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Economic Impacts on the Least Developed Countries of the Elimination of Import Tariffs on their Products



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Economic Impacts on the Least Developed Countries of the Elimination of Import Tariffs on their Products

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Preface

Several initiatives aimed at reducing trade barriers for Least Developed Countries have been proposed recently. These include the EU decision to provide duty-free and quota-free access on an autonomous basis for all products except arms when imported from the Least Developed Countries, and a proposal from the WTO General Director to bind all tariffs on imports from Least Developed Countries at zero rates in the World Trade Organisation.

The purpose of this study is to evaluate the economic impacts for the Least Developed Countries of duty-free and quota-free access in their export markets. The main focus is on the

QUAD markets (Canada, the EU, Japan, and the USA). The report documents the significance of existing trade barriers and evaluates the economic consequences of removing these barriers. The impact of supply capacity constraints in Least Developed Countries on their ability to utilise preferential trade arrangements is also investigated. Moreover, the report evaluates the significance for Least Developed Countries of certain crucial aspects of preferential trading arrangements, such as the extent of product coverage, the question of binding tariffs and procedures, the use of safeguard measures in importing countries, graduation procedures and rules of origin.

Bergen, April 2001

Rune Jansen Hagen Ottar Mæstad Arne Wiig

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Abbreviations

ACP African, Caribbean and Pacific states

AGOA African Growth and Opportunity Act

ASM Agreement on Safeguard Measures

EBA Everything But Arms

EU European Union

FAO Food and Agriculture Organisation of the United Nations

FDI Foreign Direct Investment

GDP Gross Domestic Product

GNP Gross National Product

GSP Generalised System of Preferences

GTAP Global Trade Analysis Project

HIPC Highly Indebted Poor Country

HS Harmonised Standard

LDC Least Developed Country (UN defined)

LIBOR London Interbank Overnight Rate

MFA Multi Fibre Agreement

MFN Most Favoured Nation

MNC Multinational Company

OECD Organisation for Economic Cooperation and Development

PPG Publicly and Publicly Guaranteed

QUAD Canada, the USA, Japan, and the EU

REER Real Effective Exchange Rate

ROO Rules of Origin

SACU South African Customs Union

SADC Southern African Development Community

STE State Trading Enterprise

TFP Total Factor Productivity

UN United Nations

UNCTAD United Nations Conference on Trade and Development

USA United States of America

USD United States Dollars

WTO World Trade Organisation

Factsheet

- The Least Developed Countries are the poorest countries in the world. They are officially designated as "least developed" by the General Assembly of the United Nations on the basis of a number of agreed criteria.
- 48 countries are currently classified as Least Developed. Most of them are located in Africa. Their combined population is 613.5 million, and their average income per capita is less than a dollar a day. The average growth in real GDP per capita was 0.9% in 1990–98, which was much lower than the average growth rate for all developing countries (3.1%).
- The Least Developed Countries' share of world exports has declined from 0.8% in 1980 to less than 0.5% today.
- With the aim of preventing further marginalisation of the Least Developed Countries, a plan of action, calling for improved market access for their export products, was agreed to at the WTO Ministerial Conference in Singapore in 1996.
- Most export products from the Least Developed Countries already face zero tariffs in the main export markets (EU, USA, Japan, and Canada), but major restrictions remain for textiles and clothing and in the agricultural sector. In other developing countries, the import barriers are often more restrictive than in the industrialised countries.

- Some exports from Least Developed Countries face reduced tariffs under preferential trade arrangements. These trade preferences are generally provided by the importing country on an autonomous basis and therefore offer less security for the exporting countries than do tariffs that are bound in the WTO.
- Several proposals have recently been put forth in order to enhance the number of products from the Least Developed Countries that are granted duty-free and quota-free access, and in order to reduce the uncertainty related to existing trade preferences. The EU recently decided to grant free market access for all products except arms within 2009. Two other OECD countries, Norway and New Zealand, have recently also decided to grant duty-free and quota-free access to all LDCs. (Norway from 1st July 2002.) WTO General Director and the Least Developed Countries themselves have proposed to bind all tariffs on their products at zero rates in the WTO.
- The aim of this study is to evaluate the economic impacts on the Least Developed Countries from such policy reforms. The title of the study is: "Economic impacts on the Least Developed Countries of the elimination of import tariffs on their products".

Executive Summary

Improved market access in industrialised countries is often seen as an important contribution to economic growth and increased welfare in developing countries. More recently, it has also come to be regarded as a precondition for a new round of multilateral trade negotiations.

This report describes the present import barriers faced by Least Developed Countries (LDCs) in the European Union, the USA, Japan and Canada (i.e. the QUAD) and analyses which benefits the LDCs could possibly realise from duty-free and quota-free access in these markets. It also discusses how preferential trade arrangements for the LDCs should be designed to serve the interests of LDCs.

Background

When this study was initiated, three proposals on duty-free access for LDCs had been launched:

- Binding in the World Trade Organisation (WTO) of duty-free and quota-free access for imports from LDCs.
- 2. Duty-free and quota-free access for "essentially all products" from LDCs.
- 3. Duty-free and quota-free access for "everything but arms" when imported from LDCs.

The first proposal was presented by both the General Director of the WTO and by the LDCs themselves. The last two proposals were made by the EU, the first before the Ministerial Conference in Seattle in 1999 and the last in September 2000. In February this year, the EU decided to provide duty-free and quota-free access for LDCs for "everything but arms" within 2009.

The first purpose of this study is to investigate, with reference to these three proposals, potential benefits from duty-free and quota-free access to major export markets for LDCs. The second purpose is to analyse *how* preferential trade arrangements for the LDCs should be designed in order to serve the interests of the LDCs. In principle, there are two main differences between the proposals:

- The extent of product coverage
- The degree of binding of preferences

The key questions are therefore: How important is it for the LDCs to have duty-free access extended to *all* products, compared to a situation where the importing countries have the opportunity to restrict the imports of a few, sensitive products? And how important is the reduction in uncertainty that would be provided by binding import tariffs at zero rates in the WTO, compared to a situation where duty-free access is granted on a unilateral and noncontractual basis?

