7	0	0	0	0	0	0	0	7
United States*	13	2	31	106	0	0	2	6	0	1	60	0	221
Total	33	9	70	120	115	1	4	11	0	1	62	12	438

* HS 8-digit items. ** HS 9-digit items. *** HS 10-digit items.

Note: For the definition of the product categories and the abbreviations used see Annex Table I.9.

Source: WTO (2000), *Special Agricultural Safeguard: Background Paper by the Secretariat*, G/AG/NG/S/9.

Annex Table I.8. SSG trigger prices and external reference prices used for tariffication of selected products

Country	Product	Tariff line	SSG trigger price	External reference price	Units	Change (%)
EU	Common wheat	1001.9095	148	93	euro/tonne	59
	Maize		114	95	" "	20
	Rice, milled		573	235	" "	144
	Sugar (raw)	1701.1110	418	176	" "	138
	Sugar (white)		531	195	" "	172
	Cane molasses	1703.10.00	79		" "	
	Bananas, fresh		553	267	" "	107
	Lemons		442	303	" "	
	Skimmed milk powder		706	685	" "	3
	Butter		2 483	943	" "	163
	Beef	0202.1000	2 310	1 526	" "	51
	Egg yolks, dried, other	0408.11.80	3 433			
Japan	Milk powder	0402.10.129	183.85	124	JPY/Kg	48
	Whey	0404.10.149	76.11		" "	
	Other starches	1108.19.099	202.76		" "	
Korea	Buckwheat	1008.10.0000	221		KRW/Kg	
	Wheat starch	1008.11.0000	604		" "	
	Ground nuts (in shell)	1202.10.0000	638		" "	
	Sweet potatoes	1108.19.1000	425		" "	
Poland	White sugar	1701.99.100	1 464.72		PLN/piece	
	Cut roses	0603.10.110	0.45		" "	
USA	Sugar (refined)	1701.99.50.00	0.5	0.27	USD/Kg	87
	Peanuts (shelled)	1202.20.80.40	1.24	0.64	" "	94
	Peanuts, in shell	1202.10.80.40	0.34	0.27	" "	24
	Cotton waste	5202.99.30.00	8.15	1.33	" "	515
	Not-fat dry milk	0402.10.50.00	1.02	0.86	" "	19
	Sweetened milk powder	0402.29.50.00	2.63		" "	
	Fresh blue cheese	0406.10.18.00	4.05		" "	
	Fresh Edam/Gouda cheese	0406.10.48.00	3.2	1.47	" "	118
	Cheddar cheese	0406.90.12.00	2.18	1.36	" "	60
	Butter	0405.00.40.00	2.78	1.31	" "	112
	Beef	0201.30.80.00	1.97	1.51	" "	30
Cocoa powder, over 10% sugar	1806.10.15.00	0.58		" "		

Source: OECD Secretariat calculations based on Country Supporting Tables to WTO.

Annex Table I.9. Definition of product categories used in Annex Tables I.4, I.6 and I.7

Code	Product category	Harmonised system nomenclature
CE	Cereals	1001-08, 1101-04, 1107-09, 1901-05
OI	Oil seeds, fats and oils and products	1201-08, Ch. 15 (except 1504), 2304-06
SG	Sugar and confectionery	1701-04
DA	Dairy products	0401-06
ME	Animals and products thereof	0101-06, 0201-10, 1601-02
EG	Eggs	0407-08
BV	Beverages and spirits	2009, 2201-08
FV	Fruit and vegetables	0701-14, 0801-14, 1105-06, 2001-08
TO	Tobacco	2401-03
FI	Agricultural fibres	5001-03, 5101-03, 5201-03, 5301-02
CO	Coffee, tea, mate, cocoa and preparations, spices and other food preparations	0409-10, 0901-10, 1801, 1803-06, 2101-06, 2209
OA	Other agricultural products	Ch.05 (sauf 0509, 0601-04, 1209-10, 1211-14, 1301-02, 1401-04, 1802, 2301 (sauf 2301.20), 2302-03, 2307-09, 2905.43-44, 3301, 3501-05, 3809-10, 3823.60, 4101-03, 4301.

Annex Table I.10. Number of tariff quota lines and fill rates by country

	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Australia	2	2	2	2	2	99	98	90	91	89
Canada	21	21	20	20	n.a.	78	85	82	85	n.a.
Czech Republic	24	24	24	24	24	44	50	47	45	46
European Union	53	80	85	42	42	76	72	71	66	68
Hungary	66	68	67	67	65	55	52	45	43	41
Iceland	88	87	87	n.a.	n.a.	65	67	70	n.a.	n.a.
Japan	18	18	18	18	18	69	72	70	67	71
Korea	67	67	67	64	n.a.	78	76	76	70	n.a.
Mexico	11	n.a.	n.a.	n.a.	n.a.	80	n.a.	n.a.	n.a.	n.a.
New Zealand	3	3	3	3	3	62	40	33	27	50
Norway	224	222	221	221	n.a.	68	64	62	65	n.a.
Poland	10	13	15	14	19	47	52	57	41	31
Switzerland	28	27	27	27	n.a.	92	92	89	90	n.a.
United States	47	52	53	53	40	45	53	55	66	73
OECD ^(a)	662	684	689	555	213	67	66	64	63	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff and Other Quotas: Background Paper by the Secretariat*, G/AG/NG/S/7.

Annex Table I.11. Number of tariff quota lines and fill rates by product category

	Number of quota lines					Fill rates				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Beverages	15	14	15	14	10	59	60	42	48	20
Cereals	100	105	105	83	26	63	61	58	63	56
Coffee	26	27	27	22	12	60	56	66	56	49
Eggs	14	14	14	10	2	50	53	43	58	n.a.
Agricultural fibres	9	8	9	9	1	38	31	20	34	34
Fruit and vegetables	207	217	221	199	65	74	73	71	68	50
Livestock	98	106	106	71	24	65	63	60	63	53
Other	39	39	39	33	4	69	56	64	54	57
Oilseeds	41	41	41	19	12	62	65	68	57	58
Sugar	19	19	19	13	6	76	74	78	82	66
Tobacco	3	4	4	4	3	69	60	56	55	53
Dairy products	91	90	89	78	48	66	68	67	66	49
Switzerland	15	14	15	14	10	59	60	42	48	20
United States	100	105	105	83	26	63	61	58	63	56
OECD ^(a)	662	684	689	555	213	67	66	64	63	n.a.

Note: (a) Average fill rate has been calculated from the number of notified quota lines.

Source: OECD Secretariat calculations based on WTO (2000), *Tariff and Other Quotas: Background Paper by the Secretariat*, G/AG/NG/S/7.

Annex Table I.12. Distribution of simple average fill rates, by country

Year		Less than	From 20 to	From 40 to	From 60 to	80% or more	Total
		20%	39.99%	59.99%	79.99%		
1995	Australia	.	.	.	.	2	2
	Canada	3	.	1	4	13	21
	Czech Republic	9	4	4	.	7	24
	European Union	7	4	3	6	33	53
	Hungary	18	2	17	7	22	66
	Iceland	20	6	8	8	46	88
	Japan	1	2	5	2	8	18
	Korea	12	.	3	5	47	67
	Mexico	1	1	1	.	8	11
	New Zealand	1	.	.	1	1	3
	Norway	46	19	14	19	126	224

Annex Table I.12. Distribution of simple average fill rates, by country (cont.)

	Year	Less than 20%	From 20 to 39.99%	From 40 to 59.99%	From 60 to 79.99%	80% or more	Total
Poland		4	1	1	.	4	10
Switzerland		1	.	1	1	25	28
United States		17	8	1	5	16	47
Australia	1996	.	.	.	.	2	2
Canada		2	.	.	3	16	21
Czech Republic		10	1	3	1	9	24
European Union		11	9	5	8	47	80
Hungary		21	9	9	5	24	68
Iceland		18	6	10	5	48	87
Japan		1	3	3	2	9	18
Korea		12	3	2	2	48	67
New Zealand		2	.	.	.	1	3
Norway		58	10	23	16	115	222
Poland		4	1	.	4	4	13
Switzerland		.	1	.	2	24	27
United States		16	7	3	5	21	52
Australia	1997	.	.	.	1	1	2
Canada		2	1	1	1	15	20
Czech Republic		9	3	2	3	7	24
European Union		15	7	4	10	49	85
Hungary		25	6	15	5	16	67
Iceland		17	6	8	1	55	87
Japan		1	1	6	2	8	18
Korea		13	3	1	3	47	67
New Zealand		2	.	.	.	1	3
Norway		62	13	15	18	113	221
Poland		4	1	2	2	6	15
Switzerland		2	.	.	2	23	27
United States		14	5	7	9	18	53
Australia	1998	.	.	.	.	2	4
Canada		2	1	.	1	16	20
Czech Republic		11	1	1	4	7	24
European Union		9	3	3	6	21	42
Hungary		26	9	9	7	16	67
Iceland		.	.	.	.	.	.
Japan		2	2	5	1	8	18
Korea		15	4	3	1	41	64
Mexico		.	.	.	.	.	.
New Zealand		2	.	1	.	.	3
Norway		57	15	13	18	118	221
Poland		.	.	.	.	.	.
Switzerland		.	1	1	3	22	27
United States		11	4	5	5	28	53
Australia	1999	.	.	.	1	1	2
Canada		.	.	.	.	.	.
Czech Republic		12	.	3	.	9	24
European Union		6	4	2	4	18	34
Hungary		26	11	8	5	15	65
Iceland		.	.	.	.	.	.
Japan		1	3	2	1	8	15
Korea		.	.	.	.	.	.
New Zealand		1	.	1	.	1	3
Norway		.	.	.	.	.	.
Poland		11	2	1	2	3	19
Switzerland		.	.	.	.	.	.
United States		5	4	2	4	25	40

Source: WTO (2000), *Tariff and Other Quotas: Background Paper by the Secretariat*, G/AG/NG/S/7.

Annex Table I.13. Distribution of simple average fill rates, by product category

Year		Less than 20%	From 20 to 39.99%	From 40 to 59.99%	From 60 to 79.99%	80% or more	Total
1995	Beverages and spirits	4	2	2	0	7	15
	Cereals	28	4	7	11	50	100
	Coffee, tea, mate, cocoa and preparations spices and other food preparations	5	5	2	3	11	26
	Dairy Products	18	8	11	4	50	91
	Eggs	5	2	1	0	6	14
	Agricultural fibres	5	0	0	1	3	9
	Fruit and vegetables	29	11	18	25	124	207
	Livestock	25	7	6	6	54	98
	Other commodities	7	4	1	5	22	39
	Oilseeds products	10	3	7	1	20	41
	Sugar and confectionery	3	1	1	0	14	19
Tobacco	0	0	1	1	1	3	
1996	Beverages and spirits	5	0	1	0	8	14
	Cereals	26	12	9	9	49	105
	Coffee, tea, mate, cocoa and preparations spices and other food preparations	5	6	3	2	11	27
	Dairy Products	16	8	8	6	52	90
	Eggs	5	0	1	3	5	14
	Agricultural fibres	5	1	0	0	2	8
	Fruit and vegetables	35	13	16	20	133	217
	Livestock	31	3	10	4	58	106
	Other commodities	12	3	2	7	15	39
	Oilseeds products	9	2	7	1	22	41
	Sugar and confectionery	4	1	0	1	13	19
Tobacco	1	0	1	1	1	4	
1997	Beverages and spirits	8	0	1	1	5	15
	Cereals	30	11	9	6	49	105
	Coffee, tea, mate, cocoa and preparations spices and other food preparations	5	2	3	4	13	27
	Dairy Products	18	4	11	9	47	89
	Eggs	6	1	1	2	4	14
	Agricultural fibres	7	0	0	1	1	9
	Fruit and vegetables	38	12	22	21	128	221
	Livestock	31	9	5	7	54	106
	Other commodities	10	1	5	2	21	39
	Oilseeds products	9	3	4	1	24	41
	Sugar and confectionery	3	1	0	2	13	19
Tobacco	0	1	2	0	1	4	
1998	Beverages and spirits	7	0	1	0	6	14
	Cereals	27	3	2	8	43	83
	Coffee, tea, mate, cocoa and preparations spices and other food preparations	6	2	3	3	8	22
	Dairy Products	17	8	4	6	43	78
	Eggs	4	0	0	1	5	10
	Agricultural fibres	5	0	2	1	1	9
	Fruit and vegetables	38	15	17	21	108	199
	Livestock	15	9	5	6	36	71
	Other commodities	11	4	3	1	14	33
	Oilseeds products	5	3	2	1	8	19
	Sugar and confectionery	2	0	0	1	10	13
Tobacco	0	1	2	0	1	4	
1999	Beverages and spirits	7	0	2	0	1	10
	Cereals	10	1	1	3	11	26
	Coffee, tea, mate, cocoa and preparations spices and other food preparations	4	1	1	3	3	12
	Dairy Products	7	5	4	4	28	48
	Eggs	2	0	0	0	0	2
	Agricultural fibres	0	1	0	0	0	1
	Fruit and vegetables	22	9	6	5	23	65

Annex Table 1.13. Distribution of simple average fill rates, by product category (cont.)

Year	Less than 20%	From 20 to 39.99%	From 40 to 59.99%	From 60 to 79.99%	80% or more	Total
Livestock	5	4	6	3	6	24
Other commodities	1	0	1	0	2	4
Oilseeds products	4	1	1	0	6	12
Sugar and confectionery	2	0	0	0	4	6
Tobacco	0	2	0	0	1	3

Source: OECD Secretariat calculations based on WTO (2000), *Tariff and Other Quotas: Background Paper by the Secretariat*, G/AG/NG/S/7.

Annex Table I.14. Tariff quota for selected products in selected OECD countries

Commodity	Country	Quota allocated to specific countries (a)	Nominal protection coefficients (b)				Tariff rates (c)			Tariff-quota fill rate		
			(%)				(%)			(%)		
			1986-88	1995	1996	1997	Base 1986-88	In-quota 1995	Over-quota 1995	1995	1996	1997
Wheat	Canada (other than durum)		36	13	0	11	90	20	90	18	74	27
	European Union	No	102	13	-10	-4	162	0	89	100	100	21
	Iceland		0	0	0	0	0	0	0	100+	71	
	Japan	No	640	535	522	554	271	0	51	100+	100+	100+
	Mexico		-11	-18	15	6	74	50	73	100	n.a	n.a
	Norway		247	114	77	126	495	306	470	41	52	84
	Switzerland		301	282	150	201	332	129	327	100	100	
Sugar	European Union (sugar cane)	Yes	227	81	95	100	404	0	209	100	100	100
	Hungary (beet)	No	106	56	66	84	80	30		n.a	0	0
	Japan (refined)	No	89	85	81	73	136		146	n.a	n.a	n.a
	United States (raw cane)	Yes	137	54	63	62	198	44	115	100+	100+	97
Cheese	Australia	Yes	121	60	74	63	73	3	48	98	95	79
	Canada	Yes	149	87	93	87	289	2	289	100	100	100
	European Union (cheddar)	Yes	202	166	142	98	202	13	149	97	90	93
	Hungary	No					105	50		50	51	18
	Iceland	No					578	185	564	100+	100+	100+
	Japan (fresh)	No	31	30	36	29	35	0	35	n.a	n.a	n.a
	United States (cheddar)	Yes	89	31	45	26	111	10	63	87	89	87
Butter	Canada	Yes	198	129	83	134	351	114	351	100	100	100
	Czech Republic	Yes	n.a.	74	35	60	82	32	80	11	16	27
	European Union (current access)	Yes	205	165	97	127	258	70	225	n.a	n.a	n.a
	European Union (minimum access)							77	225	n.a	100	99
	Hungary	No					159	60		50	25	84
	Iceland	No					674	216	657	0	0	0
	Japan (and butteroil)	No	519	533	325	380	633	35	773	27	20	23
	Korea	No					99	40	99	100	100	100
	Norway	No					403	60	343	0	2	14
United States	Yes	138	7	12	55	141	7	97	6	88	27	
Skimmed milk powder	Canada	Yes	46	21	30	31	237	3	237	100	100	100+
	Czech Republic		n.a.	15	0	0	n.a	30	48	2	3	0.2
	European Union	Yes	111	41	17	19	161	33	81	100	99	99
	Japan (for school)	No	266	189	116	124	321	0	287	58	64	56
	Japan (other SMP)	No					346	0	297	49	40	44
United States	No	73	23	20	23	179	2	44	27	31	50	
Beef	Canada	Yes	9	0	0	0	38	2	38	100+	97	100+
	Czech Republic	No	257	25	24	2	42	30	112	19	52	11

Annex Table I.14. **Tariff quota for selected products in selected OECD countries (cont.)**

Commodity	Country	Quota allocated to specific countries (a)	Nominal protection coefficients (b)				Tariff rates (c)			Tariff-quota fill rate		
			%				%			%		
			1986-88	1995	1996	1997	Base 1986-88	In-quota 1995	Over-quota 1995	1995	1996	1997
	European Union	Yes	91	46	40	80	160	20	88	93	88	88
	Hungary	No	195	23	6	-8	112	25	45	100	13	93
	Korea	No	130	245	211	141	45	44	45	100	100+	91
	Norway	No	144	46	58	115	405	130	344	46	56	80
	Switzerland	Yes	258	147	79	111	297	26	240	n.a	n.a	n.a
	United States	Yes	6	0	0	0	31	3	31	66	59	67
Pigmeat	Czech Republic	No	167	15	15	-8	46	30	45	29	34	9
	European Union	No	40	11	-1	1	86	23	67	100	91	72
	Hungary	Yes	93	27	-3	-11	61	25		7	40	100
	Iceland	No	359	175	91	103	538	172	525	0	3	4
	Japan (<i>ad valorem</i>)	No	70	149	100	72	5		5	n.a	n.a	n.a
	Japan (specific)	No					235		285	n.a	n.a	n.a
	Korea	No	45	89	61	37	30	25	37	100	100	100
	Norway	No	265	117	79	86	428	137	363	15	0	11
Poultrymeat	Canada (poultrymeat)	No	18	0	2	1	280	13	280	100+	100+	100+
	Canada (turkeys)	No	18	11	14	19	182	13	182	100+	99	100+
	Czech Republic	Yes	182	31	15	18	54	24	52	83	85	100
	European Union	No	48	30	19	15	48	14	41	100	100	100
	Hungary	Yes	62	31	17	20	61	35		4	6	17
	Iceland	No	654	577	471	483	467	149	455	1	8	61
	Japan	No	13	12	12	12	14		14	n.a	n.a	n.a
	Korea	No	60	130	133	110	24	20	35	75	95	100
	Norway		569	233	149	137	500	210	558	0	0	0
Sheepmeat	Czech Republic	No						20	233	43	93	33
	European Union	Yes	181	56	27	10	192	0	109	80	90	100
	Hungary	No	50	-6	3	-8	40	20		0	100	94
	Iceland	No	276	25	-21	-13	397	127	387	13	0	0.3
	Norway	No	169	58	23	5	505	162	429	0	13	2
	Poland		25	24	12	12	100	25		n.a	n.a	n.a

Notes:

(a) See Annex for more details on country specific tariff quota allocations.

(b) Where the tariffs are specific or a combination of specific and *ad valorem* they have converted to an *ad valorem* equivalent. See Methodology and Data sources in the Annex.

(c) In cases where more than one tariff rate is applicable, the maximum rates are used in the calculations.

Source: OECD Secretariat calculations.

Annex Table I.15. Tariff quotas, fill rates and administration methods for selected products

Country	Product	Initial quantity	Final quantity	Notified quantity					Admin. regime	Fill rates				
				1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
Australia	Cheese	11 500	11 500	11 500	11 500	11 500	11 500	11 500	HI	98	95	79	82	78
	Unmanufactured Tobacco	11 184	11 184	11 184	11 184	11 184	11 184	11 184	AT	136	130	127	115	128
Canada	Wheat	136 130	226 883	136 130	154 281	172 431	190 582	.	FC	18	74	27	33	.
	Barley	239 400	399 000	239 400	271 230	303 240	335 160	.	FC	5	7	12	18	.
	Broiler hatching eggs and chicks	7 949 000	7 949 000	7 949 000	7 949 000	7 949 000	7 949 000	.	OT	103	114	132	175	.
	Chicken, live, meat and products	39 844	39 844	39 844	39 844	39 844	39 844	.	MX	130	131	139	146	.
	Turkey, live, meat and products	4 467	5 588	4 467	4 691	4 915	5 140	.	MX	105	99	101	103	.
	Eggs and egg products	12 822 000	21 370 000	12 822 000	14 531 600	16 241 200	17 950 800	.	MX	98	95	120	132	.
	Beef and Veal	76 409	76 409	76 409	76 409	76 409	76 409	.	LD	113	97	117	111	.
	Fluid Milk	64 500	64 500	64 500	64 500	.	.	.	AT	100	100	.	.	.
	Cream	394	394	394	394	394	394	.	LD	77	80	63	83	.
	Milk, concentrated, condensed	12	12	12	12	12	12	.	HI	100	100	126	121	.
	Yogurt	332	332	332	332	332	332	.	HI	72	86	88	100	.
	Powdered Buttermilk:	908	908	908	908	908	908	.	HI	116	133	101	120	.
	Dry Whey:	3 198	3 198	3 198	3 198	3 198	3 198	.	LD	66	101	83	160	.
	Other Products of Milk Constituents	4 345	4 345	4 345	4 345	4 345	4 345	.	LD	46	67	100	100	.
	Butter	1 964	3 274	1 964	2 226	2 488	2 750	.	ST	100	100	100	100	.
	Cheese	20 412	20 412	20 412	20 412	20 412	20 412	.	HI	100	100	100	101	.
	Other Dairy	70	70	70	70	70	70	.	LD	100	310	224	575	.
Ice Cream	347	484	347	374	402	429	.	HI	89	99	104	121	.	
Czech Republic	Live bovine animals, meat of bovine animals	6 675	11 125	7 500	8 158	8 900	9 642	10 383	FC	19	52	11	61	49
	Meat of poultry	2 085	3 471	2 400	2 547	2 778	3 009	3 240	FC	83	85	100	100	100
	Milk and cream	1 146	1 910	1 273	1 401	1 528	1 655	1 783	FC	2	3	0	0	1
	Yogurt	6 670	6 670	6 670	6 670	6 670	6 670	6 670	FC	50	52	50	98	100
	Butter	1 669	2 781	1 854	2 039	2 225	2 410	2 596	FC	11	16	27	9	6
	Potatoes	25 556	33 583	24 894	28 232	29 570	30 908	32 245	FC	100	100	0	29	0
	Grapes, fresh	2 358	3 930	2 620	2 882	3 144	3 406	3 668	FC	2	4	20	19	6
	Wheat starch, corn starch, potato starch	3 217	3 217	3 217	3 217	3 217	3 217	3 217	FC	97	5	7	7	16
	Rape seeds	9 720	16 200	10 800	11 880	12 960	14 040	15 120	FC	15	0	0	0	0
	Sunflower seeds	1 701	1 701	1 701	1 701	1 701	1 701	1 701	FC	20	100	100	100	100
	Sunflower oil	7 705	7 705	8 000	7 705	7 705	7 705	7 705	FC	42	76	62	68	86
	Rape oil	3 694	4 750	3 870	4 046	4 222	4 398	4 574	FC	13	1	0	1	0
	Margarine, edible mixtures of fats or oils	17 181	17 181	17 181	17 181	17 181	17 181	17 181	FC	16	15	16	13	19
	Ice cream	1 289	2 075	1 420	1 551	1 682	1 813	1 944	FC	100	100	100	100	100
	European Union	Meat of bovine animals, fresh or chilled (high quality)	37 800	37 800	35 300	38 550	.	.	.	LD	93	88	88	.
Meat of bovine animals, frozen (thick and thin skirt)		50 700	50 700	50 000	51 050	51 050	.	.	LD	66	100	100	.	.
Boneless meat of bovine animals, fresh (Special or good-quality beef cuts, special boxed beef)		11 000	11 000	11 000	11 000	11 000	.	.	LD	100	100	100	.	.
Boneless meat of bovine animals, fresh ("Special or good-quality beef cuts... "special boxed beef"...		300	300	150	300	.	.	.	LD	96	100	100	.	.
Meat of sheep or goats, fresh chilled or frozen		283 825	283 825	319 575	283 825	283 825	283 825	283 825	LD	80	90	88	81	79
Meat of swine, fresh, chilled or frozen : (carcasses and half carcasses)		0	15 000	.	3 000	6 000	.	.	LD	.	0	0	.	.

Annex Table I.15. Tariff quotas, fill rates and administration methods for selected products (cont.)

Country	Product	Initial quantity	Final quantity	Notified quantity					Admin. regime	Fill rates				
				1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
	Meat of swine, fresh, chilled or frozen : (loins and cuts... bellies)	7 000	7 000	7 000	7 000	7 000	7 000	7 000	LD	37	91	72	47	48
	Turkey meat, fresh, chilled or frozen	0	1 000	.	200	400	.	.	LD	.	100	100	.	.
	Poultry eggs for consumption, in shell	70 301	135 000	82 651	83 241	96 181	.	.	LD	0	1	0	.	.
	Butter	76 667	76 667	.	.	.	.	.	LD	.	.	.	.	.
	Cheese for processing	4 500	4 500	3 500	4 500	4 500	4 500	4 500	LD	89	54	100	98	100
	Cheddar (Whole Cheddar cheeses (of the conventional flat cylindrical...))	10 250	10 250	9 000	10 250	10 250	10 250	10 250	LD	96	80	93	77	100
	Cheddar (' Made from unpasteurised milk, of a minimum fat content of 50 %...)	4 000	4 000	2 750	4 000	4 000	4 000	4 000	LD	100	84	100	100	100
	Butter	0	10 000	.	2 000	4 000	.	.	LD	.	100	100	.	.
	– Emmental, including processed	2 934	18 400	3 467	6 027	9 120	.	.	LD	100	100	100	.	.
	– Gruyere, Sbrinz, including processed	734	5 200	867	1 627	2 520	.	.	LD	100	100	100	.	.
	– Cheddar	3 000	15 000	3 000	5 400	7 800	.	.	LD	99	99	99	.	.
	– Cheese for processing	4 000	20 000	4 000	7 200	10 400	.	.	LD	100	100	100	.	.
	Skimmed milk powder	40 401	68 000	40 701	45 921	51 441	.	.	LD	100	99	99	.	.
	Wheat	300 000	300 000	300 000	300 000	300 000	300 000	300 000	LD	100	100	21	100	67
	Durum wheat	50 000	50 000	.	50 000	50 000	.	.	LD	.	86	0	.	.
	Oats	21 000	21 000	.	21 000	21 000	.	.	LD	.	5	10	.	.
	Maize	500 000	500 000	500 000	500 000	500 000	.	.	LD	100	100	98	.	.
	Husked (brown) rice	20 000	20 000	.	20 000	20 000	20 000	20 000	LD	.	62	100	100	100
	Manioc (casava)	5 500 000	5 500 000	5 500 000	5 500 000	5 500 000	5 500 000	5 500 000	LD	56	57	61	52	74
	Sweet potatoes (not China)	5 000	5 000	5 000	5 000	5 000	5 000	5 000	LD	3	1	1	1	0
	Fresh bananas, other than plantains	2 200 000	2 200 000	2 200 000	2 200 000	2 200 000	2 200 000	2 200 000	HI	100	100	100	100	100
	Maize	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	2 000 000	LD	78	69	69	79	67
	Grain sorghum	300 000	300 000	300 000	300 000	300 000	300 000	300 000	LD	71	131	69	87	67
	Cane or beet sugar	1 304 700	1 304 700	1 304 700	1 304 700	1 304 700	.	.	LD	100	100	100	.	.
	Raw cane sugar, for refining	85 463	85 463	.	128 195	128 195	.	.	LD	.	100	100	.	.
	Orange juice	1 500	1 500	1 500	1 500	1 500	1 500	1 500	FC	34	30	31	27	21
Hungary	Bovine animals and meat	13 595	13 595	13 595	13 595	13 595	13 595	13 595	LD	100	13	93	86	23
	Swine	11 339	19 909	11 339	13 052	14 767	16 481	18 195	LD	7	40	100	100	54
	Sheep and goats	26	92	26	40	52	66	79	LD	0	100	94	100	100
	Poultry	6 748	11 425	6 748	7 684	8 619	9 554	10 490	LD	4	6	17	54	8
	Milk and cream	99 901	181 015	99 901	116 124	132 347	148 569	164 792	LD	5	20	2	3	3
	Butter	178	178	178	178	178	178	178	LD	50	25	84	72	99
	Cheese and curd	319	1 206	319	496	674	851	1 029	LD	50	51	18	14	74
	Eggs not in shell	8	8	8	8	8	8	8	LD	50	0	0	0	0
	Honey	3 448	3 448	3 448	3 448	3 448	3 448	3 448	LD	1	0	1	0	0
	Bananas	16 744	17 079	16 744	16 812	16 878	16 945	17 012	LD	95	95	100	100	97
	Citrus fruit	61 921	63 159	61 921	62 169	62 416	62 664	62 911	LD	65	93	6	5	4
	Wheat	17 551	48 623	17 551	23 766	29 980	36 194	42 409	LD	0	29	13	0	0
	Rye	14 860	15 157	14 860	14 920	14 979	15 038	15 098	LD	0	26	2	0	0
	Barley	109 058	109 058	109 058	109 058	109 058	109 058	109 058	LD	0	47	13	0	6
	Maize (corn)	116 896	222 935	116 896	138 104	159 312	180 519	201 727	LD	2	17	6	2	0
	Rice	19 052	19 433	19 052	19 128	19 204	19 281	19 355	LD	50	96	98	99	99
	Cereal grains	251	256	251	252	252	.	.	LD	2	2	0	.	.
	Sugar beet	0	7 514	.	1 502	3 005	4 508	6 011	LD	.	0	0	0	0
	Sunflower-seed oil	1 098	2 600	1 098	1 398	1 699	1 999	2 300	LD	100	29	28	29	100
	Rape and mustard oil	987	987	987	988	987	987	987	LD	52	51	47	51	100

Annex Table I.15. Tariff quotas, fill rates and administration methods for selected products (cont.)

Country	Product	Initial quantity	Final quantity	Notified quantity					Admin. regime	Fill rates				
				1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
	Wine, champagne [hl]	38 3500	38 3500	38 3500	38 3500	38 3500	38 3500	38 3500	LD	9	7	2	0	2
	Unmanufactured tobacco	6 528	6 528	6 528	6 528	6 528	6 528	6 528	LD	62	50	44	45	26
Iceland	Bones and horn-coes, unworked, defatted, simply prepared (but not cut to shape), treated with acid or degelatinised; powder and waste of these products	11	11	11	11	11	.	.	AT	0	0	0	.	.
	Cut flowers and flower buds of kind suitable for bouquets or for...	42	42	42	42	42	.	.	AT	70	71	82	.	.
	Potatoes, fresh or chilled	1 575	1 575	1 575	1 575	1 575	.	.	AT	79	52	51	.	.
	Wheat and meslin	7 144	7 144	7 144	7 144	7 144	.	.	AT	201	188	185	.	.
	Barley	520	520	520	520	520	.	.	AT	2 273	3 160	3 737	.	.
	Oats	199	199	199	199	199	.	.	AT	176	22	125	.	.
	Maize	1 690	1 690	1 690	1 690	1 690	.	.	AT	99	1 106	940	.	.
	Rice	503	503	503	503	503	.	.	AT	94	146	186	.	.
	Starches; inulin	983	983	983	983	983	.	.	AT	21	23	20	.	.
	Soya beans, whether or not broken:	191	191	191	191	191	.	.	AT	3	46	111	.	.
	Ground-nuts, not roasted or otherwise cooked, whether or not...	23	23	23	23	23	.	.	AT	38	33	24	.	.
	Sunflower seeds, whether or not broken	22	22	22	22	22	.	.	AT	161	196	182	.	.
	Rape, colza or mustard oil and fraction thereof, whether or not...	572	572	572	572	572	.	.	AT	207	232	254	.	.
Japan	Skimmed milk powder (For school lunch)	7 264	7 264	7 264	7 264	7 264	7 264	7 264	LD	58	64	56	52	52
	Skimmed milk powder (for other purposes)	85 878	85 878	85 878	85 878	85 878	85 878	85 878	LD	49	40	44	38	39
	Evaporated milk	1 585	1 585	1 585	1 585	1 585	1 585	1 585	LD	42	49	52	90	92
	Condensed milk	13	13	.	.	.	.	.	OT	.	.	.	.	.
	Whey and modified whey (For feeding purposes)	45 000	45 000	45 000	45 000	45 000	45 000	45 000	LD	45	50	54	46	48
	Butter and butteroil	1 873	1 873	1 873	1 873	1 873	1 873	1 873	LD	27	20	23	20	19
	Designated dairy products for general use	137 202	137 202	137 202	137 202	137 202	137 202	137 202	ST	181	181	181	100	101
	Wheat, meslin, triticale and their processed products	5 565 000	5 740 000	5 565 000	5 600 000	5 635 000	5 670 000	5 705 000	ST	107	110	109	103	101
	Barley and its processed products	1 326 500	1 369 000	1 326 500	1 335 000	1 343 500	1 352 000	1 360 500	ST	129	117	109	117	117
	Rice and its worked and/or prepared products	379 000	758 000	379 000	454 800	530 600	606 400	644 300	ST	100	100	100	100	100
	Starches, Inulin and their preparations	157 000	157 000	157 000	157 000	157 000	157 000	157 000	LD	70	78	76	69	72
	Ground-nuts	75 000	75 000	75 000	75 000	75 000	75 000	75 000	LD	55	55	57	57	58
Korea	Milk cows (Pure-bred breeding)	640	1 067	640	687	735	782	.	HI	69	98	7	0	.
	Swine (Pure-bred breeding)	1 110	1 850	1 110	1 192	1 274	1 357	.	HI	230	199	254	24	.
	Fowls of the species Gallus domesticus (Weighing not more than 185g /Pure-bred breeding)	461 000	461 000	461 000	461 000	461 000	461 000	.	HI	148	174	152	117	.
	Meat of bovine animals (Fresh or chilled / Carcasses and half-carcasses)	123 000	225 000	123 000	143 400	167 000	184 200	.	MX	100	103	91	47	.
	Meat of swine (Frozen /Carcasses and half-carcasses)	21 930	18 275	21 930	29 240	18 275	.	.	AU	100	100	100	.	.
	Meat of fowls of the species gallus domesticus (Not cut in pieces /Frozen)	7 700	6 500	7 700	10 350	6 500	.	.	AU	75	95	101	.	.

Annex Table I.15. Tariff quotas, fill rates and administration methods for selected products (cont.)

Country	Product	Initial quantity	Final quantity	Notified quantity					Admin. regime	Fill rates				
				1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
	Skim milk powder (Concentrated /Not containing added sugar /Of a fat content, by weight, not exceeding 1.5%)	621	1034	621	667	713	759	.	MX	100	97	100	100	.
	Whey powder	23 000	54 233	23 000	26 470	29 941	33 411	.	MX	97	87	78	71	.
	Butter	250	420	250	269	288	307	.	HI	100	100	100	100	.
	Potatoes (Excluding seed potatoes)	11 286	18 810	11 286	12 122	12 958	13 910	.	ST	0	6	37	0	.
	Sweet potatoes (Fresh)	11 121	18 535	11 121	1 945	12 769	13 592	.	LD	79	77	25	0	.
	Chestnuts (In shell /Fresh or dried)	1 302	2 170	1 302	1 398	1 495	1 591	.	AU	7	5	8	13	.
	Oranges (Fresh or dried)	15 000	57 017	15 000	19 669	25 000	29 006	.	MX	100	100	97	94	.
	Korean citrus (Fresh or dried)	1 258	2 097	1 258	1 351	1 444	1 538	.	PG	99	98	100	100	.
	Oats (For seed)	597	597	597	597	597	597	.	LD	100	100	96	131	.
	Maize (Corn /For feeding)	6 102 100	6 102 100	6 102 100	6 102 100	6 102 100	6 102 100	.	HI	146	142	136	117	.
	Rice in the husk (paddy or rough)	51 307	205 228	51 307	64 134	76 961	89 787	.	ST	111	100	100	100	.
	Grain sorghum (For seeds)	14	14	14	14	14	14	.	LD	124	100	16	143	.
	Buckwheat	697	1328	697	767	837	908	.	ST	114	99	100	100	.
	Wheat Starch	227	227	227	227	227	227	.	MX	15	100	100	100	.
	Soya beans (Whether or not broken)	1 032 152	1 032 152	1 032 152	1 032 152	1 032 152	1 032 152	.	MX	142	140	151	135	.
	Groundnuts (In shell)	4 907	4 907	4 907	4 907	4 907	4 907	.	ST	122	99	95	98	.
Mexico	Milk, in powder	120 000	120 000	120 000	.	.	.	.	HI	112	.	.	.	.
New Zealand	Fresh Apples	1 878	2 564	1 878	2 015	2 152	2 290	2 427	AT	8	8	3	4	3
	Fresh Pears	597	759	597	629	662	694	727	AT	122	130	95	57	197
	Hop cones, neither ground nor powdered not in the form of pellets...	5	8	5	6	6	7	8	AT	79	11	3	14	50
Norway	Meat of bovine animals, frozen...	34	34	34	34	34	34	.	AT	197	200	6	21	.
	Meat of swine, fresh, chilled or frozen...	983	983	983	983	983	983	.	AT	184	43	40	52	.
	Sheepmeat quota: 600 tons incl bones	600	600	600	600	600	600	.	AT	0	13	18	38	.
	Milk and cream not conc...of a fat content, by weight, not exceeding 1 %	1	1	1	1	1	1	.	AT	100	400	0	0	.
	Butter and other fats and oils derived from milk	47	47	47	47	47	47	.	AT	15	9	117	100	.
	Total cheese quota = 2294 tons	2 494	2 494	2 294	2 294	2 294	2 294	.	AT	104	113	115	100	.
	Potatoes - seed	499	499	499	499	499	499	.	AT	1	0	7	0	.
	Wheat and meslin - durum wheat	11 839	11 839	11 839	11 839	11 839	11 839	.	AT	224	882	103	92	.
	Wheat and meslin - other	239 806	239 806	239 806	239 806	239 806	239 806	.	AT	41	51	84	66	.
	Barley	58 501	58 501	58 501	58 501	58 501	58 501	.	AT	276	335	48	100	.
	Maize - seed	4 394	4 394	4 394	4 394	4 394	4 394	.	AT	0	0	0	0	.
	Grain sorghum	35 032	35 032	35 032	35 032	35 032	35 032	.	AT	69	94	32	100	.
	Potato starch	221	221	221	221	221	221	.	AT	743	81	67	9	.
	Rape or colza seeds, whether or not broken	8 191	8 191	8 191	8 191	8 191	8 191	.	AT	0	0	0	100	.
	Apple juice	2 651	2 651	2 651	2 651	2 651	2 651	.	AT	68	75	99	100	.
	Butter and other fats and oils derived from milk	324	575	366	408	523	491	.	AU	0	1	0	13	.
	Hens' eggs	492	1 295	626	760	894	1 027	.	AU	0	13	20	91	.
Poland	Meat of bovine animals, frozen.	10 560	17 545	5 280	11 957	13 354	14 751	16 148	LD	100	4	46	0	0
	Meat of swine, fresh, chilled or frozen:	27 930	46 480	13 965	31 640	35 350	39 060	42 770	LD	100	62	70	100	69
	Meat and edible offal, of the poultry of heading No 0105, fresh, chilled or frozen.	20 000	20 000	21 750	28 900	31 314	36 460	43 512	LD	100	89	99	65	30
	Meat of sheep or goats, fresh, chilled or frozen.	700	1 000	.	.	.	.	.	AT	.	.	.	.	.