Other important questions with respect to the design of preferential trade arrangements concern:

- *Safeguards* (to which extent should the importing countries have the opportunity to suspend trade preferences if there is a surge in imports from LDCs?),
- Graduation (what should happen to trade preferences when a country graduates from the list of LDCs?), and
- *Rules of origin* (which rules of origin are needed in order for the LDCs to be able to take advantage of the trade preferences?).

Major findings and conclusions

The aggregate benefits of duty-free and quota-free access for the LDCs are likely to be modest, even when measured relative to their present low levels of income. The main reasons are (1) that most LDCs presently enjoy quite liberal market access in important export markets, and (2) that the ability of LDCs to take advantage of trade preferences is limited, due to constraints on supply capacity.

Nevertheless, some LDCs will reap significant benefits in a few product categories. The most important one is clothing, but producers of agricultural products such as sugar and tobacco, will benefit as well. There are also potential benefits related to the exports of rice and meat from LDCs, but these benefits will be more difficult to realise.

With respect to the design of preferential trade arrangements for the LDCs, we believe that the most important issue for the LDCs as a group is to have the product coverage of provisions for free market access extended to all products. Since the benefits of duty-free access are concentrated in a few product categories, which typically are quite sensitive import products in the QUAD, the importing countries may significantly reduce the benefits for LDCs of free market access by retaining their import controls in only a few product categories.

The benefits for the LDCs of free market access would be further enhanced if the importing countries were to make their preferential trade arrangements more binding. At present, trade preferences for LDCs may be withdrawn at any time, because they are provided on a unilateral and autonomous basis. The simplest way of making preferences more binding would be for the importing countries to notify the WTO that their preferential trade arrangements should be considered as binding within the WTO framework. A number of other approaches are available as well, including plurilateral and multilateral solutions. Note, however, that it is impossible to eliminate the uncertainty about preferential margins as long as regular, nonpreferential tariffs are subject to negotiations. The benefits of binding tariffs faced by LDCs at zero rates should therefore not be overstated.

The possibility of using safeguard measures may play an important role in the liberalisation of trade. Making trade preferences for LDCs more binding will undoubtedly call for a revision of the safeguard provisions as well. Although the Agreement on Safeguards in the WTO contains elements that may form the basis for safeguard provisions in preferential trade arrangements, the LDCs would have liked to see a number of its provisions rewritten in order to allow for more differential and favourable treatment of the LDCs.

Unfortunately, *graduation* from the UN list is not a relevant issue for most LDCs in the foreseeable future. After a country has graduated, we recommend that trade preferences should be retained until fixed investments are fully depreciated, e.g. for a period of 10–20 years, in order to reduce the costs of adjustment. Moreover, there should be no gradual increase of import restrictions during the transition period.

The present *rules of origin* in the importing countries are a major obstacle to the realisation of the benefits of duty-free and quota-free market access for LDCs, especially in the clothing sector.

Summary chapter by chapter

Chapter 2: Current trade barriers for Least Developed Countries

• All QUAD countries presently provide preferential market access for LDCs under their respective *Generalised System of Preferences* (GSP). Moreover, all LDCs but the Asian ones, benefit from the *Cotonou Agreement* with the EU, and Sub-Saharan LDCs benefit from special arrangements in the USA under the *African Growth and Opportunity Act*. This means that duty-free and quota-free access typically will be of less value for the LDCs than for other developing countries.

 The scope and depth of the preferential trade agreements vary greatly within the QUAD. The broad pattern is as follows:

The EU market has been quite open for the LDCs for a long time. All industrial products have been liberalised, along with a number of agricultural products. However, there have been import restrictions on products that come under the Common Agricultural Policy, notably for rice, sugar, bananas, maize, meat and dairy products. After the recent approval of the (revised) "everything-but-arms" initiative, only rice, sugar and bananas are not fully liberalised.

The USA has a restrictive import policy for textiles and clothing. But most agricultural products that have been restricted in the EU have enjoyed duty-free access in the US. However, there are import quotas for meat, dairy products, peanuts, sugar and tobacco.

Japan has a quite liberal trade policy towards LDCs in the industrial sector. There are restrictions on imports of leather products and a tax on petroleum. Textile imports from LDCs are subject to constraints as well, although these barriers will be removed shortly. The agricultural sector in Japan is heavily protected, and only a few product categories are granted duty-free and quota-free access.

Canada's import regime is similar to the American one, but it is even more restrictive. There are tariffs and tariff quotas on a number of agricultural products (e.g. dairy products, poultry products, eggs, margarine, wheat, barley, beef and a number of vegetables). Out-of-quota tariffs are extremely high for meat and dairy products. Although most industrial products are liberalised, there are severe import barriers on products that are of great importance for LDCs, such as textiles, clothing and footwear.

 A brief assessment of the market access opportunities in the neighbouring countries of the LDCs in southern Africa shows that tariffs are high in certain product categories. But this is probably not the main explanation for the low level of intraregional trade in this region. Other major reasons are a poorly developed infrastructure (especially for food transport) as well as the fact that many of the countries specialise in the same kind of products.

Chapter 3: Benefits for LDCs of trade liberalisation

- Potential benefits of duty-free and quotafree access include: 1) Higher prices on existing exports, 2) Price gains from diverting sales from other markets (other export markets or domestic markets) to the QUAD countries, 3) Increased value added through expansion of production. In addition, consumer welfare in the LDCs might be affected by price changes. Consumer prices may rise or fall depending on domestic policies in the LDCs.
- Most of the current exports from LDCs to the QUAD countries are duty-free. The prices for existing exports are therefore not likely to increase much. The most notable exceptions are exports of apparel to USA and Canada. We have calculated the maximal price gain on existing exports to about 220 mill. USD, most of which will accrue to Bangladesh and other clothing exporting countries in Asia. This gain amounts to 1.1% of total exports and 0.13% of total GDP in the LDCs.
- A full analysis of the potential gains from diverting sales from other markets to the QUAD markets has not been possible to undertake due to a lack of data. However, some illustrative examples indicate that the potential gains from redirecting existing exports will be quite small, mainly because products that face high trade barriers in the QUAD countries rarely are exported to non-QUAD countries on a large scale. The reason is that non-QUAD countries also have high trade barriers, and if they do not, it is because their domestic producers are

competitive enough to keep the LDCs out of the market.

Preferential access for agricultural products in the EU and Japan may potentially lead to large income gains for LDCs if they engage in triangular trade, i.e. by exporting their own production to the QUAD countries and satisfying domestic demand with imports. Rough estimates for 14 agricultural products show that if 10% of present production quantities are exported to the EU in this way, the gains could by far exceed the gains from higher prices on existing exports.