Annex Table I.15. **Tariff quotas, fill rates and administration methods for selected products (cont.)**

Country	Product	Initial quantity	Final quantity	Notified quantity					Admin. regime	Fill rates				
				1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
Switzerland	Milk and cream, concentrated or containing added sugar or other sweetening matter.	3 000	5 000	1 650	3 740	4 180	4 620	4 620	LD	6	0	0	0	7
	Cheese and curd.	5 000	5 000	.	.	.	.	.	AT	.	.	.	.	.
	Tomatoes prepared or preserved otherwise than by vinegar or acetic acid.	3 000	5 000	1 000	2 300	2 600	.	.	LD, MX	100	100	99	.	.
	Animals for slaughter: meat essentially produced on the basis of coarse fodder	22 500	22 500	22 500	22 500	22 500	22 500	22 500	MX	120	110	115	100	.
	Animals for slaughter: meat essentially produced on the basis of concentrated feeds	48 889	54 482	48 889	50 008	51 140	52 260	.	MX	97	122	117	100	.
	Animals for slaughter: meat essentially produced on the basis of coarse fodder	22 500	22 500	22 500	22 500	22 500	.	MX	120	110	115	.	.	.
	Dairy products, in milk equivalent	527 000	527 000	527 000	527 000	527 000	527 000	527 000	MX	86	94	104	97	.
	Casein	697	697	697	697	697	697	697	LD	48	23	16	26	.
	Birds' eggs, in shell	33 735	33 735	33 735	33 735	33 735	33 735	33 735	LD	80	82	72	72	.
	Cut flowers	5 000	4 590	4 590	4 590	4 590	4 590	4 590	HI	145	150	150	100	.
	Seed and table potatoes, potato products (in potato equivalent)	13 350	22 250	13 350	15 130	16 910	18 690	.	LD	363	72	91	100	.
	Fresh vegetables	166 076	166 076	166 076	166 076	166 076	166 076	166 076	MX	123	114	114	100	.
	Fruit for cider	172	172	172	172	172	172	172	AU	1	96	99	93	.
Pip-fruit products (in pip-fruit equivalent)	244	244	244	244	244	244	244	AU	278	1 357	1 354	100	.	
Red wine, other than wine for industrial use	1 620 000	1 620 000	1 620 000	1 550 000	1 540 000	1 530 000	.	FC	96	92	96	97	.	
United States	Ch2.3 - Beef	656 621	656 621	676 621	676 621	676 621	696 621	696 621	FC	66	59	67	71	74
	Ch4.3 - Milk and cream, fluid or frozen, fresh or sour, containing over 6 percent but not...	5 727 940	6 694 840	5 727 940	5 921 320	6 114 700	6 308 080	6 501 460	FC	57	74	53	98	97
	Ch4.4 - Butter, and fresh or sour cream containing over 45 percent by weight of butterfat	3 977 000	6 977 000	3 977 000	4 577 000	5 177 000	5 777 000	6 377 000	MX	6	88	97	99	98
	Ch4.5 - Dried milk whether or not containing added sugar or other sweetening matter	1 261 000	5 261 000	1 261 000	2 061 000	2 861 000	3 661 000	4 461 000	MX	27	94	77	96	98
	Ch4.6 - Dried milk or dried cream whether or not containing added sugar or other (0402.21.30)	371 300	3 321 300	371 300	961 300	1 551 300	2 141 000	2 731 000	MX	22	75	100	98	98
	Ch4.7 - Dried milk or dried cream whether or not containing added sugar or other sweetening... (0402.21.75)	99 500	99 500	99 500	99 500	99 500	99 500	99 500	FC	0	0	0	1	0
	Ch4.9 - Dairy products described in additional U.S. note 8 to chapter 4	1 905 000	4 105 000	1 905 000	2 345 000	2 785 000	3 225 000	3 665 000	FC	26	53	68	68	85
	Ch4.10 - Milk and cream, condensed or evaporated	2 857 300	6 857 300	2 857 300	3 657 300	4 457 300	5 257 000	6 057 000	FC	19	36	46	71	86
	Ch4.11 - Dried milk, dried cream or dried whey whether or not containing added sugar	296 000	296 000	296 000	296 000	296 000	296 000	296 000	MX	20	99	43	39	39
	Ch4.12 - Butter substitutes containing over 45 percent by weight of butterfat, the foregoing...	3 480 500	6 080 500	3 480 500	4 000 500	4 520 500	5 041 000	5 561 000	MX	0	90	118	98	99
	Ch4.16 - Cheddar cheese and cheese and substitutes for cheese	7 014 640	14 406 306	6 031 223	8 209 639	9 471 306	10 733 000	1 116 1000	MX	91	96	87	98	96
	Ch4.17 - American-type cheese, including Colby, washed curd and granular cheese	3 439 223	3 522 556	3 430 890	3 455 889	3 472 556	3 489 000	3 506 000	MX	84	94	87	92	96
	Ch4.18 - Edam and Gouda cheeses and cheese and substitutes for cheese	6 003 903	7 991 902	5 900 736	6 149 735	6 316 402	6 483 000	6 650 000	MX	95	88	77	86	96

Annex Table 1.15. **Tariff quotas, fill rates and administration methods for selected products (cont.)**

Country	Product	Initial quantity	Final quantity	Notified quantity					Admin. regime	Fill rates				
				1995	1996	1997	1998	1999		1995	1996	1997	1998	1999
	Ch4.19 - Italian-type cheeses, made from cow's milk, in original loaves (Romano made from	9 022 731	12 558 064	12 822 731	13 081 064	13 281 064	13 281 000	13 281 000	MX	85	85	94	96	98
	Ch4.20 - Swiss or Emmentaler cheese	7 538 166	7 854 833	7 506 500	7 601 500	7 664 833	7 728 000	7 792 000	MX	89	82	71	87	90
	...Gruyere-process cheese...													
	Ch4.21 - Cheese... containing 0.5 percent or less by weight of butterfat...	5 724 908	5 724 908	5 474 908	5 474 907	5 474 907	5 725 000	5 725 000	MX	87	74	56	38	50
	Ch4.23 - Swiss or Emmentaler cheese with eye formation	32 266 944	34 325 276	32 898 611	33 328 609	33 515 276	33 702 000	34 289 000	MX	82	85	74	81	95
	Ch12.2 - Peanuts	30 393 000	53 806 000	30 393 000	34 896 000	34 896 000	3 377 000	3 377 000	FC	95	100	100	100	100
	Ch17 - Cane sugar	1 117 195	1 117 195	1 117 195	1 117 195	1 117 195	1 117 195		FC	180	180	182	98	.
	Ch24.4 - Tobacco	111 450	112 950	.	.	150 825	150 575		NS	.	.	77	49	.

Notes:

AT = applied tariffs; AU = auctioning; FC = first-come first-served; HI = Historical importers; LD = Licenses on demand; ST = State trading ; PG = Producer groups; MX = Mixed

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

Annex Table I.16. Tariff-quota administration methods by product category, 1995-99

		Simple average fill rate					Number of quota lines					% Number of quota lines					Number of countries				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Applied tariffs	Beverages and spirits	67	100	52	100	n.a.	2	2	2	1	0	0	0	0	0	2	2	2	1	0	
	Cereals	60	57	53	57	n.a.	59	56	56	39	0	9	8	8	7	0	4	3	3	2	0
	Coffee, tea, mate, cocoa and preparations	62	72	84	72	n.a.	9	8	8	3	0	1	1	1	1	0	3	2	2	1	0
	Dairy products	78	71	59	58	n.a.	16	15	14	13	0	2	2	2	2	0	4	3	2	1	0
	Eggs	59	60	43	78	n.a.	4	4	4	4	0	1	1	1	1	0	2	2	2	2	0
	Agricultural fibres	n.a.	n.a.	n.a.	49	n.a.	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
	Fruit and vegetables	77	76	77	74	52	125	123	122	104	2	19	18	18	19	2	5	4	4	3	1
	Meat	70	51	47	52	n.a.	28	26	26	21	0	4	4	4	4	0	3	2	2	1	0
	Other agricultural products	74	52	63	50	47	29	29	29	23	1	4	4	4	4	1	3	3	3	2	1
	Oilseeds, fats and oils and products	66	71	77	98	n.a.	24	24	24	2	0	4	4	3	0	0	2	2	2	1	0
	Sugar and confectionary	97	100	95	97	n.a.	6	5	5	2	0	1	1	1	0	0	3	2	2	1	0
	Tobacco	100	100	100	100	100	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1
Auctioning	Beverages and spirits	n.a.	n.a.	99	98	n.a.	0	0	1	1	0	0	0	0	0	0	0	1	1	0	
	Dairy products	60	33	43	11	n.a.	5	5	5	3	0	1	1	1	1	0	3	3	3	2	0
	Eggs	50	57	60	91	n.a.	2	2	2	1	0	0	0	0	0	2	2	2	1	0	
	Fruit and vegetables	34	50	47	61	n.a.	6	6	6	6	0	1	1	1	1	0	3	3	3	3	0
	Meat	19	32	32	46	n.a.	15	14	14	6	0	2	2	2	1	0	3	3	3	1	0
	Sugar and confectionary	0	n.a.	n.a.	n.a.	n.a.	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
First-come, first served	Beverages and spirits	54	59	45	41	39	5	6	6	6	5	1	1	1	1	0	2	2	3	3	2
	Cereals	62	52	49	41	31	10	10	10	10	5	2	1	1	2	1	5	5	5	5	3
	Coffee, tea, mate, cocoa and preparations	47	44	52	58	66	7	7	7	7	4	1	1	1	1	3	1	1	1	1	1
	Dairy products	34	40	53	53	68	11	11	11	11	11	2	2	2	2	5	2	2	2	2	2
	Agricultural fibres	14	2	0	33	n.a.	6	5	6	6	0	1	1	1	1	0	1	1	1	1	0
	Fruit and vegetables	69	73	73	73	67	8	15	18	16	16	1	2	3	3	0	2	2	2	2	2
	Meat	60	69	59	58	45	9	10	10	10	7	1	1	1	2	1	3	4	4	4	3
	Other agricultural products	68	100	76	100	100	2	2	2	2	1	0	0	0	0	0	2	2	2	2	1
	Oilseeds, fats and oils and products	43	56	56	55	58	7	7	7	7	7	1	1	1	1	2	2	2	2	2	2
	Sugar and confectionary	65	64	82	94	75	8	8	8	7	4	1	1	1	1	2	3	3	3	2	2
Tobacco	n.a.	77	52	49	n.a.	0	1	1	1	0	0	0	0	0	0	0	1	1	1	0	
Historical importers	Beverages and spirits	100	98	100	100	n.a.	1	1	1	1	0	0	0	0	0	1	1	1	1	0	
	Cereals	100	100	100	100	n.a.	3	3	3	3	0	0	0	0	1	0	1	1	1	1	0
	Coffee, tea, mate, cocoa...	100	100	81	88	n.a.	1	1	1	1	0	0	0	0	0	1	1	1	1	0	
	Dairy products	95	97	95	97	78	8	7	7	7	1	1	1	1	1	1	4	3	3	3	1
	Agricultural fibres	60	34	16	14	n.a.	1	1	1	1	0	0	0	0	0	1	1	1	1	0	
	Fruit and vegetables	99	92	95	93	83	12	10	10	9	2	2	1	1	2	0	3	3	3	3	1
	Meat	89	96	81	64	n.a.	12	11	11	7	0	2	2	2	1	0	4	3	3	2	0
	Sugar and confectionary	100	100	100	100	n.a.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0
Licences on demand	Beverages and spirits	54	38	12	24	2	7	5	5	5	5	1	1	1	1	4	3	2	2	2	2
	Cereals	58	61	58	66	55	21	29	29	24	18	3	4	4	4	7	4	4	5	5	4
	Coffee, tea, mate, cocoa...	45	62	51	41	47	6	6	7	7	7	1	1	1	1	5	2	2	2	2	2
	Dairy products	66	65	67	56	56	28	29	29	21	17	4	4	4	4	5	6	6	6	6	4
	Eggs	37	41	30	20	0	7	7	7	4	2	1	1	1	1	2	5	5	5	4	2

Annex Table I.16. **Tariff-quota administration methods by product category, 1995-99 (cont.)**

		Simple average fill rate					Number of quota lines					% Number of quota lines					Number of countries				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
	Fruit and vegetables	63	62	52	45	44	43	45	47	46	39	6	7	7	8	26	5	6	6	6	4
	Meat	67	64	67	73	56	28	38	38	21	17	4	6	6	4	9	7	7	7	7	3
	Other agricultural products	46	54	57	44	41	7	7	7	7	2	1	1	1	1	1	3	3	3	3	2
	Oilseeds, fats and oils and products	42	30	26	28	57	6	6	6	6	5	1	1	1	1	3	4	4	4	4	3
	Sugar and confectionary	85	58	48	35	93	3	5	5	3	1	0	1	1	1	1	2	3	3	2	1
	Tobacco	54	32	37	35	30	2	2	2	2	2	0	0	0	0	2	2	2	2	2	2
Producer groups or associations	Coffee, tea, mate, cocoa and preparations	100	1	100	43	n.a.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0
	Fruit and vegetables	100	99	100	100	n.a.	2	2	2	2	0	0	0	0	0	0	1	1	1	1	0
State trading	Cereals	100	100	100	100	100	5	5	5	5	3	1	1	1	1	0	2	2	2	2	1
	Coffee, tea, mate, cocoa and preparations	96	36	100	90	n.a.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0
	Dairy products	100	100	100	100	100	2	2	2	2	1	0	0	0	0	0	2	2	2	2	1
	Fruit and vegetables	75	77	82	88	n.a.	5	5	5	5	0	1	1	1	1	0	1	1	1	1	0
	Oilseeds, fats and oils and products	100	100	98	99	n.a.	2	2	2	2	0	0	0	0	0	0	1	1	1	1	0
Mixed allocation methods	Cereals	58	100	100	100	n.a.	2	2	2	2	0	0	0	0	0	0	1	1	1	1	0
	Coffee, tea, mate, cocoa and preparations	100	60	50	50	0	1	2	2	2	1	0	0	0	0	1	1	2	2	2	1
	Dairy products	59	78	74	82	86	21	21	21	21	18	3	3	3	4	13	4	4	4	4	1
	Eggs	98	95	100	100	n.a.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0
	Agricultural fibres	100	100	82	45	34	2	2	2	1	1	0	0	0	0	0	2	2	2	1	0
	Fruit and vegetables	100	99	98	95	n.a.	6	6	6	6	0	1	1	1	1	0	2	2	2	2	0
	Meat	99	100	99	89	n.a.	5	6	6	5	0	1	1	1	1	0	4	4	4	3	0
	Other agricultural products	100	100	100	100	n.a.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0
	Oilseeds, fats and oils and products	100	100	100	69	n.a.	2	2	2	2	0	0	0	0	0	0	1	1	1	1	0
Sugar and confectionary	n.a.	n.a.	n.a.	n.a.	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	
Not specified	Coffee, tea, mate, cocoa and preparations	n.a.	0	n.a.	n.a.	n.a.	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
	Fruit and vegetables	n.a.	41	49	44	35	0	5	5	5	6	0	1	1	1	4	0	1	1	1	1
Other	Meat	100	100	100	100	n.a.	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0
Total	Total	67	66	64	63	50	662	684	689	555	213	100	100	100	100	100	-	-	-	-	-

Source: OECD Secretariat calculations based on WTO (2000), *Tariff Quota Administration Methods and Tariff Quota Fill: Background Paper by the Secretariat*, G/AG/NG/S/8.

Annex Table I.17. Canada: Imports within tariff rate quotas and applied tariffs, 1998

Product	Tariff quota quantity	Imports		Applied tariffs	
		m.f.n.	Other ⁽¹⁾	m.f.n.	Other ⁽¹⁾
(1000 tonnes)					
Broiler hatching eggs and chicks	7949 ⁽²⁾	0	13893.9 ⁽²⁾	1.24 cents/each (chicks)	Duty free
Chicken, live, meat and products	39.844	0	58.304	2.17 cents/dozen (eggs) 2.74 cents/kg (live chicken)	Duty free
Turkey, live, meat and products	5.139	0	5.3111	0-7.5% (chicken products) 2.32 cents/kg (live turkey)	Duty free
Beef and veal	74.409	84.6966	0	0-10.5% (turkey products)	Duty free
Concentrated/condensed milk/cream	0.0117	0	0.0147	Duty free	Duty free
Yoghurt	0.332	0.327	0.005	4.09 cents/kg	Duty free or 2.99 cents/kg
Powder butter milk	0.908	0.025	1.0677	9%	Duty free
Other products of milk constituents	4.345	4.2709	0.111	4.79 cents/kg	Duty free
Other dairy	0.07	0.0024	0.4003	9%	Duty free
Ice cream	0.4292	0.004	0.5193	9.50%	Duty free
Cheese	20.412	16.656	3.9680	11.50%	Duty free
Eggs and egg products	17950.8 ⁽²⁾	0	23735.9 ⁽²⁾	4.09 cents/kg or 4.79 cents/kg	Duty free
Margarine	6.349	0.0303	0.3741	1.84 cents cents/dozen (eggs)	Duty free
				12% or 8.1-8.32 cents/kg	
				10.5%	Duty free

Notes:

(1) Other : Imports which could occur at rates other than m.f.n. rates include those under the US and Mexican Tariff (under NAFTA), the Chilean Tariff (under CFTA), the Australian Tariff, the New Zealand Tariff, the General Preferential Tariff, the Commonwealth Caribbean countries Tariff and the Least Developed country Tariff, depending on the product.

(2) 1000 dozen.

Source: Export and Import Controls Bureau, Department on Foreign Affairs and International Trade; Canada Customs Tariff 1998.

Annex Table I.18. References and domestic prices for dairy products

	Country	Units	Butter				Skim milk powder				Cheese			
			1986	1987	1988	1995	1986	1987	1988	1995	1986	1987	1988	1995
Reference price	New Zealand	USD/T	1 115	1 050	1 100	1 468	750	850	1 200	1 802	1 170	1 200	1 400	2 004
Domestic prices	Australia	AUD/T	1 979	2 137	1 908	2 076	1 261	1 482	1 715	2 293	2 873	3 116	3 143	3 449
	Canada	CAD/T	4 976	5 040	5 095	5 324	2 945	2 980	3 008	3 931	–	–	–	–
	EU	Euro/T	3 375	3 544	3 562	3 282	1 875	1 969	1 979	2 055	3 795	3 891	4 024	4 388
	Czech Republic	CZK/T	–	–	–	74 742	–	–	–	58 319	–	–	–	76 890
	Japan	JPY/T	1 225	1 100	1 080	993	541	527	521	514	278	260	271	270
	Switzerland	CHF/T	19 670	19 670	20 870	17 710	–	–	–	–	–	–	–	11 740
	USA	USD/T	3 186	3 091	2 921	1 806	1 778	1 747	1 769	2 394	2 806	2 716	2 729	2 928

Reference price: New Zealand export prices (SONZA, various years);

Domestic prices: Canada, EU, Japan, USA (OECD, Agricultural Commodities Outlook database, 1999). Australia: export unit values net of export subsidies (*Australian Commodity Statistics*, ABARE, 1998) Czech Republic: BIC - Bilanční a Informační Centrum VUZE (Balance and Information Center of the Research Institute of Agricultural Economics, Prague). Switzerland: Butter: Le livre des desserts, Centrale suisse du ravitaillement en beurre, 1995; Cheese: Statistiques laitières de la Suisse, Commission suisse du lait, 1997.

Transportation costs

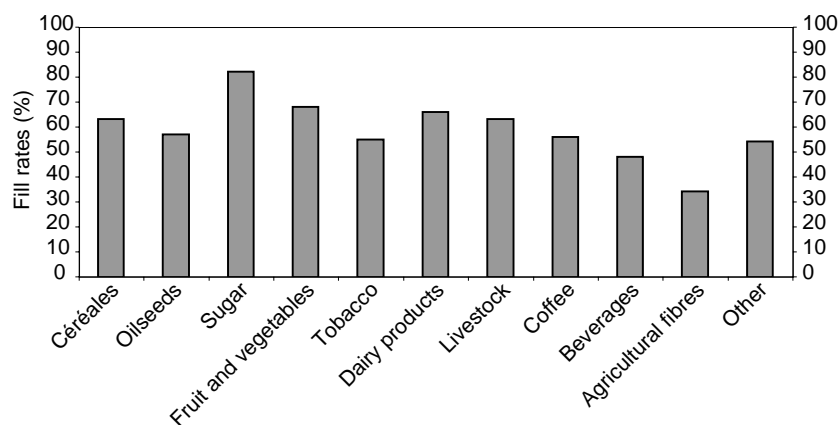
Transportation costs in USD/T from New Zealand to:

Country	Butter				Skim milk powder				Cheese			
	1986	1987	1988	1995	1986	1987	1988	1995	1986	1987	1988	1995
Australia	127	127	127	150	100	100	96	89	127	127	127	150
Canada	181	205	210	225	77	93	95	147	–	–	–	–
Czech Republic	–	–	–	150	–	–	–	105	–	–	–	150
EU	152	180	180	150	79	95	95	105	152	180	180	150
Japan	145	165	165	200	63	77	77	91	145	165	165	200
Switzerland	152	180	180	150	–	–	–	–	–	–	–	150
USA	181	205	210	225	77	93	95	147	181	205	210	225

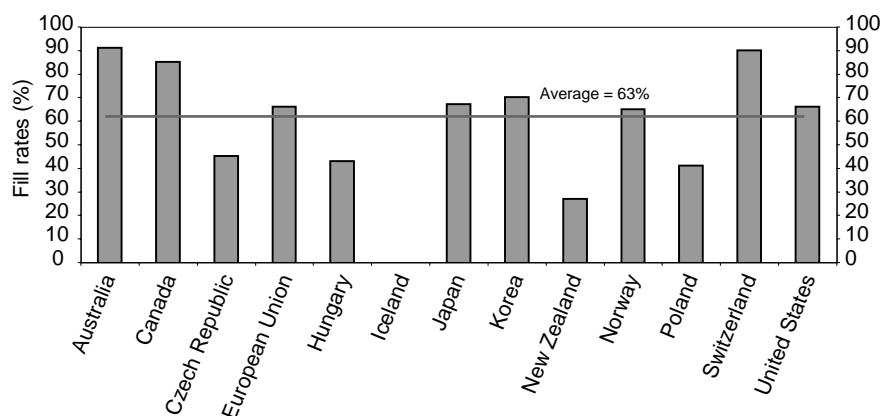
Source: OECD (1999), PSE/CSE database.

Annex Figure I.1. Tariff quota fill rates in OECD countries (simple average, 1998)

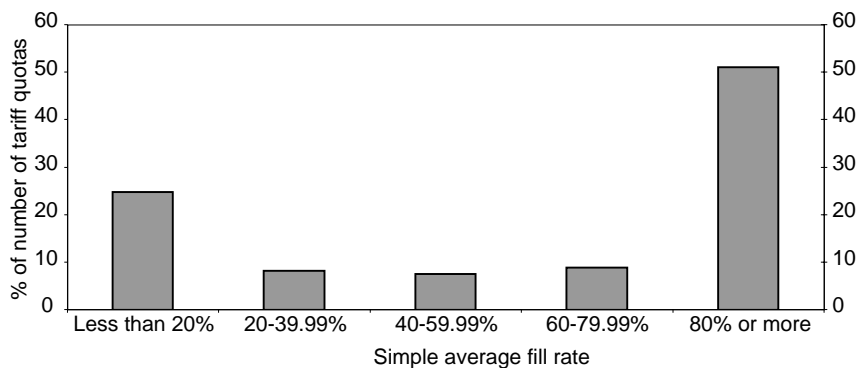
By product category



By country



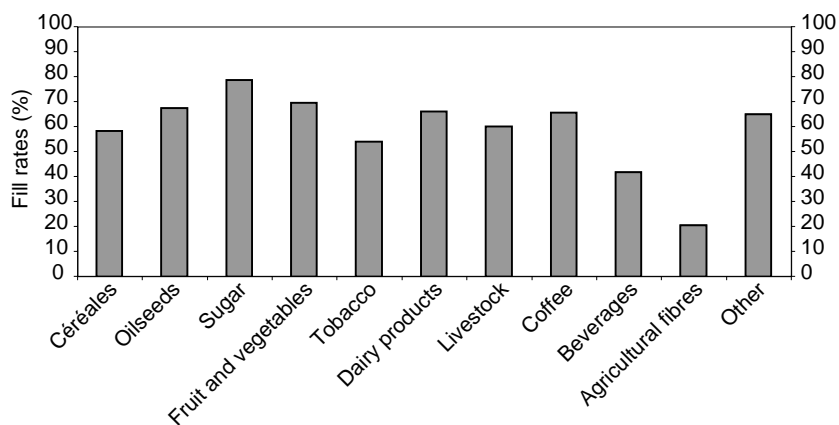
Frequency distribution of fill rates



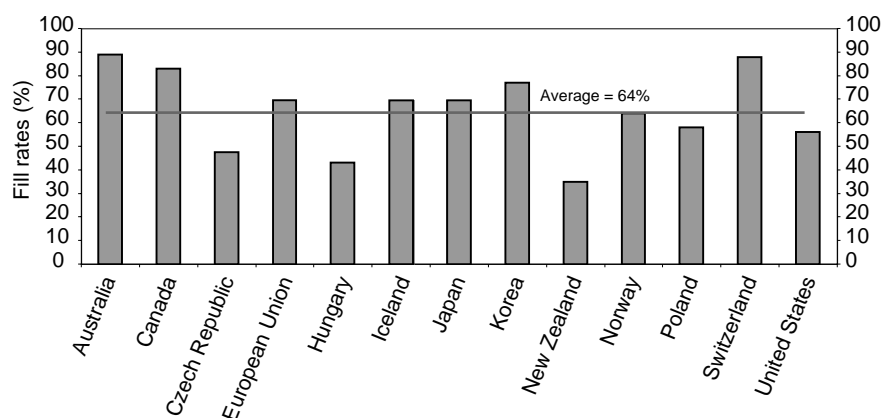
Note: no data available for Mexico.

Annex Figure I.2. Tariff quota fill rates in OECD countries (simple average, 1997)

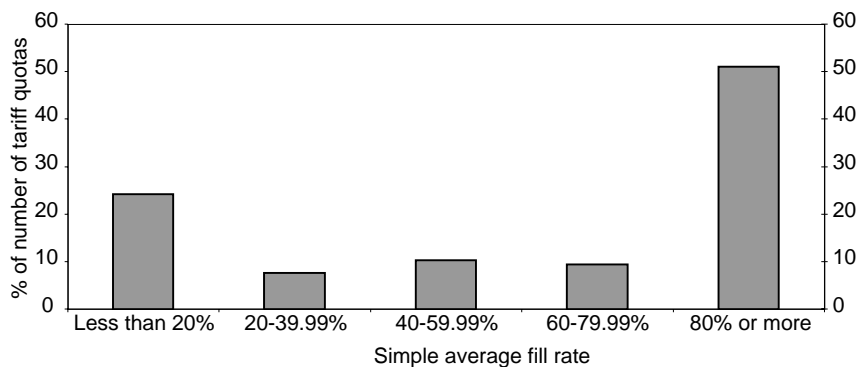
By product category



By country



Frequency distribution of fill rates

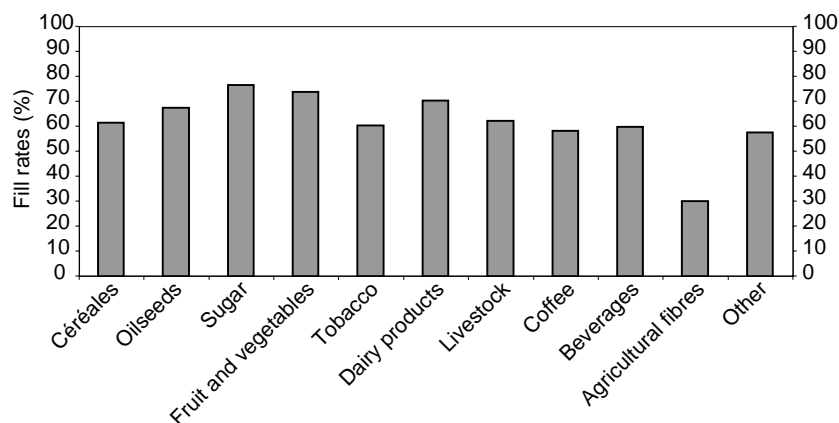


Note: no data available for Mexico.

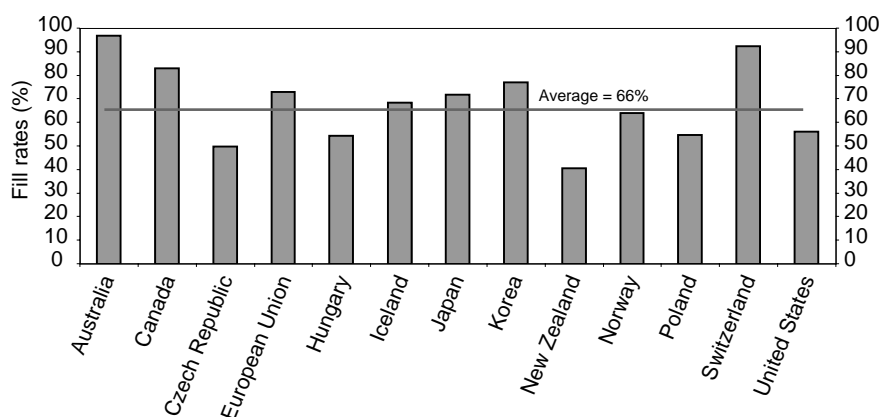
Source: OECD Secretariat calculations based on country notifications WTO.

Annex Figure I.3. Tariff quota fill rates in OECD countries (simple average, 1996)

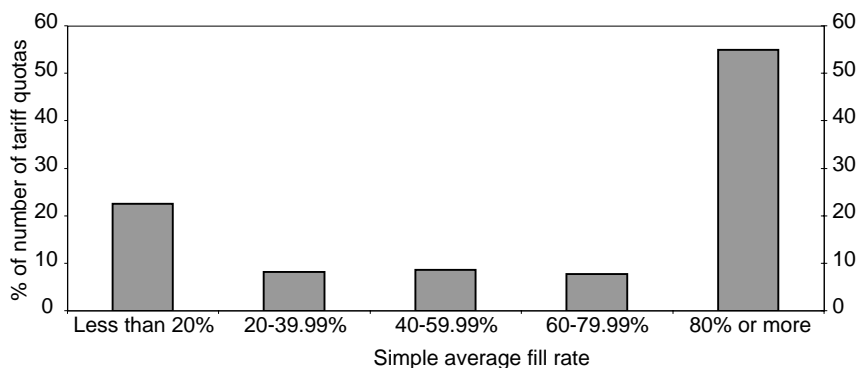
By product category



By country



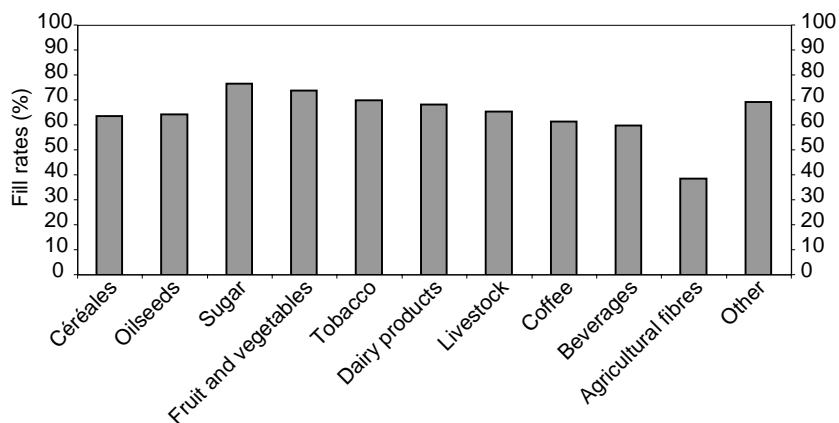
Frequency distribution of fill rates



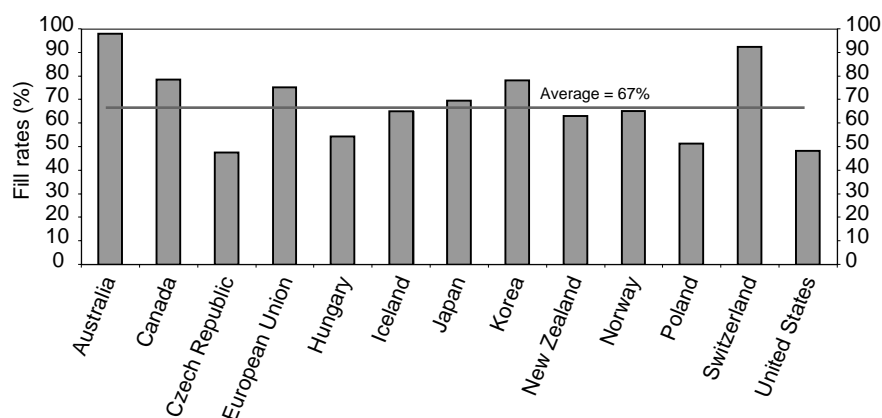
Note: no data available for Mexico.

Annex Figure I.4. Tariff quota fill rates in OECD countries (simple average, 1995)

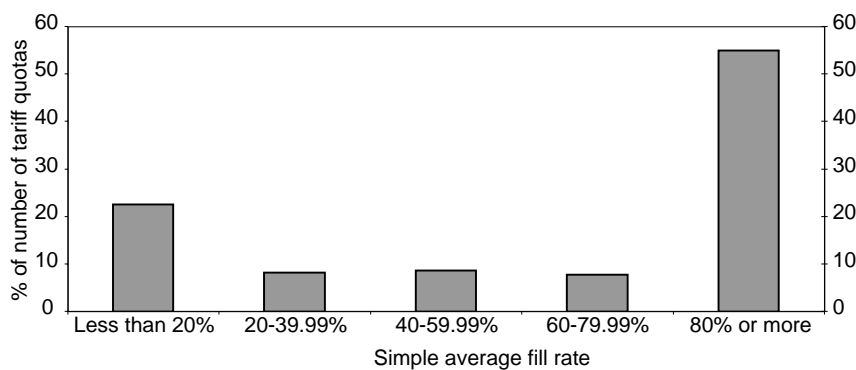
By product category



By country



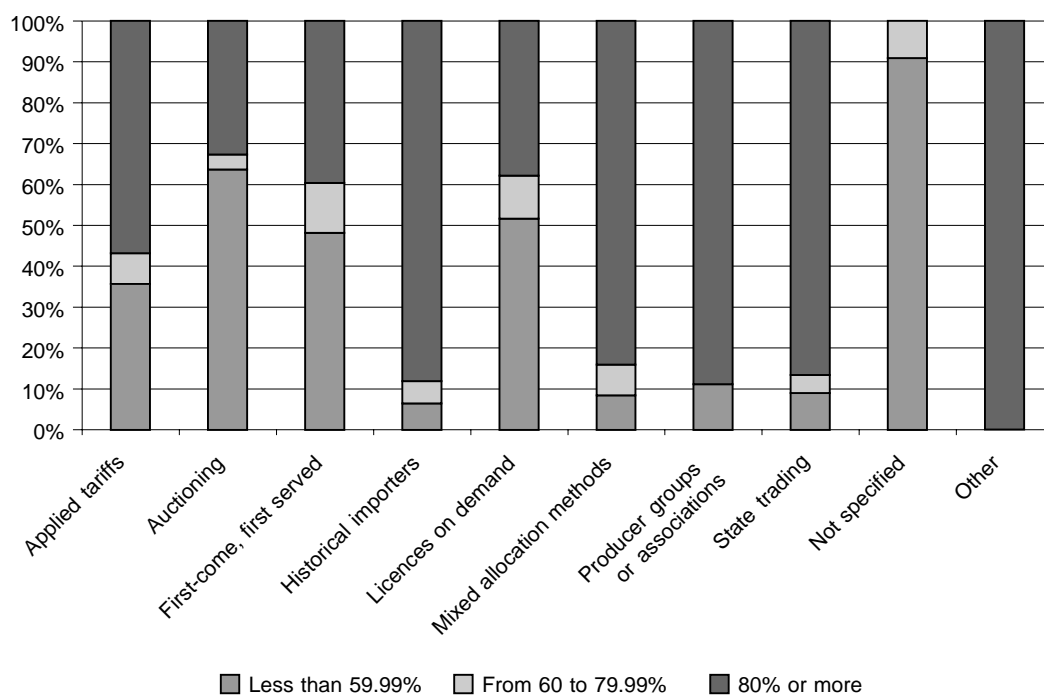
Frequency distribution of fill rates



Note: no data available for Mexico.

Source: OECD Secretariat calculations based on country notifications WTO.

Annex Figure I.5. Frequency distribution of the simple average tariff quota fill rate



Source: OECD Secretariat calculations based on country notifications WTO.

Annex Table II.1. Green box expenditures and General services support estimates (GSSE)
(Mill. USD)

Country	1986-88			1995			1996			1997			1998		
	Green box (1)	GSSE (2)	(2)/(1)	Green box (1)	GSSE (2)	(2)/(1)	Green box (1)	GSSE (2)	(2)/(1)	Green box (1)	GSSE (2)	(2)/(1)	Green box (1)	GSSE (2)	(2)/(1)
Australia	654	377	0.6	690	596	0.9	740	606	0.8	932	604	0.6	820	499	0.6
Canada	1 270	1 454	1.1	1 529	1 557	1.0	1 462	1 510	...	890	1 311	1.5	n.a.	1 302	...
Czech Republic	29	58	2.0	132	119	0.9	197	124	0.6	121	110	0.9	196	106	0.5
European Union	10 139	10 774	1.1	24 548	7 677	0.3	28 084	9 230	0.3	20 597	8 208	0.4	n.a.	8 282	...
Hungary	252	83	0.3	105	95	0.9	n.a.	122	...	n.a.	92	...	n.a.	171	...
Iceland	37	23	0.6	29	16	0.5	50	17	0.3	41	18	0.4	40	19	0.5
Japan	14 987	8 775	0.6	33 677	24 605	0.7	25 902	18 561	0.7	21 915	15 158	0.7	n.a.	16 343	...
Korea	2 153	2 011	0.9	5 173	4 596	0.9	6 443	5 078	0.8	6 098	4 663	0.8	3 831	3 073	0.8
Mexico	0	680	...	1 623	544	0.3	1 442	318	0.2	1 458	370	0.3	1 446	417	0.3
New Zealand	136	104	0.8	133	98	0.7	140	106	0.8	143	107	0.7	120	86	0.7
Norway	472	128	0.3	647	153	0.2	637	167	0.3	520	96	0.2	515	85	0.2
Poland	0	291	...	436	458	1.1	549	533	1.0	878	507	0.6	847	482	0.6
Switzerland	n.a.	455	...	2 300	529	0.2	2 404	503	0.2	2 129	412	0.2	2 191	407	0.2
United States	24 098	15 233	0.6	46 041	25 330	0.6	51 825	21 810	0.4	51 246	20 490	0.4	n.a.	19 727	...
OECD	54 227	41 058	0.8	11 7064	68 290	0.6	119 876	60 518	0.5	n.a.	54 773	...	n.a.	54 585	...

Notes: Mexico: 1991 US dollars; n.a. = not available.

Source: OECD Secretariat calculations.

Annex Table II.2. Blue box measures

Country	Year	Types of measures	Number of programmes included under the measures	Value (mill. USD)	Shares %
European Union	1995	(a)	7	20 455	75
		(c)	4	6 794	25
	1996	(a)	7	21 819	80
		(c)	4	5 492	20
	1997	(a)	8	18 357	79
		(c)	4	4 821	21
Iceland	1995	(b)	1	22	100
	1996	–	0	0	–
	1997	–	0	0	–
	1998	–	0	0	–
Norway	1995	(a)	1	434	39
		(b)	3	394	35
		(c)	1	295	26
	1996	(a)	1	497	44
		(b)	3	376	33
		(c)	1	250	22
	1997	(a)	1	467	45
		(b)	3	338	32
		(c)	1	237	23
	1998	(a)	1	497	48
		(b)	3	315	30
		(c)	1	232	22
United States	1995	(b)	7	7 030	100
	1996	–	0	0	–
	1997	–	0	0	–
OECD	1995	(a)	8	20 889	59
		(b)	11	7 447	21
		(c)	5	7 089	20
	1996	(a)	8	22 316	78
		(b)	3	376	1
		(c)	5	5 741	20
	1997	(a)	9	18 824	78
		(b)	3	338	1
		(c)	5	5 058	21

Notes: (a) Production-limiting payments based on fixed area and yields.

(b) Production-limiting payments made on 85 % or less of the level of production.

(c) Production-limiting livestock payments made on a fixed number of head.