Whether the LDCs will be able (and willing) to export such quantities is far from clear, however. This would require substantial investments both in physical infrastructure and logistics for imports and exports, and inspection bodies would be needed in order to ensure compliance with sanitary and phytosanitary regulations in the importing countries, since import/export swaps are most likely for agricultural goods. Moreover, considerations about food supply security may make LDCs reluctant to engage in import/export swaps in food products on a large scale.

Others have estimated the potential increase in export revenue from removing all tariff peaks in the QUAD to 2.5 billion USD, i.e. an 11% increase. Most of the gain comes from increased access for clothing products in the US. There are also significant benefits in the exports of sugar and tobacco. We consider the estimate of the gain in the clothing sector to be too optimistic because LDC clothing exporters will have difficulties in complying with the rules of origin in the QUAD markets.

LDCs may not be the sole beneficiaries of improved market access for their goods in the QUAD, and producers of exports in these countries may not see the profitability of their activities increase if preferential margins in the QUAD improve. The first

issue is important for the magnitude of the static gains to LDCs from improved market access. The second issue is of interest from a dynamic perspective; the degree to which the benefits of improved market access are passed on to the producers will determine the supply response which is crucial for the impact such changes will have on income levels in the LDCs in the future.

- Both state trading enterprises and multinational companies are major actors in important world markets for agricultural goods. However, little is known about the details of their operations and the roles they play have not been subjected to stringent analyses.
- Since state trading enterprises in many cases have special privileges, concerns have recently been raised that they might interfere unduly with trade. State trading enterprises in many LDCs do seem to be involved in exports of a broad range of products. However, not much is known about the nature of their involvement, which most likely varies from country to country.
- It seems likely that multinational companies wield some market power. There is some indirect evidence that this is the case; increases in world market prices of six major commodities are much more easily transmitted to consumer prices in six major OECD countries than decreases are. Moreover, Europe has seen an increase in the degree of concentration at the retail level in recent years.
- Unless governments in LDCs use trade policies to ensure that their producers will continue to serve domestic markets to some degree even after improved market access has increased prices in export markets, consumers in these countries are unlikely to be much affected. Producers will benefit to the extent that governments do not tax away the gains. The distributional effects will in this case depend on how

factor markets work. For example, the gains estimated for producers of apparel might lead to higher wages for unskilled workers if the labour market is reasonably efficient; if not, unemployment might decrease and profits increase instead. For such reasons, accurate assessments of the consequences for wages, profits and returns on land can only be made in specific cases.

Chapter 4: How can the benefits be secured?

- Extending product coverage of the preferential schemes in the US and Canada and liberalising rules of origin stand out as the measures that would bring the greatest benefits for the LDCs in the short run. The potential for significant export growth is greatest in the textile and clothing sectors, which are heavily protected in the USA and Canada, and which are constrained by the present rules of origin in developed countries.
- Binding tariffs and procedures would reduce uncertainties about future trade preferences. This could stimulate investments in supply capacity, which is urgently needed in order for the LDCs to take advantage of their trade preferences.

However, the positive effect of binding could easily be overstated. LDC investors often face large uncertainties in other areas, which may be far more discouraging for investment incentives. Moreover, binding duty-free and quota-free access will never eliminate uncertainty about *preference margins*, as long as MFN tariffs are subject to negotiations.

• The simplest way to bind tariffs would be for each of the preference granting countries to notify the WTO that their GSP schemes should be considered as binding within the WTO framework. There are a number of other alternatives as well, including plurilateral and multilateral agreements on binding tariffs and/or procedures.

- Safeguard mechanisms play an important role in the trade liberalisation process. By leaving a line of retreat open to the importing countries, safeguards allow them to reduce the level of tariffs below what it otherwise would be. Safeguards are likely to play a more important role in preferential trade arrangements if tariffs are bound.
- From the point of view of the LDCs, safeguards should be designed to achieve their objectives for the importing country at the smallest possible costs for the exporters. It follows from this principle that safeguards that apply to preferential trade should
 - Address a well-defined, serious injury in the importing country;
 - Be based on a clear and restrictive definition of serious injury;
 - Not be applied without a proven, causal link between LDC imports and the injury;
 - Specify generous limits for LDC market shares and LDC import growth below which the LDC will not be targeted by safeguards;
 - Not limit the overall size of the market more than necessary;
 - Not prevent LDCs from capturing market shares from other exporters;
 - Not be implemented without compensation to the LDCs.
- Rules of origin are a necessary part of any preferential trade agreement. But the present complexity and restrictiveness of rules of origin in developed countries represent an unnecessary barrier to trade and might considerably reduce the gains for LDCs of duty-free and quota-free access. Improvement for LDCs could be achieved by using "change of tariff heading" as a

criterion to determine origin and by not requiring more than a single tariff jump in order to become eligible for preferential treatment.

- The possibility of graduating from preferential trade arrangements may create a disincentive to utilise the preferences. This is not a major problem at present, however, mainly because most LDCs are very far away from the graduation limits defined by the UN.
- After a country has graduated, we recommend that trade preferences should be retained until fixed investments are fully depreciated, e.g. for a period of 10–20 years, in order to reduce the costs of adjustment. Moreover, there should be no gradual increase of import restrictions during the transition period. Finally, sector-wise graduation should not be applied to LDCs because most LDCs produce an extremely narrow range of export commodities.

Appendix 3: Supply capacity in the Least Developed Countries

- The share of exports in GDP is lower in LDCs than in low-income countries. Low productive capacity is a major explanation for the weak performance of the export sectors of LDCs. However, it is likely that the lack of export infrastructure, such as institutions for quality control, contributes to the poor performance as well.
- Productivity is low in LDCs, particularly
 with respect to labour. This is due to low
 levels of both physical and human capital.
 Moreover, total factor productivity is low,
 presumably due to factors such as outdated
 technologies and inefficient allocation of
 resources across sectors.
- Since the accumulation of productive inputs, the allocation of them across sectors and the adoption of new technology depend on the incentives for taking these actions, governments have an important role to play in increasing capacity through economic

- policies which influence these incentives. Furthermore, public investments in infrastructure, health and education could potentially boost productivity considerably.
- Rates of investment hold out the prospect of a reasonably rapid expansion of capacity in the coming years. However, the foundation on which accumulation is currently based is weak. LDCs are not attractive targets for foreign investors at present. Their financial sectors are underdeveloped. Moreover, their average rate of saving is negative. This means that foreigners are financing today's investment. In fact, the source of funds is almost exclusively foreign governments. However, aid flows are dwindling. Furthermore, debt levels are high, and the extent to which debt relief will be provided is unclear. Thus, it is uncertain whether the investment levels can be sustained without substantial increases in both private and public savings rates. Furthermore, a major unresolved issue is the degree to which investment (in particular in the public sector) is efficient in LDCs.
- Viewed in isolation, improving access to export markets increases the incentives to invest in export capacity. However, investment decisions hinge on a number of factors, and with respect to many of these LDCs are not faring very well. In particular, the macroeconomic environment is extremely volatile. While the terms of trade are beyond control, donors could contribute by providing more stable aid flows to governments which pursue well-founded economic policies, and governments should aim at keeping the real exchange rate as stable as possible.
- In order to significantly expand exports, LDCs need to build an infrastructure that can facilitate the flow of market information to producers, enforce the sanitary and phytosanitary standards of the importing countries, and implement quality control more generally. Donors could aid LDCs by

- providing technical assistance in these matters.
- Economic policy reform, particularly with respect to public finances and financial sector regulation, is another key issue in

capacity building. Whether such reforms will materialise is hard to predict. However, even if they do, it seems unlikely that LDC production for exports will increase substantially in the short to medium term, given the current situation.

1 Background and Purpose of the Study

The Least Developed Countries are the poorest countries in the world. They are officially designated as "least developed" by the General Assembly of the United Nations on the basis of a number of agreed criteria. There are currently 48 such countries, with a combined population of 613.5 million, or 13.1% of the total population in all developing countries. Their average GDP per capita is 287 dollars, or less than a dollar a day (UNCTAD 2000).

The LDCs' share of the world economy has been declining over the years. Their share of world exports has declined from 0.8% in 1980 to less than 0.5% today (WTO 1997). They also have much slower economic growth than other developing countries. The average growth in real GDP per capita in 1990–98 was 0.9% in the LDCs compared to 3.1% in all developing countries. Thus, the LDCs are lagging behind. Policies that prevent further marginalisation of these countries are therefore most welcome.

Several initiatives have been taken in recent years in order to reduce trade barriers for exports from LDCs. Some of these initiatives can be traced back to the WTO Ministerial Conference in Singapore in 1996, where the WTO members agreed to a plan of action to favour LDCs, "...including provisions for taking positive measures, for example duty-free access on an autonomous basis". The most radical proposal that has been put forth in the wake of this declaration is to eliminate import quotas and bind all import tariffs on LDC imports at zero rates in the WTO. This proposal has been voiced both by the former and the present WTO General Director and by the LDCs themselves.

Although the WTO member countries have not yet followed up the Directors' proposal on multilateral solutions, some of them have taken separate initiatives on an autonomous basis. During the preparations for the 1999 Ministerial Conference in Seattle, the EU proposed the granting of duty-free access for "essentially all products" from LDCs. And to some extent, the

EU talks have been followed by action. A revised version of the EU proposal was recently adopted by the European Council, promising duty-free and quota-free access for all products except arms within 2009 (European Commission 2001b). Furthermore, both Canada and Japan have extended – or are in the process of extending – duty-free access for LDCs to a broader range of products, and last year the USA liberalised clothing imports from Sub-Saharan Africa through the African Trade and Opportunity Act.

The purpose of this study is to evaluate the economic impacts on the LDCs of different policies that reduce the trade barriers LDCs would normally face in their export markets. The various proposals differ greatly in scope and depth, as well as in terms of the legal and institutional structures involved. This is a signal that it will be difficult for the LDCs to obtain all the concessions they want in every area of concern. This study therefore aims to suggest what the key priorities for LDCs should be in a process of gradual trade liberalisation in their export markets.

This study was commissioned by the Norwegian Ministry of Foreign Affairs. The mandate of the study is presented in Appendix 4. A short version of the mandate, together with our interpretations of some key elements, is presented below.

The mandate in brief

According to the mandate, the study should, with reference to the current trade barriers the LDCs face, assess the economic impacts for the LDCs of two alternative future policy regimes:

- (1) Duty-free access for all products from LDCs, and
- (2) Duty-free access for "essentially all" products from LDCs

The study should assess consequences of duty-free access for LDCs in the industrialised countries as well as in both industrialised countries and other developing countries. Economic outcomes include both the consequences for the LDC economy in general, for sectors of particular interest and for income distribution.

The study should also include a discussion of the following aspects of preferential trade arrangements: product coverage, binding in the WTO, safeguards used in the importing countries, transition rules related to graduation from LDC status and the question of rules of origin.

Interpretations

A quantitative assessment of the second policy alternative is not possible due to the inherent ambiguity of the statement "essentially all products". We have circumvented this problem by emphasising the product categories in which full duty-free and quota-free market access will bring the largest gains to the LDCs. In this way, we are able to identify the likely consequences of exemptions from completely free market access.

"Duty-free" is taken to imply both duty-free and quota-free market access.

With regard to country coverage, it has not been possible within the time frame of this study to analyse the consequences of lifting trade barriers in all industrialised and (non-LDC) developing countries. We have therefore concentrated on the major export markets for the LDCs, i.e. the EU, the USA, Japan and Canada. We have also investigated the possibilities for enhanced South-South trade within the Southern African Development Community (SADC).

We interpret the mandate to say that the LDCs should be treated as a group. Country specific consequences are therefore mentioned only occasionally.

With regard to types of economic outcomes, "consequences for the LDC economy in general" are taken to mean the impacts on GDP and export revenue.

The study aims to address the issue of market access from an LDC point of view, especially when it comes to the questions of product coverage, binding, safeguards, graduation, and rules of origin.

The mandate allows for discussions of relevant issues that are not explicitly mentioned in the mandate. Against this background we have included an extensive appendix on supply constraints in the LDCs (Appendix 3). It appears that such constraints put severe limitations on the ability of the LDCs to take advantage of preferential trade arrangements. Identifying and addressing the supply constraints should therefore be an integral part of any trade liberalisation initiatives for LDCs.