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table II.3. **Blue box measures – European Union**

Measure type	Name and description of measure with reference to criteria in Article 6:5	Base Period, 1986-88		1995		1996		1997		
		Value (mill. euro)	Shares (%)	Value (mill. euro)	Shares (%)	Value (mill. euro)	Shares (%)	Value (mill. euro)	Shares (%)	
Payments based on fixed area and yields	Per hectare compensatory payments to producers of maize, based on regional base areas.			973.0	4.7	1 222.8	5.7	1 213.0	5.9	
	Per hectare compensatory payments for producers of cereals not subject of the base area for maize, based on regional base areas.			8 638.6	41.4	10 001.2	46.5	9 555.0	46.7	
	Per hectare compensatory payments for producers of soybeans. Colza seed and sunflower seed. based on regional base areas			2 381.0	11.4	2 439.4	11.3	2 369.0	11.6	
	Per hectare compensatory payments for producers of peas. Beans. Field beans and sweet lupines. based on regional base areas			522.7	2.5	525.0	2.4	618.0	3.0	
	Per hectare compensatory payments for producers of non-textile flax seed. based on regional base areas			72.4	0.3	96.5	0.4	129.0	0.6	
	Compensation for set-aside requirement related to the per hectare aid. equivalent to the compensatory aid per hectare for cereals calculated on a regional level			2 112.1	10.1	1 827.8	8.5	1 251.0	6.1	
	Supplements to per hectare compensatory payments for durum wheat producers			948.3	4.5	1 080.6	5.0	1 016.0	5.0	
	Per hectare compensatory payments for rice							40.5	0.2	
	Total			15 648.1		17 193.3		16 191.5		
Payments based on 85% or less of the base level of production										
Livestock payments made on a fixed number of head	Payments to producers keeping suckler cows. compensating for intervention price reduction. limited on the number of animals in accordance with reference years (suckler cow premiums)	302.6	73.3	2 446.4	11.7	2 042.9	9.5	1 695.0	8.3	
	Special premium for producers holding male bovine animals. within regional ceilings under a reference year (special premium beef and veal)	110.1	26.7	1 407.2	6.8	1 238.5	5.8	1 341.0	6.6	
	Additional premium to the special premium in order to deseasonalise slaughterings (deseasonalisation premium)			23.0	0.1	39.5	0.2	45.0	0.2	
	Compensatory payments for ewes and goat. limited per producer in accordance with reference numbers (ewe and goat premium)			1 320.8	6.3	1 006.6	4.7	1 171.0	5.7	
	Total	412.7		5 197.4		4 327.5		4 252.0		
TOTAL			412.7	100.0	20 845.5	100.0	21 520.8	100.0	20 443.5	100.0

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table II.4. **Blue box measures – Iceland**

Measure type	Name and description of measure taking into account the criteria in Article 6:5	Base Period, 1986-88		1995		1996	
		Value (mill. ISK)	Shares (%)	Value (mill. ISK)	Shares (%)	Value (mill. ISK)	Shares (%)
Payments based on 85% or less of the base level of production , during fixed reference period (1986-1988)	Name of measure: production limiting program; dairy farmers. Description of measure: direct payments to farmers for production within individually allocated quotas. Production above yearly quota is disciplined.	0	...	0	...	0	...
Payments based on 85% or less of the base level of production , during fixed reference period (1986-1988)	Name of measure: production limiting program; sheep farmers. Description of measure: direct payments to farmers for production within individually allocated quotas. Production above yearly quota is disciplined.	0	...	1 4551.1	100.0	0	...
TOTAL		0	...	1 455.1	100.0	0	...

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table II.5. **Blue box measures – Norway**

Name and description of measure	Base period, 1986-88		1995		1996		1997		1998	
	Value (mill. NOK)	Shares (%)	Value (mill. NOK)	Shares (%)	Value (mill. NOK)	Shares (%)	Value (mill. NOK)	Shares (%)	Value (mill. NOK)	Shares (%)
Acreage and Cultural Landscape Scheme (Art. 6:5 (a)(i))	1 045	20.0	2 750.7	38.6	3 209.0	44.3	3 305.1	44.8	3 752.1	47.6
Structural Income Support to Dairy Farmers (Art. 6:5 (a)(ii))	1 611	30.9	1 539.3	21.6	1 482.5	20.5	1 442.7	19.6	1 424.8	18.1
Regional Deficiency Payment to Milk Production (Art. 6:5 (a) (ii))	499	9.6	450.4	6.3	431.7	6.0	433.9	5.9	432.7	5.5
Regional Deficiency Payment to Meat Production (Art. 6:5 (a) (ii))	484	9.3	505.8	7.1	512.0	7.1	515.6	7.0	522.8	6.6
Total	2 594.0	49.7	2 495.5	35.1	2 426.2	33.5	2 392.2	32.4	2 380.3	30.2
Headage support (Art. 6:5 (a)(iii))	1 576	30.2	1 871.1	26.3	1 611.1	22.2	1 677.8	22.7	1 747.8	22.2
TOTAL	5 215.0	100.0	7 117.3	100.0	7 246.3	100.0	7 375.1	100.0	7 880.2	100.0

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table II.6. **Blue box measures – United States**

Measure type	Name and description of measure	1986-88		1995		1996		1997	
		Value (mill. USD)	Shares (%)	Value (mill. USD)	Shares (%)	Value (mill. USD)	Shares (%)	Value (mill. USD)	Shares (%)
(a) Payments based on fixed area and yields.		0.0	...	0.0	...	0.0	...	0.0	...
(b) Payments based on 85% or less of base level of production: Deficiency payments for marketing year 1995 were only made on 85% of base acreage and program yields have been held constant.									
	Wheat	2617.5	27.0	2 127.0	30.3	0.0	...	0.0	...
	Rice	530.4	5.5	511.1	7.3	0.0	...	0.0	...
	Corn	4 736.5	48.8	3 009.0	42.8	0.0	...	0.0	...
	Sorghum	459.2	4.7	320.1	4.6	0.0	...	0.0	...
	Barley	222.2	2.3	150.7	2.1	0.0	...	0.0	...
	Oats	16.8	0.2	11.6	0.2	0.0	...	0.0	...
	Cotton	1 123.2	11.6	901.0	12.8	0.0	...	0.0	...
Livestock payments on a fixed number of head		0.0	...	0.0	...	0.0	...	0.0	...
TOTAL			9 705.8	100.0	7 030.4	100.0	...	0.0	...

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table II.7. Green box measures by category and by country, 1995-98 (%)

Measure type	Australia	Canada	Czech Rep.	EU	Hungary	Iceland	Japan	Korea	Mexico	New Zealand	Norway	Poland	Switzerland	United States	OECD
(a) General services	64.7	65.6	2.3	28.7	36.5	23.2	83.4	63.0	31.3	94.8	22.5	66.5	19.8	13.3	37.7
Research and development	29.6	7.7	0.0	1.9	0.0	0.0	2.5	6.8	0.0	52.7	0.0	11.4	0.1	0.9	2.3
Pest and disease control	11.4	0.3	1.6	6.8	0.0	6.6	0.4	0.8	2.1	36.0	0.0	6.5	0.0	0.0	1.8
Training services	1.9	1.3	0.0	5.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Extension and advisory services	12.0	3.3	0.5	1.0	0.0	0.0	3.6	1.2	0.0	0.0	0.0	19.4	0.1	2.1	2.3
Inspection services	1.2	5.9	0.0	0.9	0.0	5.6	0.0	1.2	0.0	0.0	0.0	1.0	0.2	0.0	0.3
Infrastructural services	5.9	6.5	0.0	4.6	0.0	0.0	62.0	52.0	19.9	4.6	2.4	28.0	0.0	0.0	19.1
Marketing and promotional services	2.7	3.3	0.0	3.1	0.0	4.1	0.2	0.2	0.0	0.0	2.4	0.0	0.0	0.1	0.8
Other general services	0.0	0.3	0.2	4.8	0.0	0.3	6.2	0.0	0.0	1.4	0.0	0.0	15.4	0.3	2.9
Non-separated general services	0.0	37.2	0.0	0.0	36.5	6.7	8.5	0.0	9.3	0.0	17.8	0.2	4.0	9.8	6.9
(b) Public stockholding for food security purposes	0.0	0.0	0.0	0.0	0.0	3.4	2.2	2.0	0.0	0.0	16.8	0.0	0.1	0.0	0.7
(c) Domestic food aid	0.0	0.0	0.0	1.7	0.0	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	74.6	32.0
(d) Decoupled income support	0.5	31.1	0.0	1.1	0.0	47.0	0.0	4.7	0.0	0.0	0.0	0.0	36.0	7.7	5.0
(e) Income insurance and income safety-net programs	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(f) Payments for relief from natural disasters	7.8	0.0	0.0	1.7	4.6	0.0	2.3	1.0	0.0	0.3	1.3	6.7	0.0	0.3	1.2
(g) Structural adjustment assistance provided through producer retirement programs	1.1	0.0	0.0	3.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
(h) Structural adjustment assistance provided through resource retirement programs	0.0	0.0	0.9	5.0	0.0	12.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	3.5	2.5
(i) Structural adjustment assistance provided through investment aids	4.0	0.0	58.3	28.0	57.0	8.2	3.6	26.0	0.0	0.0	18.2	11.6	6.0	0.2	8.8
(j) Environmental programs	20.6	0.9	38.5	18.0	0.0	0.6	3.9	2.1	0.0	5.0	4.5	0.0	21.4	0.5	5.8
(k) Regional assistance programs	1.4	0.0	0.0	12.8	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	14.6	0.0	3.0
(i) Other	0.0	0.1	0.0	0.0	1.9	5.2	0.0	1.1	68.7	0.0	36.4	15.2	2.1	0.0	1.6
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table III.1. Structure of export subsidies by product and by country (%)

Country	Description of products	1986-90	1991-92	2000 ⁽¹⁾	1995		1996		1997		1998	
		Budgetary outlay commitments			Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments
Australia	Pears	0.3		0.3	0.0	0.3	0.0	0.3	0.0	0.2	0.0	0.3
	Butter and butter oil	16.3		16.3	0.0	17.9	0.0	17.7	0.0	17.4	0.0	17.1
	Skim Milk Powder	27.0		27.0	0.0	28.3	0.0	28.1	0.0	27.9	0.0	27.6
	Cheese	24.7		24.7	0.0	22.7	0.0	23.0	0.0	23.3	0.0	23.7
	Other Milk Products	31.8		31.8	0.0	30.8	0.0	31.0	0.0	31.1	100.0	31.3
Canada	Wheat and Wheat Flour	47.2	74.6	47.2	0.0	47.4	0.0	47.4	0.0	47.4	0.0	47.3
	Coarse Grains	17.7	0.0	17.7	0.0	15.9	0.0	16.1	0.0	16.4	0.0	16.7
	Oilseeds	9.1	0.0	9.1	0.0	8.1	0.0	8.3	0.0	8.4	0.0	8.6
	Vegetable Oils	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.5
	Oilcakes	1.1	0.0	1.1	0.0	1.0	0.0	1.0	0.0	1.1	0.0	1.1
	Butter	2.6	9.5	2.6	25.9	5.6	54.5	5.2	0.0	4.8	0.0	4.2
	Skim Milk Powder	7.4	0.0	7.4	74.1	6.6	45.5	6.7	0.0	6.9	0.0	7.0
	Cheese	3.9	6.7	3.8	0.0	4.2	0.0	4.1	0.0	4.1	0.0	4.0
	Other Milk Products	5.3	0.0	5.3	0.0	4.8	0.0	4.9	0.0	5.0	0.0	5.1
	Vegetables	0.5	1.3	0.5	0.0	0.8	0.0	0.8	0.0	0.7	0.0	0.6
	Incorporated Products	4.8	7.8	4.8	0.0	5.0	0.0	4.9	0.0	4.9	0.0	4.9
Czech Republic	Beef (0102,0201,0202,1602)	7.1		7.1	0.0	7.1	0.0	7.1	10.1	7.1	0.0	7.1
	Pork	1.6		1.7	0.0	1.6	0.0	1.7	0.0	1.7	0.0	1.7
	Poultry, eggs, poultry products	5.4		5.4	0.0	5.4	0.0	5.4	0.0	5.4	0.0	5.4
	Sheep meat	0.2		0.2	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2
	Milk powder (0402)	28.7		28.7	17.0	28.7	12.6	28.7	9.7	28.7	10.0	28.7
	Other dairy products (0401,0405,0406)	29.5		29.5	83.0	29.5	87.4	29.5	77.6	29.5	86.1	29.5
	Fruit, vegetables, their products	1.9		1.9	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.9
	Hops	3.3		3.3	0.0	3.3	0.0	3.3	0.0	3.3	1.5	3.3
	Vegetable oil fats	0.7		0.7	0.0	0.7	0.0	0.7	0.0	0.7	0.0	0.7
	Sugar, confectionary	1.5		1.5	0.0	1.5	0.0	1.5	0.0	1.5	0.0	1.5
	Beer	1.3		1.3	0.0	1.3	0.0	1.3	0.0	1.3	0.0	1.3
	Wine	0.4		0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4
	Spirits, beverages	1.6		1.6	0.0	1.6	0.0	1.6	0.0	1.6	0.0	1.6
	Potato starch (110813)	1.1		1.1	0.0	1.1	0.0	1.1	2.6	1.1	2.4	1.1
Malt	12.4		12.4	0.0	12.4	0.0	12.4	0.0	12.4	0.0	12.4	
Cereals, flour products	3.4		3.4	0.0	3.4	0.0	3.4	0.0	3.4	0.0	3.4	
European Union(2)	Wheat and wheat flour	16.9	37.4	17.3	2.4	19.6	5.7	19.3	4.1	19.0	9.4	18.5
	Coarse grains	13.1		14.1	6.2	13.7	7.0	13.7	6.3	13.8	14.3	13.9
	Rice	0.6		0.5	0.6	0.5	1.3	0.5	0.7	0.5	0.5	0.5
	Rapeseed	0.3		0.4	0.0	0.3	0.0	0.3	0.0	0.4	0.0	0.4
	Olive oil	0.8		0.7	1.3	0.7	0.7	0.7	0.2	0.7	0.0	0.7
	Sugar	7.3		6.7	7.8	6.2	9.4	6.3	17.9	6.4	14.9	6.5
	Butter and butteroil	12.5		12.7	5.2	11.8	9.9	12.0	7.1	12.1	5.4	12.3
	Skim milk powder	3.5		3.7	2.9	3.5	3.1	3.5	2.7	3.5	3.6	3.6
	Cheese	4.2	9.1	4.6	9.0	5.1	4.9	5.0	4.0	4.9	2.8	4.8
	Other milk products	9.5		9.4	14.9	8.7	13.2	8.8	17.3	8.9	14.2	9.0
	Beef meat	18.6	37.6	16.8	30.8	16.4	27.4	16.4	19.3	16.5	12.0	16.6
	Pigmeat	1.7		2.6	2.1	2.5	1.3	2.5	1.7	2.5	6.7	2.5

Annex Table III.1. Structure of export subsidies by product and by country (%) (cont.)

Country	Description of products	1986-90	1991-92	2000 ⁽¹⁾	1995		1996		1997		1998	
		Budgetary outlay commitments			Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments
Hungary	Poultry meat	1.4	2.4	1.2	2.4	1.2	1.3	1.2	1.7	1.2	1.7	1.2
	Eggs	0.4		0.6	0.3	0.5	0.1	0.5	0.3	0.5	0.3	0.6
	Wine	0.6		0.5	1.0	0.5	1.1	0.5	0.9	0.5	0.5	0.5
	Fruit and vegetables, fresh	1.0		0.7	1.4	0.7	1.1	0.7	0.6	0.7	0.6	0.7
	Fruit and vegetables, processed	0.1		0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1
	Raw tobacco	0.6	1.8	0.5	0.4	0.8	0.1	0.8	0.0	0.7	0.0	0.7
	Alcohol	1.4		1.3	1.0	1.2	2.1	1.2	2.4	1.2	2.3	1.2
	Incorporated products	5.4	11.6	5.6	10.1	6.1	10.2	6.0	12.7	5.9	10.7	5.8
	Wheat	9.2		9.2	14.7	9.2	0.0	9.2	0.0	9.2	0.1	9.2
	Corn	1.0		1.0	11.8	1.0	0.0	1.0	0.0	1.0	28.6	1.0
	Sunflower seed	1.5		1.5	0.7	1.5	1.5	1.5	0.0	1.5	0.0	1.5
	Sunflower oil	5.1		5.1	0.0	5.1	0.0	5.1	0.0	5.1	0.0	5.1
	Sugar	1.0		1.0	0.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0
	White cream cheese	0.2		0.2	0.1	0.2	0.1	0.2	0.0	0.2	0.5	0.2
	Slaughter cattle	7.1		7.1	9.6	7.1	29.8	7.1	12.1	7.1	0.0	7.1
	Beef	7.0		7.0	0.0	7.0	0.0	7.0	0.0	7.0	0.0	7.0
	Slaughter pig	5.4		5.4	0.0	5.4	2.7	5.4	0.0	5.4	5.8	5.4
	Pork	21.2		21.2	1.2	21.2	11.8	21.2	5.6	21.2	9.4	21.2
	Slaughter sheep	3.7		3.7	14.3	3.7	16.8	3.7	16.0	3.7	0.0	3.7
	Sheep meat	0.8		0.8	0.5	0.8	0.9	0.8	0.8	0.8	0.0	0.8
Broiler chicken	24.5		24.5	21.0	24.5	13.8	24.5	49.2	24.5	43.3	24.5	
Wine in barrel	3.8		3.8	13.8	3.8	4.7	3.7	0.5	3.8	3.3	3.8	
Apple	6.7		6.7	2.2	6.7	0.7	6.7	2.2	6.7	0.0	6.7	
Red pepper meal	1.7		1.7	10.2	1.7	17.2	1.7	13.6	1.7	9.0	1.7	
Iceland	Sheepmeat	78.0		78.2	100.0	78.2	100.0	77.9	100.0	77.8	n.d.	78.0
	Milk	22.0		21.8	0.0	21.8	0.0	22.1	0.0	22.2	n.d.	22.0
Mexico	Sugar	76.3		76.3	0.0	76.3	0.0	76.3	100.0	76.2	0.0	76.2
	Wheat	1.6		1.6	0.0	1.6	0.0	1.6	0.0	1.6	100.0	1.6
	Dry beans	1.1		1.1	0.0	1.1	0.0	1.1	0.0	1.1	0.0	1.1
	Sorghum	2.4		2.4	0.0	2.4	0.0	2.4	0.0	2.4	0.0	2.4
	Maize	18.6		18.6	0.0	18.6	0.0	18.6	0.0	18.6	0.0	18.6
New Zealand	All products described in annex 1 of the Agreement on Agriculture	100.0		0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	
Norway	Bovine meat	7.1	16.1	7.1	3.4	11.0	1.8	10.3	6.8	9.8	11.3	9.1
	Swine meat	17.6		17.6	1.6	13.7	1.3	13.8	11.7	14.4	3.0	15.2
	Sheep and lamb meat	3.6		3.6	0.3	2.8	1.2	2.8	3.5	2.9	1.6	3.1
	Poultry meat	0.1		0.1	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.1
	Egg and egg products	3.5		3.5	3.7	2.7	3.2	2.7	2.4	2.9	2.2	3.0
	Butter	10.8		10.8	9.6	8.4	5.5	8.5	3.9	8.9	3.2	9.3
	Cheese	49.8	82.9	49.8	75.9	57.9	80.0	55.6	65.9	54.7	73.0	53.5
	Whey powder	0.0	0.7	0.0	0.6	0.5	0.0	0.4	0.0	0.4	0.0	0.3
	Fruit and vegetables	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
	Honey	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
	Processed agricultural products	7.4		7.4	4.7	2.7	7.0	5.6	5.7	5.8	5.6	6.2

Annex Table III.1. Structure of export subsidies by product and by country (%) (cont.)