2 Current Trade Barriers for Least Developed Countries

In order to evaluate the consequences for the Least Developed Countries of eliminating duties and quotas in their export markets, we need to have a solid understanding of the restrictiveness of the present trade regime. This is the subject of Chapter 2.

Investigating the restrictiveness of a given trade policy is a major challenge from a methodological point of view. The problem is that we ideally want to see the nominal trade barriers in light of the export potential of the LDCs because only trade barriers on products where LDCs have an export potential make a difference. However, we have limited information about export potential, since a low level of actual exports may be a consequence of high trade barriers rather than a sign of limited export potential.

There is no straightforward solution to this problem. We have therefore adopted a dual approach. As a point of departure, we assess the trade barriers in those product categories where LDCs currently have their largest exports. The obvious problem with this approach is that it runs the risk of overlooking the significance of prohibitive trade barriers. Throughout the analysis, we will therefore also keep an eye on trade barriers that are of a prohibitive nature in areas where LDCs may be expected to have a comparative advantage, even though current exports are limited (e.g. certain agricultural products).

Trade policies vary greatly among the export markets of LDCs. It is therefore appropriate to describe trade policies on an individual country basis. But since the number of importing countries is very large, we need to restrict ourselves to the most important ones. As shown in Section 2.1, the major markets for LDC exports are in the QUAD (the EU, the USA, Japan and Canada). By focusing on import

barriers in these countries, little attention will be devoted to the trade barriers faced by LDCs in other developing countries in general. However, for the sake of illustration, we have included an assessment of the trade barriers the LDCs face in the SADC region with respect to intra-regional trade in southern Africa.

2.1 Major export markets for Least Developed Countries

The most important markets for the LDCs – in descending order of magnitude – are the EU, the USA, Japan and Canada, which together represent about 65% of LDC exports (UNCTAD 2000a).¹

The EU is by far the single most important trading partner for the LDCs. While developing countries in general export 19% of their goods to the EU, the share for the LDCs is 35%. A major explanation for the close trading relationship between the EU and the LDCs, apart from close political relations in the past, is the relatively generous preferential market access that most LDCs have enjoyed in the EU. African LDCs are typically more dependent on the EU market than are other LDCs. Most African countries ship more than 50% of their exports to EU.

The USA/Canada are also important trading partners for some LDCs. These markets represent 23% of total LDC exports, of which more than nine tenths are for the US market. Note, however, that the LDC imports in these markets are very unevenly distributed across the LDCs. In 1999, only two countries (Angola and Bangladesh) accounted for 65% of US imports from LDCs (USITC 2001).

¹⁾ According to UN COMTRADE data, the Quad share of total LDC exports in 1996–98 was as high as 75% (reported in Hoekman *et al.* 2001).

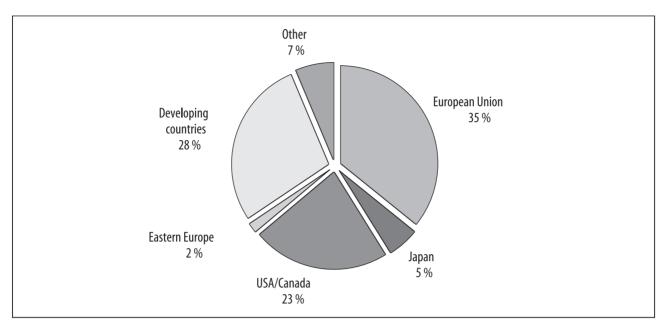


Figure 2.1 Major export markets for LDCs

Source: UNCTAD (2000).

Relative to its size, the Japanese market has traditionally not been among the most important markets for LDCs, currently importing only 5% of LDC exports. Limited market access for agricultural products is probably one of the explanations. The importance of the Japanese market may therefore increase as trade barriers are lifted.

2.2 Major export commodities

In terms of aggregate export values, the major export commodities in the LDCs are petroleum and apparel, accounting for more than 45% of total exports. However, most LDCs export neither petroleum nor apparel. The petroleum exports are from Angola and a few other Central African countries, and the exports of apparel are completely dominated by the Asian LDCs and by Bangladesh in particular.

Most LDCs export products such as minerals, raw materials and tropical agricultural products (coffee, sugar, vegetables, fruits and nuts, tobacco).

Table 2.1 Major export commodities from LDCs (1996–98 average)

HS code	Product	LDC exports (mill. USD)	Share of total LDC exports (%)	Export to Quad as share of total (%)
27	Mineral fuels, oil & prod.	5958	26.2	66.2
62	Art. of apparel & clothing access	2702	11.9	96.6
71	Natural/cultured pearls, precious stones	2094	9.2	95.3
61	Art. of apparel & clothing access	1776	7.8	96.1
9	Coffee, tea, matè and spices	1407	6.2	83.8
3	Fish & crustacean, molluscs	1307	5.7	85.6
52	Cotton	893	3.9	45.6
26	Ores, slag and ash	758	3.3	96.5
89	Ships, boats and floating structures	632	2.8	24.7
44	Wood and articles of wood	622	2.7	46.0
24	Tobacco and manufactured	405	1.8	77.1
74	Copper and articles thereof	387	1.7	54.2
41	Raw hides and skin	322	1.4	61.0
12	Oil seed, oleagi fruits; misc. grains	283	1.2	71.5
81	Other base metals	278	1.2	92.3
8	Edible fruits and nuts; melons	257	1.1	36.5
7	Edible vegetables and roots & tubers	251	1.1	28.1
	All other products	2442	10.7	67.6
	Total	22772	100	75.2

Source: Hoekman et al. (2001), computed from UN COMTRADE.

2.3 Trade barriers in the QUAD countries

This section reviews the trade policies towards LDCs in each of the QUAD markets. Before turning to the details, let us highlight some general aspects of the current policies.

- Agricultural products, textiles and clothing are the most heavily protected products in the QUAD markets.
- The trade barriers in each of the mentioned product categories differ substantially among the QUAD countries. High trade barriers are found for textiles and clothing in the USA and Canada. Canada and Japan have also established quite restrictive import regimes in the agricultural sector. The EU also has a few substantive trade barriers in the agricultural sector, although the overall market access in the EU is better than in the other QUAD markets.
- All regions have some kind of preferential treatment of LDCs. Preferences are typically granted on a unilateral and autonomous basis through the GSP framework. Furthermore, the EU grants preferences on a more contractual basis to the ACP countries through the Cotonou Agreement.²
- Not all countries that are designated LDC status by the UN actually receive LDC preferences in the QUAD countries. Political reasons are the common grounds for rejecting LDC treatment, as in the case of Myanmar.
- Not all countries that receive LDC preferences are necessarily treated the same. In the USA, African LDCs enjoy more favourable treatment than the Asian LSCs in the clothing sector (through the African

²⁾ The Cotonou Agreement between the EU and some 70 former colonies and territories in Africa, the Caribbean, and the Pacific grants generous trade preferences and provides for financial assistance on a contractual basis. Most LDCs, except the Asian ones, are included in the ACP group.

Growth and Opportunity Act³). And in the EU, non-ACP LDCs have not enjoyed quite as liberal market access as the ACP countries. The Everything-But-Arms initiative will however bring discrimination to an end.

- Stringent rules of origin reduce the value of the preferential agreements for the LDCs, in particular for such industrial products as textiles and clothing.
- Preferential trade arrangements commonly used for non-trade purposes, such as to ensure compliance with human rights or social standards. This adds to the unpredictability of preferential margins.

2.3.1 Market access in the US

The US imports from LDCs amounted to 4.8 billion USD in 1996 (OECD 1997). LDCs face significant trade barriers in the US for textiles and clothing but enjoy quite generous access for agricultural products through the GSP system.

The US imports from LDCs are characterised by huge imports of petroleum from a few African countries and substantial imports of clothing from Bangladesh and a few other Asian LDCs.

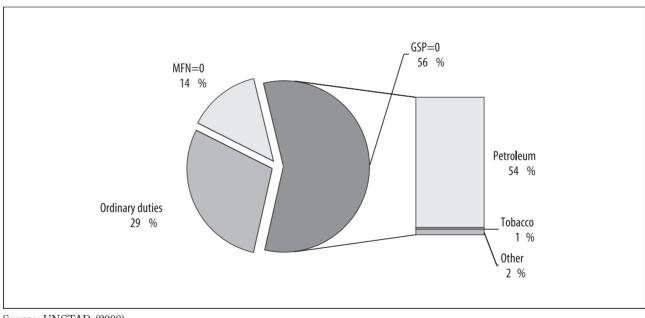


Figure 2.2 US imports from LDCs

Source: UNCTAD (2000).

In 1996, 71% of the imports to the US paid zero duties.4 14% were imported duty-free under MFN conditions. The most important products in this category, in descending order of import values, are diamonds, aluminium ore, frozen shrimps and prawns, cobalt and coffee. The US

GSP system extended duty-free access to an additional 56% of the imports. Although the GSP covers a large share of US imports, the range of products and export countries that actually benefits from GSP treatment is extremely narrow. As much as 95% of the GSP covered

The African Growth and Opportunity Act (AGOA), adopted in 2000, provides preferential market access for countries in Sub-Saharan Africa in the US clothing market. Due to strict rules of origin for non-LDCs and the lack of export capacity in Sub-Saharan LDCs, the AGOA is not expected to provide large benefits for the countries in the region.

Throughout Section 2.3, figures for GSP-covered products are based on *eligibility* of GSP treatment and not on *received* GSP treatment. It is well known that the utilisation rate of the GSP system is low in many countries (see Section 5.4 and UNCTAD 1999d).

imports are petroleum. Since Angola alone accounts for 95% of total LDC exports of crude petroleum to the US market (USITC 2001), it should be evident that the US GSP scheme is not of great value to the average Least Developed Country.

The value of the GSP system cannot be evaluated only on the basis of trade values; the preference margin must also be taken into account. Calculations of the tariff revenues foregone show that 51% of the US GSP preferences are related to tobacco imports, while only 39% stem from preferences on petroleum, where the preference margin is less than 1%.5

Textiles and clothing are the most significant product groups that are excluded from GSP treatment in the US. In fact, these products are non-eligible for GSP treatment by law. Textiles and clothing face both tariff and non-tariff barriers. Practically all LDC imports to the US under ordinary duties, which constitute 29% of the US imports from LDCs, are clothing from Bangladesh and a few other Asian LDCs. The rates of duties vary between 3% and 30%, with an average tariff rate of 12% (OECD 1997). In addition to tariffs, there are quotas on imports of textiles and clothing under the Multifiber Agreement up to 2005. The quota utilisation rate is close to 100% for a number of products, indicating that they pose a real constraint on LDC exports (Otexa 2000).

Sub-Saharan countries have recently received preferential access to the US clothing market through the African Trade and Opportunity Act (AGOA). African LDCs may obtain duty-free, but not quota-free access for apparel made from fabric originating anywhere in the world until September 30 2004. But Asian LDCs, which are

the countries that have the resources needed to export these products, still have to pay ordinary duties.

By studying the tariffs and quotas of products that actually are imported from LDCs, we run the risk of overlooking prohibitive trade barriers. The US imports of agricultural products from the LDCs are very low in most product categories, and we have therefore investigated the nominal agricultural trade barriers in order to find significant trade barriers. In most product groups, the LDCs enjoy duty-free access⁶. However, there are import quotas in some important product categories such as meat, dairy products, peanuts, sugar and tobacco. Out-of-quota tariffs are significant in some cases, especially for some tobacco products. Thus, although there are exceptions, high trade barriers in the US agricultural sector do not in general seem to represent a significant problem for LDCs. LDC agricultural products are simply not competitive in the US market and/or enjoy better market conditions in other markets (e.g. Europe).

2.3.2 Market access in the EU

The EU countries imported goods from LDCs for 9.1 billion USD in 1996 (OECD 1997), almost twice the value of the US imports. The EU imports from LDCs are significantly more diversified than the US imports, both in terms of product spectre and countries of origin.

After the recent approval of the Everything-But-Arms initiative, LDCs enjoy free market access in the EU, except for rice, sugar and bananas. The import restrictions in the remaining categories will be phased out by 2006 (bananas) and 2009 (rice and sugar). In the meantime, import quotas for these three products will be gradually expanded.

⁵⁾ Calculations are based on the mean applied MFN rate for each product group (OECD 1997). The total revenue foregone due to GSP preferences is about 53 million USD (assuming a constant trade volume).