Country	Description of products	1986-90	1991-92	2000 ⁽¹⁾	1995		1996		1997		1998		
		Budgetary outlay commitments			Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments	
Poland	Animal husbandry products	13.4		13.5	0.0	13.4	0.0	13.4	0.0	13.4	0.0	13.4	
	Processed meat	17.1		17.1	0.0	17.1	0.0	17.1	0.0	17.1	0.0	17.1	
	Meat	7.6		7.6	0.0	7.6	0.0	7.6	0.0	7.6	0.0	7.6	
	Poultry	1.9		1.9	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.9	
	Powder milk	1.1		1.1	0.0	1.1	0.0	1.1	0.0	1.1	0.0	1.1	
	Dasein	1.6		1.7	0.0	1.7	0.0	1.7	0.0	1.6	0.0	1.6	
	Sugar	6.4		6.4	100.0	6.4	100.0	6.4	100.0	6.4	95.1	6.4	
	Molasses	2.0		2.0	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0	
	Spirit products	4.1		4.2	0.0	4.1	0.0	4.1	0.0	4.1	0.0	4.1	
	Fruits and vegetables (0710...)	6.2		6.2	0.0	6.2	0.0	6.2	0.0	6.2	0.0	6.2	
	Fruits and vegetables (0810...)	6.6		6.6	0.0	6.6	0.0	6.6	0.0	6.6	0.0	6.6	
	Processed fruits and vegetables	21.0		21.1	0.0	21.0	0.0	21.0	0.0	21.0	0.0	21.0	
	Potato starch and processed potatoes	1.4		1.4	0.0	1.4	0.0	1.4	0.0	1.4	4.9	1.4	
	Sowing materials	1.2		1.2	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2	
	Rape oil	2.4		2.5	0.0	2.4	0.0	2.4	0.0	2.4	0.0	2.4	
	Rape	3.0		2.6	0.0	3.0	0.0	3.0	0.0	3.0	0.0	3.0	
	Potatoes	2.8		2.8	0.0	2.8	0.0	2.8	0.0	2.8	0.0	2.8	
	Switzerland	Dairy products	64.5		64.5	64.0	64.5	66.9	67.4	68.7	62.9	62.8	64.4
		Cattle for breeding and horses	5.1		5.1	5.9	5.1	3.8	5.3	0.0	5.0	0.1	5.1
Fruit		3.8		3.8	3.0	3.8		27.3	1.0	5.8	4.5	3.9	
Potatoes		0.5		0.5	0.2	0.5			0.5	0.8	0.4	0.6	
	Processed products	26.1		26.1	26.9	26.1	29.3		29.8	25.5	32.3	26.0	
Turkey	Meat of bovine	0.1		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Meat of sheep	2.4		2.5	0.0	0.4	0.0	0.4	0.0	0.5	0.0	0.5	
	Meat of poultry	0.4		0.4	1.7	0.1	0.0	0.1	0.8	0.1	1.2	0.1	
	Creams	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Milk	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Yoghurt	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Butter	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Cheese	0.3		0.3	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	
	Eggs	0.3		0.3	1.2	0.0	0.0	0.0	0.9	0.1	0.7	0.1	
	Natural honey	0.1		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Cut flowers (fresh)	0.2		0.2	0.9	0.1	0.0	0.1	2.1	0.1	2.6	0.1	
	Potatoes	0.5		0.5	0.0	0.1	4.0	0.1	0.9	0.1	0.0	0.1	
	Tomatoes	1.6		1.6	0.0	0.3	12.1	0.3	5.3	0.3	0.0	0.3	
	Onions (dried)	1.8		1.8	0.0	0.3	13.8	0.3	5.8	0.3	0.0	0.4	
	Vegetables, frozen (excl. potatoes)	0.8		0.8	4.0	0.2	0.0	0.2	4.1	0.2	5.1	0.2	
	Potatoes (frozen and fried)	0.4		0.4	1.0	0.1	0.0	0.1	0.0	0.1	0.2	0.1	
	Vegetables (dehydrated)	0.4		0.4	0.4	0.1	0.0	0.1	0.8	0.1	1.1	0.1	
	Chickpeas	6.6		6.7	0.0	1.0	0.0	1.1	0.0	1.2	0.0	1.4	
	Green and red lentils (shelled, unshelled)	2.8		2.8	0.0	0.4	0.0	0.5	0.0	0.5	0.0	0.6	
Citrus fruit	6.9		7.0	0.0	1.1	53.7	1.2	15.9	1.3	12.7	1.4		
Apples	3.3		3.4	0.0	0.5	16.4	0.6	6.1	0.6	2.8	0.7		

Annex Table III.1. Structure of export subsidies by product and by country (%) (cont.)

Country	Description of products	1986-90	1991-92	2000 ⁽¹⁾	1995		1996		1997		1998	
		Budgetary outlay commitments			Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments	Subsidised exports	Commitments
	Fruits (frozen)	0.6		0.6	2.2	0.2	0.0	0.2	3.4	0.2	2.5	0.2
	Wheat	25.6		25.9	0.0	73.4	0.0	72.7	0.0	71.8	0.0	70.7
	Barley	4.4		4.5	0.0	14.1	0.0	14.0	0.0	13.8	0.0	13.6
	Maize	1.2		0.0	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2
	Wheat flour	1.3		1.4	18.4	1.1	0.0	1.1	0.0	1.1	0.0	1.1
	Semolina	1.4		1.5	0.9	0.2	0.0	0.2	0.0	0.3	0.0	0.3
	Malt	1.6		1.6	0.6	0.2	0.0	0.3	0.0	0.3	0.0	0.3
	Liquorice root	0.2		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Olive oil	1.7		1.7	0.0	0.3	0.0	0.3	0.4	0.3	3.4	0.3
	Sunflower seed oil (refined)	2.2		2.2	0.0	0.3	0.0	0.4	0.0	0.4	0.0	0.4
	Maize oil (refined)	0.6		0.6	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
	Margarine	2.6		2.6	4.4	0.6	0.0	0.6	0.0	0.6	0.0	0.7
	Sausages and similar products, of meat, meat offal	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other prepared meat, meat offal	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Prepared or preserved fish	3.5		3.6	1.3	0.6	0.0	0.6	2.9	0.7	2.1	0.7
	Chocolate and other food preparations containing chocolate, biscuits, wafers	2.0		2.4	8.3	0.3	0.0	0.3	0.0	0.3	0.0	0.4
	Macaroni, vermicelli	0.9		0.9	6.3	0.4	0.0	0.4	0.0	0.4	0.0	0.4
	Preserves, pastes	13.5		13.2	41.8	1.8	0.0	2.0	39.9	2.2	52.2	2.5
	Homogenised fruit preparations	0.3		0.3	1.1	0.1	0.0	0.1	1.0	0.1	1.5	0.1
	Ground nuts	0.1		0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Fruit juices (concentrated)	1.4		1.4	5.4	0.5	0.0	0.5	9.6	0.5	11.7	0.6
	Vegetable juices	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Tobacco	5.8		5.9	0.0	0.9	0.0	1.0	0.0	1.1	0.0	1.2
United States	Wheat	61.2	88.8	61.2	0.0	65.5	0.0	65.0	0.0	64.4	0.0	63.7
	Coarse grains	7.8		7.8	0.0	5.8	0.0	6.0	1.1	6.3	0.0	6.6
	Rice	0.4	2.0	0.4	0.0	1.3	0.0	1.2	0.0	1.1	0.0	0.9
	Vegetable oils	2.4	6.4	2.4	0.0	4.5	0.0	4.3	0.0	4.0	0.0	3.6
	Butter and butter oil	5.1		5.1	0.0	3.8	16.5	4.0	7.9	4.2	0.3	4.4
	Skim milk powder	13.9		13.9	65.8	10.4	77.2	10.8	79.1	11.3	90.9	11.9
	Cheese	0.6		0.6	8.0	0.5	2.1	0.5	3.5	0.5	2.8	0.5
	Other milk products	0.0	1.9	0.0	6.1	1.2	4.2	1.1	7.7	0.9	5.0	0.7
	Bovine meat	3.8		3.8	0.0	2.9	0.0	3.0	0.0	3.1	0.0	3.3
	Pig meat	0.1		0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
	Poultry meat	2.4		2.4	20.1	1.8	0.0	1.9	0.8	2.0	1.0	2.1
	Live dairy cattle (head)	2.0		2.0	0.0	1.5	0.0	1.6	0.0	1.6	0.0	1.7
	Eggs (dozen)	0.3	0.9	0.3	0.0	0.6	0.0	0.6	0.0	0.6	0.0	0.5

Note: 1. The year 2004 for Mexico and Turkey. 2. EU-12 for 1986-90 and 1991-92; EU-15 for 2000.

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table III.2. Share of subsidised exports in total exports by year and by country (%)

Country	Description of products	1995	1996	1997	1998
Australia	Butter and butter oil	0	0	0	0
	Cheese	0	0	0	0
	Other Milk Products	0	0	0	0
	Pears	0	0	0	0
	Skim Milk Powder	0	0	0	0
Canada	Butter	30	6	0	0
	Cheese	0	0	0	0
	Coarse Grains	0	0	0	0
	Incorporated Products	0	0	0	0
	Oilcakes	0	0	0	0
	Oilseeds	0	0	0	0
	Other Milk Products	0	0	0	0
	Skim Milk Powder	99	6	0	0
	Vegetable Oils	0	0	0	0
	Vegetables	0	0	0	0
	Wheat and Wheat Flour	0	0	0	0
Czech Republic	Beef (0102,0201,0202,1602)	0	0	37	0
	Milk powder (0402)	68	21	31	36
	Other dairy products (0401, 0405, 0406)	41	47	40	30
European Union	Beef meat	92	109	112	95
	Butter and butteroil	115	107	102	110
	Cheese	82	82	77	70
	Coarse grains	92	96	110	115
	Eggs	88	75	86	83
	Fruit and vegetables, fresh	47	40	38	41
	Fruit and vegetables, processed	35	44	32	27
	Olive oil	115	104	49	0
	Other milk products	89	84	87	82
	Pigmeat	46	36	24	62
	Poultry meat	51	46	39	35
	Rapeseed	0	0	0	0
	Raw tobacco	4	1	0	0
	Rice	64	94	48	52
	Skim milk powder	97	99	77	111
Sugar	19	26	30	30	
Wheat and wheat flour	26	96	114	114	
Hungary	Apple	98	8	30	0
	Beef	4	0	0	0
	Broiler chicken	100	100	94	74
	Corn	94	0	0	23
	Pork	93	97	85	68
	Red pepper meal	99	99	74	73
	Sheep meat	100	97	64	0
	Slaughter cattle	97	100	69	0
	Slaughter pig	0	52	0	70
	Slaughter sheep	99	99	80	0
	Sugar	0	0	0	0
	Sunflower oil	0	0	0	0
	Sunflower seed	2	2	0	0
	Wheat	99	0	0	8
	White cream cheese	100	100	100	2
	Wine in barrel	99	98	2	13
	Iceland	Sheepmeat	47	15	2	n.a.
Norway	Bovine meat	40	28	60	99
	Butter	99	99	94	92
	Cheese	82	82	86	85
	Egg and egg products	68	80	91	93
	Fruit and vegetables	0	0	0	0
	Honey	0	0	0	0
	Poultry meat	52	0	0	0

Annex Table III.2. **Share of subsidised exports in total exports by year and by country (%)** (cont.)

Country	Description of products	1995	1996	1997	1998
	Sheep and lamb meat	77	73	82	98
	Swine meat	80	66	90	86
	Whey powder	99	n.a.	0	0
Poland	Potato starch	n.a.	n.a.	n.a.	n.a.
	Sugar	20	89	33	40
Switzerland	Dairy products	85	90	85	75
	Fruit	74	n.a.	6	28
	Potatoes	98	n.a.	91	93
Turkey	Apples	0	100	100	50
	Chocolate and other food preparations containing chocolate, biscuits, wafers	16	0	0	0
	Citrus fruit	0	100	67	33
	Creams	0	0	19	41
	Eggs	37	0	11	5
	Fruit juices (concentrated)	47	0	35	21
	Fruits (frozen)	106	0	49	n.a.
	Homogenised fruit preparations	51	0	61	64
	Macaroni, vermicelli	40	0	0	0
	Malt	530	0	0	0
	Margarine	46	0	0	0
	Meat of poultry (excl. edible offals)	49	0	14	28
	Olive oil	0	0	3	22
	Onions (dried)	0	100	93	0
	Other prepared meat, meat offal	10	0	0	0
	Potatoes	0	35	7	0
	Potatoes (frozen and fried)	137	0	16	74
	Prepared or preserved fish	47	0	52	24
	Preserves, pastes	74	0	67	66
	Sausages and similar products, of meat, meat offal	11	0	0	0
	Semolina	93	0	0	0
	Tomatoes	0	99	87	0
	Vegetable juices	11	0	0	0
	Vegetables (dehydrated)	25	0	22	23
	Vegetables, frozen (excl. potatoes)	60	0	42	35
	Wheat flour	59	0	0	0
United States	Bovine meat	0	0	0	0
	Butter and butter oil	0	130	99	13
	Cheese	18	15	12	14
	Coarse grains	0	0	0	0
	Eggs (dozen)	7	0	0	0
	Other milk products	150	122	115	90
	Pig meat	0	0	0	0
	Poultry meat	2	0	0	0
	Rice	0	0	0	0
	Skim milk powder	79	178	84	164
	Vegetable oils	0	0	0	0

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table III.3. **Subsidised export volumes as a percentage of annual commitments by year and by country**

Country	Description of products	1995	1996	1997	1998
Australia	Butter and butter oil	0.0	0.0	0.0	0.0
	Cheese	0.0	0.0	0.0	0.0
	Other Milk Products	0.0	0.0	0.0	3.9
	Pears	0.0	0.0	0.0	0.0
	Skim Milk Powder	0.0	0.0	0.0	0.0

Annex Table III.3. **Subsidised export volumes as a percentage of annual commitments by year and by country (cont.)**

Country	Description of products	1995	1996	1997	1998
Canada	Butter	46.8	8.1	0.0	0.0
	Cheese	0.0	0.0	0.0	0.0
	Coarse Grains	0.0	0.0	0.0	0.0
	Oilcakes	0.0	0.0	0.0	0.0
	Oilseeds	0.0	0.0	0.0	0.0
	Other Milk Products	0.0	0.0	0.0	0.0
	Skim Milk Powder	69.3	2.8	0.0	0.0
	Vegetable Oils	0.0	0.0	0.0	0.0
	Vegetables	0.0	0.0	0.0	0.0
	Wheat and Wheat Flour	0.0	0.0	0.0	0.0
Czech Republic	Beef (0102,0201,0202,1602)	0.0	0.0	18.6	0.0
	Hops(1210)	0.0	0.0	0.0	4.8
	Milk powder (0402)	58.6	17.5	19.5	25.4
	Other dairy products (0401, 0405, 0406)	43.3	51.5	51.7	58.9
	Potato starch (110813)	0.0	0.0	44.4	43.1
European Union	Beef meat	89.6	109.6	93.7	76.1
	Butter and butteroil	30.0	58.7	37.4	38.0
	Cheese	99.0	99.1	84.3	62.3
	Coarse grains	48.2	90.3	69.9	123.3
	Eggs	75.4	56.3	90.1	104.1
	Fruit and vegetables, fresh	98.8	98.6	98.1	93.0
	Fruit and vegetables, processed	53.5	80.7	60.7	55.8
	Olive oil	96.4	103.7	72.6	0.0
	Other milk products	97.6	100.0	102.0	90.7
	Pigmeat	69.8	54.8	42.3	153.8
	Poultry meat	96.2	99.2	105.0	99.4
	Rapeseed	0.0	0.0	0.0	0.0
	Raw tobacco	5.9	1.1	0.0	0.0
	Rice	54.4	144.2	102.6	99.0
	Skim milk powder	72.0	83.6	56.6	74.5
Sugar	55.0	80.1	117.8	111.5	
Wheat and wheat flour	13.6	75.0	72.4	83.3	
Hungary	Apple	8.6	1.2	2.3	0.0
	Beef	0.0	0.0	0.0	0.0
	Broiler chicken	14.6	9.7	13.3	16.8
	Corn	42.7	0.0	0.0	81.3
	Pork	1.3	8.6	4.9	3.9
	Red pepper meal	55.0	65.9	40.2	43.8
	Sheep meat	10.4	14.2	9.6	0.0
	Slaughter cattle	36.4	50.4	34.7	0.0
	Slaughter pig	0.0	9.2	0.0	12.8
	Slaughter sheep	68.5	68.4	55.5	0.0
	Sugar	0.0	0.0	0.0	0.0
	Sunflower oil	0.0	0.0	0.0	0.0
	Sunflower seed	5.4	4.9	0.0	0.0
	Wheat	45.9	0.0	0.0	0.1
	White cream cheese	3.7	4.5	0.9	11.3
	Wine in barrel	9.4	6.6	0.2	1.5
	Iceland	Sheepmeat	61.4	10.4	0.8	0.0
Mexico	Sugar	0.0	0.0	16.7	0.0
	Wheat	0.0	0.0	0.0	59.9
Norway	Bovine meat	19.6	12.1	63.9	104.5
	Butter	61.1	34.8	35.6	28.2
	Cheese	82.2	85.6	101.6	122.0
	Egg and egg products	75.1	99.4	117.0	88.5
	Fruit and vegetables	0.0	0.0	0.0	0.0
	Honey	0.0	0.0	0.0	0.0
	Poultry meat	213.9	0.0	0.0	0.0
	Sheep and lamb meat	14.6	30.0	142.2	105.9

Annex Table III.3. **Subsidised export volumes as a percentage of annual commitments by year and by country** (*cont.*)

Country	Description of products	1995	1996	1997	1998
	Swine meat	11.0	9.6	105.9	19.8
	Whey powder	74.3	0.0	0.0	0.0
Poland	Potato starch	0.0	0.0	0.0	6.7
	Sugar	0.7	116.4	149.2	119.2
Switzerland	Dairy products	86.5	82.0	81.7	79.7
	Fruit	83.9	0.0	10.5	70.1
	Potatoes	41.7	0.0	43.2	68.0
Turkey	Apples	0.0	84.7	72.4	19.0
	Chocolate and other food preparations containing chocolate, biscuits, wafers	100.0	0.0	0.0	0.0
	Citrus fruit	0.0	97.9	68.0	41.6
	Creams	0.0	0.0	78.4	96.5
	Eggs	100.0	0.0	96.7	60.0
	Fruit juices (concentrated)	100.0	0.0	100.0	100.0
	Fruits (frozen)	87.4	0.0	100.0	60.1
	Homogenised fruit preparations	68.7	0.0	81.8	100.0
	Macaroni, vermicelli	100.0	0.0	0.0	0.0
	Malt	22.9	0.0	0.0	0.0
	Margarine	65.9	0.0	0.0	0.0
	Meat of poultry (excl. edible offals)	100.0	0.0	67.7	78.2
	Olive oil	0.0	0.0	6.8	47.2
	Onions (dried)	0.0	70.3	80.0	0.0
	Other prepared meat, meat offal	13.9	0.0	0.0	0.0
	Potatoes	0.0	97.7	52.3	0.0
	Potatoes (frozen and fried)	70.0	0.0	1.2	11.5
	Prepared or preserved fish	55.6	0.0	90.8	50.0
	Preserves, pastes	80.9	0.0	100.0	100.0
	Sausages and similar products, of meat, meat offal	35.9	0.0	0.0	0.0
	Semolina	26.3	0.0	0.0	0.0
	Tomatoes	0.0	94.3	100.0	0.0
	Vegetable juices	75.2	0.0	0.0	0.0
	Vegetables (dehydrated)	100.0	0.0	79.0	83.1
	Vegetables, frozen (excl. potatoes)	100.0	0.0	100.0	99.6
	Wheat flour	77.2	0.0	0.0	0.0
United States	Bovine meat	0.0	0.0	0.0	0.0
	Butter and butter oil	0.0	24.1	45.7	1.3
	Cheese	85.5	82.3	100.0	93.2
	Coarse grains	0.0	0.0	1.4	0.0
	Eggs (dozen)	25.0	0.0	0.0	0.0
	Other milk products	36.1	22.0	100.0	106.8
	Pig meat	0.0	0.0	0.0	0.0
	Poultry meat	65.1	0.0	0.0	11.6
	Rice	3.6	0.0	0.0	0.0
	Skim milk powder	58.9	69.7	104.4	154.1
	Vegetable oils	0.0	0.0	0.0	0.0

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table III.4. **Export subsidy budgetary outlays as a percentage of annual commitments by year and by country**

Country	Description of products	1995	1996	1997	1998
Australia	Pears	0.0	0.0	0.0	0.0
	Butter and butter oil	0.0	0.0	0.0	0.0
	Skim Milk Powder	0.0	0.0	0.0	0.0
	Cheese	0.0	0.0	0.0	0.0
	Other Milk Products	0.0	0.0	0.0	6.0

Annex Table III.4. **Export subsidy budgetary outlays as a percentage of annual commitments by year and by country (cont.)**