⁶⁾ The main exceptions are sweet corn (21.3%), dried onions (29.8%) and dried garlic (29.8%), whereas there are some very low specific tariffs on tomatoes, cucumbers and certain citrus fruits.

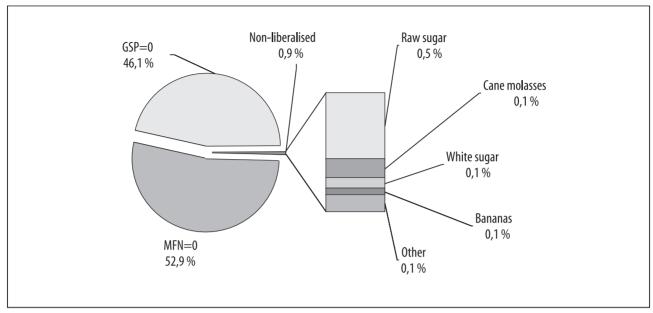


Figure 2.3 EU imports from LDCs

Sources: OECD (1997) and European Commission (2000a).

In this study, we evaluate the effect of lifting the trade barriers that existed before the adoption of the EBA initiative. Therefore, we need to describe the preceding trade regime as well.

In 1996, 99% of the EU imports from LDCs entered free of duty. 53% were duty-free under MFN rates. The most important products in this category were diamonds, coffee, crude petroleum, cotton and various minerals and ores (WTO 1997). Furthermore, an extensive GSP scheme granted free market access to LDCs for all industrial products, including textiles and clothing. Fish, fish products and most agricultural products were included in the GSP scheme as well. But, unlike the US where there is duty-free access for all products eligible for GSP treatment, the GSP scheme in the EU has included positive – and indeed quite high – tariff rates for some product categories.

In the agricultural sector, there were 919 tariff lines where LDCs did not enjoy free market access. In 835 of these tariff lines there are presently no LDC imports (European Commission 2000). There are only 19 tariff lines with total imports exceeding 100 000 EUR and nine tariff lines with imports exceeding 500 000 EUR. Table 2.2 reports the import restrictions in these nine tariff lines. These products combined accounted for 95% of the imports of non-liberalised products in 1998.

We note that not all LDCs are treated equally. Traditionally, the ACP countries have enjoyed more liberal market access in the EU than non-ACP LDCs through the Lomé Conventions, now being replaced by the Cotonou Agreement. Much of this discrimination was eliminated when the EU in 1998 extended Lomé preference to all LDCs for all products that are not encompassed by import quotas.

Table 2.2 Import tariffs in EU on major non-liberalised products, 2000

			Tariffs (EUR/tonne)		
HS code	Product	Imports 1998 (1000 EUR)	GSP-LDC	ACP	
04051030	Recombined butter	970	1611	1592	
04069021	Cheddar	1976	1671	Q: 584	
				1671	
07099060	Sweet corn	1662	94	92	
08030019	Bananas	4420	Q: 75	Q: Free	
			680	480	
10070090	Grain sorghum	2231	94	P: 37.6	
				94	
17011110	Raw cane sugar, for refining	29957	339	Q: Free	
				339	
17011190	Raw cane sugar, not for refining	13587	419	Q: Free	
				419	
17019910	White sugar	6905	419	Q: Free (cane)	
				419	
17031000	Cane molasses	12336	3.5	Q: Free	
				3.5	
Q: Within qu	Q: Within quota tariff rate				
P: Tariff within preferential ceiling					

Sources: European Commission (2000a) and Taric (2000).

The explanation why there are few imports to the EU of non-liberalised products can either be that the import barriers are prohibitive or that the LDCs lack export capacity. Most likely it is a combination of these two factors. Some of the non-liberalised products, such as rice, maize, meat, dairy products, tomatoes and some fruits are produced in significant quantities in the LDCs and may therefore potentially benefit from improved market access. It should be noted, however, that all cereals from LDCs already enter the US market free of duty, and the same is true for meat and dairy products within given quotas. The fact that LDCs do not export these products to the US market may therefore be a sign of weak export capacity.

The Cotonou Agreement provides special market access conditions for sugar, beef and veal to a limited number of ACP countries. Countries that have quotas under the sugar protocol are guaranteed payment according to the price paid to EU farmers. However, these provisions are not of great value to many LDCs. Only four LDCs (Madagascar, Malawi, Tanzania, and Uganda) have quotas under the sugar protocol, and the quotas are very small compared to the production capacities of these

countries (<10%) (FAO 2001, ACP 2001). When it comes to the protocol on beef and veal, there is only one LDC (Madagascar) that benefits from reduced tariffs within a specified quota. Overall, therefore, the protocols of the Cotonou Agreement do not offer great benefits to LDCs.

2.3.3 Market access in Japan

Japan imports for about 1.5 billion USD annually from LDCs, which is no more than one sixth of the value of the EU imports. More than 50% of the imports are duty-free under MFN tariffs. Among the most important products in this category are copper, cobalt, coffee, wood and tobacco (WTO 1997).

A further 14% is imported free of charge under the Japanese GSP scheme. The duty-free GSP import is dominated by one single product; octopus imported from Mauritania and Gambia. This product alone accounts for 79% of the dutyfree GSP imports.

As much as 33% of Japan's imports from LDCs are dutiable at ordinary rates. The main product groups in this category are petroleum, fish and other sea products. The tariff rates for fish and other sea products are in the 2% to 15% range.

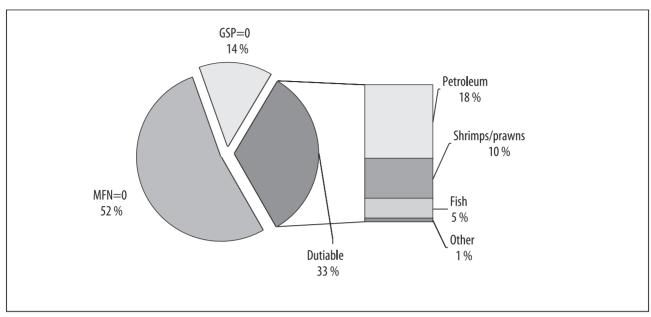


Figure 2.4 Japan's imports from LDCs

Source: OECD (1997).