Country	Description of products	1995	1996	1997	1998
Canada	Wheat and Wheat Flour	0.0	0.0	0.0	0.0
	Coarse Grains	0.0	0.0	0.0	0.0
	Oilseeds	0.0	0.0	0.0	0.0
	Vegetable Oils	0.0	0.0	0.0	0.0
	Oilcakes	0.0	0.0	0.0	0.0
	Butter	34.2	9.5	0.0	0.0
	Skim Milk Powder	83.4	6.2	0.0	0.0
	Cheese	0.0	0.0	0.0	0.0
	Other Milk Products	0.0	0.0	0.0	0.0
	Vegetables	0.0	0.0	0.0	0.0
Incorporated Products	0.0	0.0	0.0	0.0	
Czech Republic	Beef (0102,0201,0202,1602)	0.0	0.0	32.5	0.0
	Milk powder (0402)	9.9	8.4	7.7	9.1
	Other dairy products (0401,0405,0406)	47.0	56.4	60.3	76.3
	Potato starch(110813)	0.0	0.0	53.0	56.8
	Hops	0.0	0.0	0.0	12.2
European Union	Wheat and wheat flour	5.1	15.1	9.3	29.5
	Coarse grains	18.9	26.0	19.8	60.1
	Rice	55.5	141.3	68.6	58.3
	Rapeseed	0.0	0.0	0.0	0.0
	Olive oil	77.8	52.2	11.2	0.0
	Sugar	51.7	76.5	121.8	134.1
	Butter and butteroil	18.4	42.3	25.6	25.4
	Skim milk powder	34.7	44.8	32.9	58.4
	Cheese	73.7	49.9	35.7	33.7
	Other milk products	71.0	76.3	84.6	91.6
	Beef meat	78.4	85.4	50.8	42.3
	Pigmeat	34.8	26.4	29.8	154.6
	Poultry meat	85.0	57.4	64.5	82.4
	Eggs	21.3	12.0	24.1	34.3
	Wine	88.9	110.6	74.1	63.0
	Fruit and vegetables, fresh	90.7	85.1	38.4	50.4
	Fruit and vegetables, processed	92.6	89.5	53.3	45.5
Raw tobacco	18.8	4.0	0.0	0.0	
Alcohol	36.3	89.6	85.6	106.1	
Incorporated products	68.5	86.2	92.7	107.0	
Hungary	Wheat	39.4	0.0	0.0	0.1
	Corn	281.6	0.0	0.0	412.6
	Sunflower seed	11.3	13.8	0.0	0.0
	Sunflower oil	0.0	0.0	0.0	0.0
	Sugar	0.0	0.0	0.0	0.0
	White cream cheese	8.7	4.0	0.8	35.1
	Slaughter cattle	33.0	58.3	16.7	0.0
	Beef	0.0	0.0	0.0	0.0
	Slaughter pig	0.0	7.0	0.0	15.8
	Pork	1.4	7.8	2.6	6.6
	Slaughter sheep	96.4	64.0	43.1	0.0
	Sheep meat	15.6	16.7	10.7	0.0
	Broiler chicken	21.1	7.9	19.9	26.2
	Wine in barrel	90.6	17.3	1.3	12.9
Apple	8.1	1.5	3.2	0.0	
Red pepper meal	146.7	140.7	79.0	78.4	
Iceland	Sheepmeat	26.5	3.9	0.8	0.0
	Milk	0.0	0.0	0.0	0.0
Mexico	Sugar	0.0	0.0	20.8	0.0
	Wheat	0.0	0.0	0.0	123.9
Norway	Bovine meat	17.4	10.4	65.6	106.5
	Swine meat	6.6	5.4	76.4	16.8
	Sheep and lamb meat	6.2	25.9	111.5	45.7

Annex Table III.4. **Export subsidy budgetary outlays as a percentage of annual commitments by year and by country** (*cont.*)

Country	Description of products	1995	1996	1997	1998
	Poultry meat	242.9	0.0	0.0	0.0
	Egg and egg products	76.7	67.9	80.1	63.9
	Butter	64.6	38.0	41.1	29.1
	Cheese	74.4	84.3	113.3	117.4
	Whey powder	70.5	0.0	0.0	0.0
	Fruit and vegetables	0.0	0.0	0.0	0.0
	Honey	0.0	0.0	0.0	0.0
	Processed agricultural products	97.2	74.1	92.2	78.1
Poland	Sugar	0.2	35.9	21.5	34.6
	Potato starch	0.0	0.0	0.0	8.2
Switzerland	Dairy products	81.0	78.1	80.8	78.8
	Cattle for breeding and horses	93.9	55.5	0.3	1.1
	Fruit	65.4	0.0	13.0	91.3
	Potatoes	26.5	0.0	42.6	55.2
	Processed products	84.3	0.0	86.8	100.0
Turkey	Wheat flour	57.7	0.0	0.0	0.0
	Semolina	13.3	0.0	0.0	0.0
	Malt	8.2	0.0	0.0	0.0
	Margarine	26.6	0.0	0.0	0.0
	Chocolate and other food preparations containing chocolate, biscuits, wafers	97.3	0.0	0.0	0.0
	Macaroni, vermicelli	56.1	0.0	0.0	0.0
	Vegetable juices	66.6	0.0	0.0	0.0
	Sausages and similar products, of meat, meat offal	16.8	0.0	0.0	0.0
	Other prepared meat, meat offal	7.5	0.0	0.0	0.0
	Potatoes	0.0	99.8	51.5	0.0
	Tomatoes	0.0	96.3	97.8	0.0
	Onions (dried)	0.0	99.8	96.3	0.0
	Citrus fruit	0.0	100.0	68.2	42.2
	Apples	0.0	63.6	55.0	19.0
	Cut flowers (fresh)	28.1	0.0	98.6	99.9
	Vegetables, frozen (excl. potatoes)	67.1	0.0	99.9	99.9
	Vegetables (dehydrated)	20.5	0.0	56.9	59.8
	Fruits (frozen)	44.1	0.0	99.8	59.8
	Preserves, pastes	78.3	0.0	99.6	99.5
	Homogenised fruit preparations	66.9	0.0	82.3	99.9
	Fruit juices (concentrated)	37.0	0.0	99.1	99.8
	Olive oil	0.0	0.0	7.8	47.4
	Potatoes (frozen and fried)	48.2	0.0	0.9	9.1
	Prepared or preserved fish	8.1	0.0	24.0	13.4
	Meat of poultry (excl. edible offals)	99.1	0.0	67.6	78.1
	Creams	0.0	0.0	78.6	98.0
	Eggs	100.0	0.0	99.9	62.6
United States	Wheat	0.0	0.0	0.0	0.0
	Coarse grains	0.0	0.0	2.0	0.0
	Rice	0.0	0.0	0.0	0.0
	Vegetable oils	0.0	0.0	0.0	0.0
	Butter and butter oil	0.0	47.9	22.7	1.2
	Skim milk powder	13.9	82.7	84.0	136.1
	Cheese	38.5	50.0	83.8	96.5
	Other milk products	10.8	44.3	99.7	128.6
	Bovine meat	0.0	0.0	0.0	0.0
	Pig meat	0.0	0.0	0.0	0.0
	Poultry meat	24.1	0.0	4.6	8.1
	Live dairy cattle (head)	0.0	0.0	0.0	0.0

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table III.5. Implied average unit export subsidies (national currency per tonne)

		Implied average unit export subsidy		Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy
		1986-90	1991-92										2000	1995	1995	1996	1996	1997	1997	1998	1998
Australia	Butter and butter oil	457		370		383		381		379		377
	Cheese	538		436		429		430		431		432
	Other Milk Products	2 647		2 144		2 097		2 103		2 111	3 232	2 120
	Pears	100		81		97		95		90		87
	Skim Milk Powder	434		352		362		360		359		357
Canada	Butter	3 909	3 632	3 143	3 003	4 108	4 760	4 027		3 918		3 766
	Cheese	2 209	2 438	1 780		2 318		2 236		2 145		2 041
	Coarse Grains	25		21		25		24		23		22
	Oilcakes	27		22		27		26		25		24
	Oilseeds	27		22		26		26		25		24
	Other Milk Products	919		743		894		868		840		811
	Skim Milk Powder	856		691	1 002	833	1 788	809		784		756
	Vegetable Oils	30		24		29		28		27		26
	Vegetables	31	24	25		24		24		24		25
Wheat and Wheat Flour	28	24	22		24		24		24		23	
Czech Republic	Beef (0102,0201,0202,1602)	7 684		6 221		7 485		7 270	12 286	7 039		6 788
	Hops(1210)	18 314		14 771		17 803		17 257		16 824	41 000	16 192
	Milk powder (0402)	22 986		18 625	3 782	22 400	10 377	21 739	8 311	21 069	7 286	20 330
	Other dairy products (0401, 0405, 0406)	25 156		20 382	26 580	24 510	26 039	23 784	26 875	23 034	28 794	22 222
	Potato starch (110813)	5 026		4 084		4 890		4 771	5 500	4 615	5 857	4 438
European Union(1)	Alcohol	103		84	114	101	111	98	110	95	110	91
	Beef meat	1 893	1 923	1 526	1 478	1 691	1 297	1 666	888	1 637	891	1 605
	Butter and butteroil	2 860		2 374	1 750	2 854	1 999	2 772	1 837	2 684	1 728	2 589
	Cheese	1 137	1 288	1 063	1 036	1 393	675	1 341	543	1 283	659	1 218
	Coarse grains	109		97	46	117	33	114	31	110	52	106
	Eggs	378		442	136	481	102	475	125	468	151	460
	Fruit and vegetables, fresh	90		70	77	84	71	82	31	79	41	76
	Fruit and vegetables, processed	77		58	121	70	75	68	58	66	52	63
	Olive oil	580		472	458	568	278	552	82	534		515
	Other milk products	849		728	629	864	642	841	677	817	798	790
	Pigmeat	361		431	266	533	249	516	350	497	479	477
	Poultry meat	389	313	317	277	314	182	314	193	315	261	315
	Pulses											
	Rapeseed	321		267		321		312		302		291
	Raw tobacco	441	515	363	1 625	508	1 700	490		467		440
	Rice	336		276	342	335	319	325	210	314	178	302
	Skim milk powder	1 202		1 012	584	1 213	631	1 179	663	1 142	865	1 103
Sugar	480		392	443	471	437	458	458	443	514	428	
Tomato concentrate												
Vegetable oils												

Annex Table III.5. Implied average unit export subsidies (national currency per tonne) (cont.)

		Implied average unit export subsidy		Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy
		1986-90	1991-92	2000	1995	1995	1996	1996	1997	1997	1998	1998
Hungary	Wheat and wheat flour	105	111	89	43	113	22	110	14	106	36	101
	Wine	21		17	24	20	20	20	12	19	12	18
	Apple	3 695		3 391	3 423	3 663	4 543	3 617	5 059	3 574		3 517
	Beef	43 528		35 821	46 000	42 057		41 758		40 156		38 419
	Broiler chicken	38 936		31 658	54 923	37 949	30 024	36 885	53 519	35 730	53 854	34 488
	Corn	159		902	1 156	176		199		234	1 500	296
	Pork	41 183		33 308	41 867	40 099	35 399	38 944	19 996	37 699	60 825	36 354
	Red pepper meal	42 556		35 000	106 624	40 000	89 909	42 125	77 114	39 250	65 050	36 375
	Sheep meat	57 000		54 500	79 872	53 333	58 824	50 000	51 903	46 667		43 333
	Slaughter cattle	22 814		18 582	20 053	22 088	25 013	21 631	10 017	20 794		20 233
	Slaughter pig	27 568		22 171		27 143	19 931	26 049		25 513	30 078	24 263
	Slaughter sheep	28 310		22 826	38 767	27 536	25 011	26 741	20 108	25 885		24 960
	Sugar	1 410		4 656		1 521		1 694		1 929		2 329
	Sunflower oil	6 189		5 021		6 011		5 855		5 657		5 472
	Sunflower seed	3 767		3 056	7 647	3 667	9 983	3 548		3 432		3 351
	Wheat	1 422		1 152	1 188	1 386		1 346		1 304	1 883	1 257
	White cream cheese	24 000		15 500	54 167	23 316	20 000	22 581	20 000	21 788	66 667	21 512
Wine in barrel	1 623		1 316	15 256	1 581	4 012	1 534	10 216	1 486	12 073	1 434	
Iceland	Milk	1 025		823		984		968		950		901
	Sheepmeat	6 374		5 175	2 673	6 196	2 262	6 002	6 250	5 845		5 621
Mexico	Sugar	374		352				452	363			
	Wheat	30		29						60	29	
Norway	Bovine meat	28 810	32 050	23 377	27 913	31 370	26 218	30 561	30 258	29 488	28 642	28 117
	Butter	11 192		9 059	11 525	10 901	11 567	10 588	11 835	10 251	10 223	9 886
	Cheese	18 717	24 493	15 166	21 182	23 396	21 828	22 165	23 154	20 764	18 441	19 164
	Egg and egg products	13 470		10 903	13 397	13 129	8 719	12 761	8 461	12 365	8 622	11 937
	Fruit and vegetables	1 070	951	869		912		943		892		929
	Honey	6 593	12 963	5 347		12 658		12 010		11 404		10 145
	Poultry meat	26 056		20 982	29 010	25 547		26 515		24 016		22 951
	Sheep and lamb meat	32 033		26 003	13 147	31 152	26 217	30 326	22 980	29 309	12 229	28 340
	Swine meat	28 235		22 869	16 522	27 510	14 936	26 730	18 671	25 867	21 152	24 957
	Whey powder	1 333	37 063	1 055	33 880	35 743		33 915		32 374		28 346
Poland	Potato starch			0		0		0		230	269	220
	Sugar	379		307	102	369	110	358	50	347	97	334
Switzerland-Liechtenstein	Cattle for breeding and horses	2 446		1 982	2 018	2 383	1 605	2 315	962	2 241	607	2 162
	Dairy products	5 639		4 569	5 149	5 493	5 082	5 336	5 111	5 169	4 930	4 986
	Fruit	2 183		1 772	1 658	2 124		14 158	2 524	2 045	2 562	1 966
	Potatoes	337		273	209	330		328	315	319	251	309

Annex Table III.5. Implied average unit export subsidies (national currency per tonne) (cont.)

	Implied average unit export subsidy		Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy	Unit subsidised exports	Implied unit export subsidy
	1986-90	1991-92	2000	1995	1995	1996	1996	1997	1997	1998	1998
Turkey											
	Apples	68	60			50	67	50	66	65	65
	Chocolate and other food preparations containing chocolate, biscuits, wafers	143	153	99	102						
	Citrus fruit	35	31			35	34	34	34	34	34
	Creams	72	64					70	70	70	69
	Cut flowers (fresh)										
	Eggs	123	108	121	121			123	119	123	118
	Fruit juices (concentrated)	152	134	66	179			172	173	170	170
	Fruits (frozen)	88	78	50	99			96	96	94	94
	Homogenised fruit preparations	78	69	50	51			54	54	55	55
	Macaroni, vermicelli	75	66	42	75						
	Malt	57	50	20	56						
	Margarine	50	44	20	50						
	Meat of poultry (excl. edible offals)	211	186	207	209			204	204	202	202
	Olive oil	100	88					110	97	96	96
	Onions (dried)	18	16			25	18	21	17		17
	Other prepared meat, meat offal	282	249	150	279						
	Potatoes	22	19			22	22	21	21		21
	Potatoes (frozen and fried)	73	65	50	72			55	71	55	70
	Prepared or preserved fish	585	517	84	579			150	567	150	560
	Preserves, pastes	90	77	50	52			55	55	57	57
	Sausages and similar products, of meat, meat offal	324	286	150	321						
	Semolina	30	27	15	30						
	Tomatoes	19	17			19	19	18	18		18
	Vegetable juices	57	50	50	56						
	Vegetables (dehydrated)	537	475	109	532			375	520	370	514
	Vegetables, frozen (excl. potatoes)	89	79	78	116			110	110	107	107
	Wheat flour	29	26	15	20						
United States											
	Bovine meat	1 602	1 298		1 560		1 516		1 467		1 415
	Butter and butter oil	1 784	1 446		1 042	2 156	1 086	566	1 141	1 144	1 213
	Cheese	1 481	1 200	628	1 395	828	1 362	1 113	1 327	1 334	1 289
	Coarse grains	36	30	0	36		35	48	33		32
	Eggs (dozen)	404	356	327	0	354	353		351		347
	Other milk products	767	1 154	618	345	1 154	2 323	1 149	1 153	1 386	1 152
	Pig meat	1 554	1 258		1 512		1 470		1 422		1 373
	Poultry meat	642	520	232	625		607		588	395	567
	Rice	76	58	61	58		58		58		58
	Skim milk powder	1 493	0	1 209	264	1 119	1 131	922	1 146	1 027	1 163
	Vegetable oils	123	90	100	90		91		91		93
	Wheat	31	40	25	38		36		34		31

Note: Implied average unit export subsidies are calculated by dividing the value commitments by the volume commitments; EU-12 for 1986-90 and 1991-92; EU-15 for 2000.

Source: OECD Secretariat calculations based on country notifications to WTO.

Annex Table III.6. Cumulated unused export subsidies

		1995		1996		1997		1998	
		Volume (000' t)	Value (million)	Volume (000' t)	Value (million)	Volume (000' t)	Value (million)	Volume (000' t)	Value (million)
European Union	Coarse grains					12151.3			
	Sugar			998.2	515.4 euro	741.8	375.4 euro		
	Rice	74.4	24.3 euro	5					
	Olive oil	5							
	Beef meat	117.9							
	Poultry meat			19.7					
	Pigmeat					689.6	561.9 euro		
	Eggs					95.1			
	Wine	690.4 ⁽¹⁾	6.4 euro	400.9 ⁽¹⁾					
	Other milk products			52.3					
	Alcohol						121.4 euro		
	Incorporated products						360.5 euro		
Norway	Swine meat					X			
	Sheep and lamb meat					X	X	X	
	Poultry meat	0.03	USD 150						
	Egg and egg products					X			
	Cheese					X	X	X	X
	Bovine meat							X	X
Poland	Sugar	126.6		106.5		48.3		26.4	
United States	Skimmed milk powder					4.1		45.598	USD 35.34
	Other milk products							0.341	USD 1.65

Note:

1. hl

X = values and volume not specified.

Source: Country Notifications to WTO.

Annex Table IV.1. Nominal protection coefficients by commodity and by country (%)

Product	1986-90	1990-94	1995-99	1995	1996	1997	1998	1999
Wheat	74.3	64.0	22.1	17.6	7.8	15.8	32.1	37.2
European Union	0.0	79.7	67.1	11.3	-8.6	-3.7	18.6	21.4
Japan	588.2	555.8	593.8	535.1	522.1	553.9	681.7	675.9
Norway	245.4	264.0	133.2	114.3	76.7	129.0	138.1	207.9
Poland	17.1	-4.6	18.9	7.1	30.3	21.0	30.4	5.8
Switzerland	274.2	261.7	220.3	282.1	147.3	197.1	220.1	255.0
United States	16.5	24.6	0.4	1.8	0.0	0.0	0.0	0.0
Maize	30.2	28.9	4.6	7.9	-0.3	3.1	5.9	6.1
European Union	100.5	85.0	16.7	37.6	3.4	8.4	19.6	14.6
Mexico	46.9	78.0	13.4	14.7	-12.0	16.0	18.2	30.3
Turkey	21.1	36.5	35.7	7.1	16.9	45.1	62.3	47.3
Other grains	103.5	99.9	31.2	37.9	15.4	17.7	48.6	36.4
European Union	108.8	96.4	27.5	39.9	3.9	8.8	57.8	27.3
Korea (Barley)	291.4	458.8	359.7	439.8	360.8	365.3	224.6	408.0
Norway	258.0	214.4	148.3	142.1	85.8	111.4	199.5	202.5
Switzerland	296.5	238.2	135.9	226.3	102.9	105.4	129.0	115.7
United States	15.3	16.7	0.4	1.0	0.0	0.0	0.9	0.0
Rice	429.3	445.9	410.8	512.4	357.0	297.5	362.4	524.4
Australia	9.7	2.5	1.5	1.0	1.6	1.4	1.6	2.0
European Union	126.5	117.4	32.3	76.7	20.1	24.8	15.3	24.4
Japan	434.4	418.4	453.3	503.0	370.6	305.9	457.0	630.1
Korea	480.7	602.6	417.4	689.8	409.3	368.8	240.4	378.8
United States	0.6	1.9	0.1	0.3	0.0	0.0	0.0	0.0

Annex Table IV.1. **Nominal protection coefficients by commodity and by country (%)** (cont.)

Product	1986-90	1990-94	1995-99	1995	1996	1997	1998	1999
Oilseeds	15.1	13.7	9.2	13.4	10.4	6.8	4.9	10.6
Korea (soybeans)	398.6	508.2	582.9	733.6	603.5	453.0	392.8	731.4
Switzerland	556.5	530.6	348.8	397.0	352.2	312.1	293.7	389.3
Refined sugar	129.4	102.1	99.8	64.1	73.1	82.7	112.8	166.5
Australia	10.5	6.7	2.0	6.8	3.1	0.0	0.0	0.0
European Union	174.2	139.7	122.6	80.8	92.4	104.0	146.5	189.0
Hungary	76.7	62.5	74.2	56.0	65.8	83.7	67.7	97.6
Japan	161.3	155.0	154.4	142.9	140.0	131.5	171.6	186.3
Mexico	0.5	18.3	71.8	-5.3	47.2	55.9	72.2	188.8
Poland	71.9	29.1	61.3	31.3	74.5	49.7	74.4	76.5
Switzerland	309.5	294.5	234.2	277.0	244.4	231.3	195.3	223.0
Turkey	7.0	32.0	113.8	39.3	43.4	116.6	125.6	243.9
United States	67.0	50.5	54.1	32.2	37.8	37.2	58.4	104.8
Milk	180.4	162.0	119.5	114.9	98.8	99.3	142.6	142.0
Australia	44.7	47.8	23.6	25.5	20.8	28.0	24.0	19.8
Canada	168.9	158.0	107.2	85.1	81.9	103.5	134.0	131.7
Czech Republic	158.4	96.2	39.0	30.2	28.9	28.9	65.9	41.3
European Union	161.0	149.1	114.7	110.7	95.6	94.5	131.8	141.0
Hungary	71.1	62.6	55.6	37.2	26.4	49.7	88.2	76.3
Japan	432.6	389.0	315.9	364.0	273.1	263.8	314.8	364.0
Iceland	429.5	324.8	131.5	95.7	86.3	108.2	186.3	180.8
Korea	280.5	267.3	195.2	195.9	185.5	186.4	182.5	225.8
Mexico	57.2	87.8	46.7	-3.1	24.1	50.7	76.8	85.0
Norway	153.1	206.2	171.5	139.7	141.0	165.9	215.1	195.6
Poland	-3.7	-18.7	11.1	1.4	2.8	10.9	30.9	9.7
Switzerland	453.7	443.4	300.9	354.6	297.9	269.3	318.7	264.3
Turkey	72.2	106.1	98.7	62.2	72.1	118.6	153.1	87.3
United States	15.3	16.7	0.4	1.0	0.0	0.0	0.9	0.0
Beef and veal	55.0	48.3	38.8	32.5	26.7	39.9	42.8	51.9
Canada	2.7	2.5	0.1	0.0	0.0	0.0	0.6	0.0
European Union	88.4	82.4	73.4	45.5	39.9	80.0	88.3	113.2
Japan	63.8	44.1	44.3	48.1	46.2	44.3	42.3	40.4
Iceland	108.8	92.3	67.2	22.0	28.3	70.5	82.7	132.5
Korea	165.7	219.1	174.9	245.2	211.3	141.3	86.4	190.1
Norway	136.2	112.6	92.7	44.1	56.2	112.6	102.6	148.2
Switzerland	242.9	194.8	127.4	147.0	64.2	121.2	122.8	181.7
United States	1.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Pigmeat	29.0	29.6	22.4	27.7	18.4	12.5	18.8	34.5
Czech Republic	144.9	70.0	16.8	14.5	14.8	-7.2	4.5	57.6
European Union	15.5	16.4	9.1	11.7	10.2	4.6	9.6	9.6
Japan	66.1	93.8	107.8	149.1	99.6	71.8	96.3	122.3
Iceland	155.0	116.5	97.5	92.3	45.9	46.7	109.3	193.2
Korea	54.4	81.4	61.9	88.9	61.5	36.5	29.2	93.6
Norway	116.8	90.3	74.9	49.3	34.6	32.2	83.2	175.1
Poland	22.3	22.7	37.5	38.0	26.2	34.5	22.6	66.2
Switzerland	95.8	88.1	95.2	65.4	73.4	64.2	101.8	171.0
Poultrymeat	31.3	25.0	12.9	18.3	12.2	9.7	8.5	15.5
Canada	23.5	26.0	2.9	2.0	4.0	4.7	2.3	1.3
Czech Republic	162.5	77.5	43.8	25.9	41.0	33.8	61.6	56.6
European Union	46.7	36.4	22.2	30.1	19.0	15.4	12.4	34.0
Hungary	53.1	18.6	27.5	30.9	17.0	20.0	18.5	51.1
Iceland	594.7	499.3	537.0	576.5	471.2	482.9	538.0	616.2
Korea	91.8	102.3	76.1	113.0	90.9	69.6	27.9	79.2
New Zealand	68.0	56.9	42.2	66.6	53.0	48.3	18.8	24.4
Norway	576.7	364.4	198.9	232.4	149.1	136.6	154.6	321.7
Poland	62.7	93.7	49.1	59.7	62.0	39.6	45.3	38.8
Switzerland	661.7	570.9	470.0	603.3	447.9	357.9	412.8	527.9
Turkey	20.7	33.8	26.7	41.2	5.8	3.4	42.5	40.7
United States	7.0	1.3	0.3	1.0	0.3	0.0	0.0	0.0

Annex Table IV.1. **Nominal protection coefficients by commodity and by country (%) (cont.)**

Product	1986-90	1990-94	1995-99	1995	1996	1997	1998	1999
Sheepmeat	125.0	71.2	16.4	40.0	16.6	6.0	13.7	5.7
European Union	175.8	97.4	21.8	56.2	27.3	9.1	14.4	2.0
Iceland	274.1	130.0	-3.2	25.1	-21.4	-13.2	10.2	7.8
Switzerland	462.9	384.2	203.7	367.8	178.2	131.7	182.8	157.7
Turkey	19.5	22.8	13.1	27.8	-6.7	0.3	25.7	18.5
Eggs	30.0	25.0	20.2	27.2	15.1	15.0	21.0	22.9
Canada	34.0	49.3	39.9	55.9	35.4	33.3	29.3	45.7
Czech Republic	108.8	28.3	40.4	34.8	15.5	40.0	58.8	53.1
Hungary	73.4	48.8	63.3	74.7	37.2	77.8	90.6	36.3
Iceland	390.9	332.9	350.9	420.1	277.4	279.1	349.7	428.3
New Zealand	76.3	44.6	62.6	69.8	34.1	57.4	56.4	95.0
Norway	291.6	210.7	171.2	216.4	90.5	117.1	168.6	263.3
Poland	29.6	66.4	112.7	117.4	86.5	74.4	129.5	155.7
Switzerland	513.0	460.7	444.1	573.8	376.7	393.4	421.8	454.8
Turkey	23.4	33.3	66.6	96.2	43.6	55.4	69.3	68.8
All PSE products	107.5	99.4	77.8	88.9	62.5	58.3	76.8	102.5

Note: NPCs are underestimated in some cases as they are negative despite the absence of policies which can justify these results. These cases are mainly in the Czech Republic, Hungary, Poland, Mexico and Turkey and are attributable to high domestic inflation and exchange rate misalignments.

Source: OECD PSE Database.

Annex Table IV.2. **Import penetration rates by commodity and by country¹ (%)**

Commodity	Country	1990-94	1995-99	1995	1996	1997	1998	1999
Wheat	Canada	0.2	0.7	0.3	1.4	0.7	1.0	0.3
	Czech Republic	1.0	2.2	0.1	5.3	1.4	2.9	1.4
	European Union ⁽²⁾	2.1	3.3	3.5	2.5	3.9	3.2	3.7
	Japan	88.5	91.8	90.5	92.3	95.3	91.2	89.8
	Mexico	20.4	35.3	29.2	32.2	33.2	40.2	41.8
	Norway	45.7	40.5	29.9	48.0	49.2	37.8	37.6
	Poland	6.8	9.3	11.1	24.4	6.1	3.7	1.4
	Switzerland	34.2	33.4	36.6	32.2	32.1	33.3	32.6
	Turkey	5.4	11.5	7.8	13.3	15.6	10.4	10.3
	United States	5.7	7.1	6.0	7.1	7.5	7.4	7.2
Coarse grains	Canada	4.0	4.3	4.1	3.8	6.7	3.8	3.1
	Czech Republic	4.7	7.9	3.9	21.1	2.8	5.6	5.8
	European Union ⁽²⁾	3.8	3.3	4.8	3.0	2.0	3.8	3.1
	Hungary	3.0	0.6	0.7	1.1	0.3	0.7	0.4
	Japan	99.4	99.7	100.6	101.7	98.8	98.3	99.0
	Norway	10.1	20.0	17.7	21.7	20.8	19.0	20.8
	Poland	5.1	5.4	5.2	7.0	4.2	2.7	7.6
	Switzerland	33.6	30.0	32.9	29.0	27.2	30.4	30.2
	Turkey	4.6	9.1	6.9	10.8	8.7	9.5	9.4
	United States	1.3	1.4	1.5	1.4	1.4	1.4	1.2
Rice	Australia	13.0	12.3	12.0	13.0	12.5	12.1	11.8
	Japan	6.0	6.4	4.7	6.2	6.3	7.6	7.1
	Korea	0.0	1.7	2.2	0.0	1.4	2.5	2.2
	Turkey	63.4	63.4	67.7	57.6	63.6	64.2	63.9
	United States	6.3	8.8	7.2	10.2	8.8	8.8	9.3
Sugar refined	Australia	0.6	0.6	1.6	0.8	0.2	0.2	0.3
	Czech Republic	1.0	6.0	4.7	2.1	1.7	8.7	12.9
	European Union ⁽²⁾	14.4	14.2	14.7	13.5	15.6	14.6	12.6
	Hungary	13.3	1.9	0.3	1.1	0.8	3.7	3.6
	Mexico	9.2	2.0	3.3	5.0	0.7	0.5	0.5
	Poland	2.1	2.3	4.8	4.8	0.5	0.8	0.4
	Switzerland	51.2	44.6	55.8	43.5	38.8	42.4	42.8
	Turkey	6.6	12.1	46.6	7.4	0.5	6.1	0.0
	United States	24.1	24.9	27.6	34.4	24.8	19.9	17.9

Annex Table IV.2. Import penetration rates by commodity and by country¹ (%) (cont.)

Commodity	Country	1990-94	1995-99	1995	1996	1997	1998	1999
Oilseeds	Australia	19.6	8.4	18.2	9.0	9.0	3.1	2.9
	Czech Republic	10.1	6.0	9.6	7.2	5.4	4.8	2.9
	Mexico	79.2	97.6	96.2	102.4	96.1	96.5	96.9
	Poland	9.2	16.3	3.3	49.9	18.9	5.8	3.7
	Switzerland	65.3	63.8	63.8	63.9	63.9	63.9	63.7
	United States	0.7	1.0	0.9	1.2	1.0	0.8	0.8
Butter ⁽³⁾	Australia	3.0	8.3	6.3	8.9	7.2	9.3	9.5
	Canada	0.4	2.8	0.7	2.9	3.3	3.7	3.7
	Czech Republic	0.0	2.1	0.0	2.3	2.9	2.3	3.1
	European Union ⁽²⁾	3.7	5.2	4.1	5.4	5.0	5.3	6.0
	Japan	7.8	0.6	2.3	0.0	0.1	0.1	0.2
	Korea	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Norway	0.0	0.2	0.0	0.0	0.3	0.3	0.4
	Poland	8.8	0.9	0.2	0.3	3.1	0.6	0.6
	Switzerland	9.8	8.1	6.8	7.0	9.4	8.4	8.7
	Turkey	4.1	6.9	5.7	7.2	7.2	7.2	7.1
	United States	0.3	2.6	0.3	1.0	1.1	4.8	5.7
Cheese ⁽³⁾	Australia	16.7	17.1	17.5	18.4	17.3	16.3	16.2
	Canada	7.2	7.0	7.0	7.3	6.8	6.9	7.0
	Czech Republic	6.7	12.1	18.3	15.8	8.1	7.7	10.6
	European Union ⁽²⁾	1.5	1.8	1.4	1.6	1.8	2.0	2.3
	Hungary	9.5	9.8	0.0	2.3	14.8	15.7	16.3
	Japan	79.8	83.7	84.9	83.2	83.4	84.0	83.0
	Korea	5.9	70.2	98.2	71.8	71.8	53.4	55.6
	Norway	3.7	3.9	3.8	3.6	4.0	4.0	4.0
	Poland	4.0	1.9	2.5	1.7	1.9	1.8	1.8
	Switzerland	28.8	30.2	29.7	29.5	29.8	31.3	30.8
	Turkey	1.2	1.6	1.6	1.6	1.6	1.6	1.6
United States	4.7	4.4	4.7	4.5	4.1	4.5	4.2	
Skim milk powder ⁽³⁾	Canada	8.8	3.3	7.2	8.1	0.9	0.2	0.0
	Czech Republic	3.0	0.7	1.0	0.9	1.1	0.3	0.3
	European Union ⁽²⁾	2.2	6.6	4.1	6.5	7.7	7.0	7.6
	Hungary	8.7	19.4	24.6	24.2	14.4	16.7	16.9
	Japan	31.7	24.8	36.5	25.7	25.3	20.1	16.3
	Korea	41.5	15.9	51.2	3.1	2.9	12.4	9.7
	Poland	175.4	23.3	4.8	10.7	53.8	16.6	30.7
	Switzerland	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	United States	0.2	0.5	0.1	0.5	0.8	0.6	0.5
Wholemilk powder ⁽³⁾	Australia	12.4	12.5	9.9	12.4	9.1	11.8	19.3
	European Union ⁽²⁾	0.6	1.3	2.0	1.2	1.1	1.0	1.0
	Poland	3.2	3.0	5.6	0.3	2.1	4.0	2.8
	United States	0.0	2.9	0.0	2.0	3.9	4.1	4.3
Beef and veal ⁽⁴⁾	Czech Republic	2.1	4.8	5.1	4.4	1.4	7.1	6.1
	European Union ⁽²⁾	7.0	5.6	5.6	5.7	6.0	5.2	5.4
	Hungary	25.7	18.7	23.3	16.4	22.6	16.7	14.5
	Korea	49.7	39.3	49.2	45.7	46.5	22.3	32.7
	Mexico	12.4	12.1	3.5	8.2	14.4	15.6	18.8
	Norway	0.2	3.3	2.2	4.6	3.3	3.2	3.1
	Poland	8.0	2.5	3.0	5.6	1.9	0.2	1.9
	Switzerland	6.6	6.4	7.5	5.1	6.4	6.4	6.6
	Turkey	14.8	9.2	32.5	13.3	0.1	0.1	0.1
United States	13.5	13.2	12.6	12.1	13.1	14.1	14.1	
Pigmeat ⁽⁴⁾	Australia	1.9	6.7	2.7	4.1	6.5	5.4	14.9
	Czech Republic	0.8	2.4	1.4	1.3	1.3	5.1	3.1
	European Union ⁽²⁾	0.6	0.3	0.1	0.3	0.4	0.3	0.3
	Hungary	3.1	7.9	14.6	4.5	7.8	6.5	5.9
	Japan	29.9	38.6	39.3	44.4	35.1	34.5	39.8

Annex Table IV.2. Import penetration rates by commodity and by country¹ (%) (cont.)

Commodity	Country	1990-94	1995-99	1995	1996	1997	1998	1999
	Korea	1.6	6.2	5.2	6.0	9.3	8.0	2.6
	Mexico	9.2	6.1	3.2	4.0	5.5	8.3	9.6
	Norway	2.4	2.2	4.6	2.7	1.3	1.3	1.2
	Poland	3.2	2.8	2.7	2.4	2.5	3.7	2.7
	Switzerland	1.6	3.8	0.8	4.6	4.7	4.4	4.5
	United States	5.2	6.1	5.0	6.0	6.4	6.7	6.4
Poultrymeat ⁽⁵⁾	Canada	9.8	13.1	10.7	11.6	13.5	14.1	15.6
	Czech Republic	1.1	8.0	6.5	9.8	11.0	6.5	6.0
	European Union ⁽²⁾	2.6	3.5	3.0	3.6	3.4	3.7	3.8
	Hungary	1.0	0.6	0.4	0.4	1.4	0.3	0.4
	Japan	22.4	30.2	30.5	30.5	28.4	28.9	32.7
	Korea	0.0	3.6	1.9	3.0	5.4	4.1	3.7
	Mexico	9.0	9.5	8.1	9.3	9.8	9.9	10.2
	Norway	0.5	0.6	2.8	0.0	0.0	0.0	0.0
	Poland	11.4	9.9	9.4	11.0	13.2	9.6	6.4
	Switzerland	52.7	46.7	50.0	47.4	45.0	45.6	45.4
Sheepmeat ⁽⁴⁾	European Union ⁽²⁾	18.0	18.6	18.1	18.6	19.3	18.7	18.3
	Norway	0.4	0.3	1.1	0.5	0.0	0.0	0.0
	Switzerland	52.4	55.8	58.3	53.8	53.8	58.3	54.8
	Turkey	0.0	0.1	0.4	0.0	0.0	0.0	0.0

Notes: 1. Import penetration is defined as the ratio of agricultural imports to consumption in volume term. A low penetration rate does not necessarily imply import barriers. It may reflect productivity improvement. 2. Net of intra-EU trade; 3. Product weight; 4. Carcass weight; 5. Ready-to-cook weight.

Source: OECD, AGLINK Database.

Annex Table IV.3. Country shares in the value of OECD agricultural trade (%)

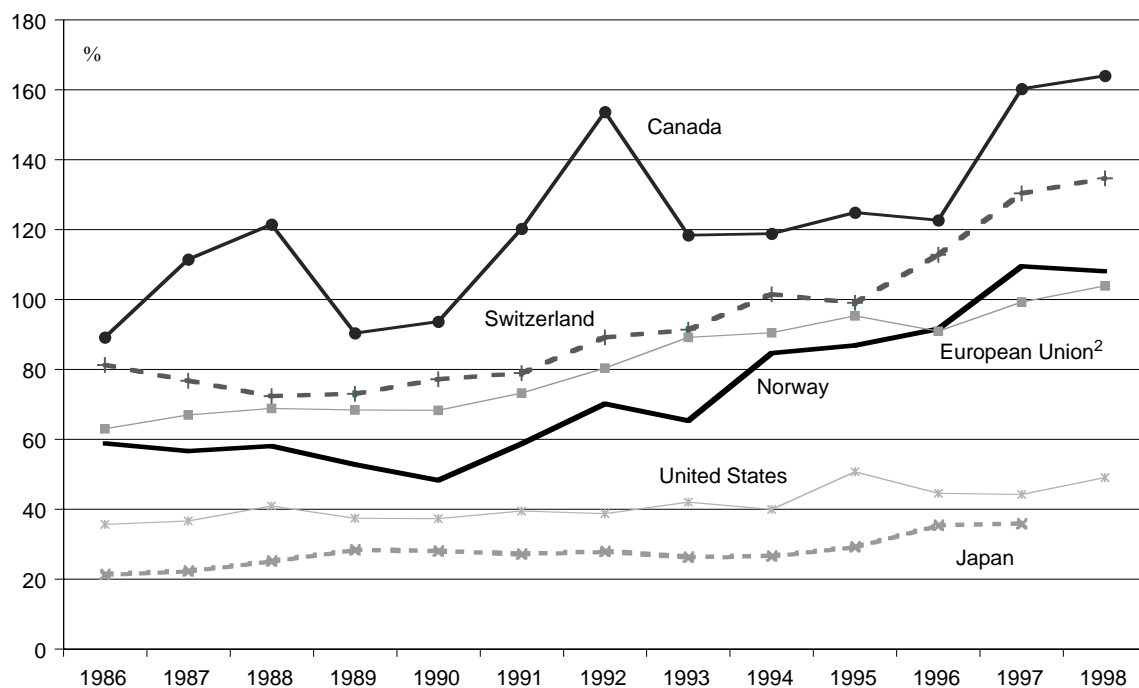
Exports	1986-90	1990-94	1995-98	1995	1996	1997	1998
United States	36.5	34.9	35.3	36.3	36.7	34.1	34.1
European Union	32.7	33.6	32.4	32.8	31.9	32.3	32.7
Canada	7.7	7.7	8.5	7.6	8.2	9.0	9.1
Australia	9.5	7.0	6.2	5.9	6.1	6.8	6.2
Mexico	0.6	2.5	3.5	3.4	3.2	3.5	4.0
New Zealand	4.4	3.8	3.7	3.8	3.9	3.8	3.4
Turkey	2.7	2.7	2.7	2.6	2.7	2.9	2.9
OECD	100	100	100	100	100	100	100
Imports	1986-90	1990-94	1995-98	1995	1996	1997	1998
United States	21.0	18.9	19.9	18.3	19.2	20.0	22.2
European Union	39.7	35.6	34.4	35.7	33.9	33.9	34.0
Canada	5.0	5.2	5.3	4.9	4.8	5.5	5.8
Mexico	0.8	3.8	3.8	2.7	3.9	3.9	4.5
Japan	20.6	21.2	20.4	22.0	21.2	20.0	18.5
Korea	n.a.	1.0	4.8	5.2	5.5	5.1	3.6
Switzerland	3.3	3.1	2.7	2.9	2.7	2.6	2.7
Poland	n.a.	0.9	1.9	1.7	2.1	2.0	2.0
Turkey	1.1	1.3	2.0	1.9	2.1	2.1	1.9
OECD	100	100	100	100	100	100	100

Notes:

EU-10 before 1986; EU-12 from 1986 to 1994; EU-15 from 1995 onwards. Excludes intra-EU trade; Germany includes ex-GDR from 1991. OECD includes Mexico from 1990, Hungary and Poland from 1992, Czech Republic from 1993 and Korea from 1994.

Source: OECD, Foreign Trade Statistics, 1999.

Annex Figure V.1. Agricultural trade openness (%)



Notes: 1) Average share of agricultural imports and exports as a percent of agricultural GDP.

2) Exclude European Union intra trade.

Source: OECD Secretariat calculations.

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