The agricultural sector in Japan is heavily protected, and prohibitive trade barriers are encountered in a number of sectors (see Table 2.3). There is a positive list of agricultural and fish products that are eligible for GSP

treatment, which in the case of LDCs implies duty-free and quota-free access. These products, such as certain fish products, vegetables, bananas, fruits and nuts, coffee and tea products, all face relatively low MFN tariffs.

Table 2.3 Trade barriers in agriculture in Japan

	MFN applied tariff rate (%)
Rice	503.0
Wheat	535.1
Other cereals	450.0
Sugar	142.9
Bovine meat and meat products	48.1

Source: GTAP version 4.

LDCs enjoy duty-free and quota-free access for most industrial products in Japan, with the exceptions of leather products and footwear. Textiles also face tariffs at present, but these tariffs will be removed in April 2001, implying that all import of textiles and clothing from LDCs will be duty- and quota-free.

2.3.4 Market access in Canada

The Canadian market is by far the smallest of the QUAD markets. Total imports from LDCs in 1996 were 0.3 billion USD, i.e. only 3.5% of the EU imports. Nevertheless, Canada collects duties on their LDC imports that exceed the total duties collected by the EU and Japan (see Chapter 3). Further trade liberalisation in Canada is therefore of potentially greater importance than the trade figures may seem to indicate.

Most of Canada's LDC imports (78%) are in product categories that are duty-free under MFN rules. The most important products in this category are petroleum, minerals and ores, coffee and frozen shrimps and prawns (WTO, 1997). Only an additional 1% of the imports are duty-free under the GSP scheme. The Canadian GSP-scheme is thus of very little significance in providing duty-free access to LDCs.

GSP=0 0,9 % Textiles/Clothing 20,7 % Other 0,3 %

Figure 2.5 Canada's imports from LDCs

Source: OECD (1997).

As is the case in the USA, the import regime in Canada is characterised by high barriers in the textile and clothing sector. Textiles and clothing constitute about 20% of Canada's imports from LDCs, and most of this import is levied at a rate between 20% and 25%.

Canada also has fairly high trade barriers in the agricultural sector. There are tariffs and tariff quotas on a number of agricultural products (e.g. dairy products, poultry products, eggs, margarine, wheat, barley and beef, and a number of vegetables). Out-of-quota tariffs are extremely high for meat and dairy products.

2.3.5 Regional market access in southern Africa

As an illustrative example of the trade barriers faced by LDCs in their regional markets, we will present indicative data on the trade barriers faced by LDCs in the Southern African Development Community (SADC) region. The SADC is composed of both LDCs (Angola, Dem. Rep. of Congo, Lesotho, Malawi, Mozambique, Tanzania and Zambia) and non-LDCs (South Africa, Botswana, Namibia, Zimbabwe, Swaziland and Mauritius). Efforts have been made to stimulate trade relations among the SADC members. Nevertheless, only about 5% of

SADC exports are intra-regional trade (Yeats 1998). In fact, this figure is even lower for the LDCs in the region.⁷ This is in stark contrast to the usual pattern found in developed countries, where neighbouring countries usually are important trading partners.

Can the low level of intra-regional exports from these countries be explained by high import tariffs? Unfortunately, available protection data are scarce at this level. Some indicative figures can, nevertheless, be obtained from the GTAP database, where the SADC countries are divided into two groups; the South African Customs Union (SACU) and the Rest of Southern Africa. All members of SACU, except Lesotho, are non-LDCs, while all countries in Rest of Southern Africa are LDCs, except Zimbabwe and Mauritius. We have used the tariffs Rest of Southern Africa faces as indicative of the tariffs faced by LDCs in the SADC.

Table 2.4 shows the average applied MFN rates faced by countries in Rest of Southern Africa when exporting to the QUAD, the SACU and to other countries in Rest of Southern Africa. Although, average MFN tariffs are lower in regional trade than in QUAD markets, there are

many product categories where the opposite is the case.⁸ Thus, one cannot rule out that high tariffs are part of the explanation of low trade volumes. Most likely, however, other obstacles are far more important.

Yeats (1998) has studied the reasons for the low degree of intra-regional trade in Sub-Saharan Africa. He concludes that the main reasons are (1) lack of adequate infrastructure and (2) lack of export products that other countries in the region need to import.

African infrastructure is poorly developed in general, but the situation is even worse when it comes to intra-regional trade. Transport routes have been developed from the inland to the coast, which does not make for easy transportation between countries within the region. The trade in food products especially suffers from badly developed transportation networks and storage opportunities.

While the lack of infrastructure may be amended through appropriate investments, it is more difficult to overcome the second major problem; the lack of compatible export products. The resource base is quite similar across many African countries. They therefore tend to specialise in the same types of products, which does not lead to much intra-regional trade.

Table 2.4 Import tariffs facing rest of southern Africa in Three export regions (%)

	QUAD	SACU ¹	Rest Southern Africa ²
Rice	0.0	11.1	1.4
Other cereals	44.4	-5.6	-7.3
Vegetables/fruit	4.4	13.8	10.6
Oilseeds	0.0	4.2	10.6
Sugar	75.6	0.2	10.6
Other crops	8.4	1.8	10.6
Meat	97.1	32.6	9.4
Other animal products	0.9	5.1	6.0
Other food	6.7	8.4	10.6
Fish	6.7	12.9	0.8
Forest	1.6	9.6	10.6
Beverages/tobacco	19.2	37.4	-3.4
Fuel/minerals	0.5	2.8	4.7
Textiles/clothing/leather	10.4	19.0	24.9
Other manufacturing	1.9	10.9	5.1
Total	13.4	9.4	5.5

¹ SACU members: South Africa, Botswana, Namibia, Swaziland, Lesotho.

Sources: GTAP version 4 and authors' calculations.

² Rest of Southern Africa: Angola, Tanzania, Mozambique, Zambia, Malawi, Zimbabwe, Mauritius.

3 Benefits for LDCs of Trade Liberalisation

This chapter reports on our evaluation of the benefits for the LDCs of removing existing tariffs and quotas in the QUAD markets. The theoretical basis for the analysis is explained in Section 3.1 and Appendix 2. Due to the lack of reliable data, it is however not possible to measure the consequences for the LDCs in a way that is completely satisfactory from a theoretical point of view. Therefore, we have to rely on somewhat imprecise measures and indicators. Three such measures are described in Section 3.2, and the results are presented in Sections 3.3 – 3.5. Issues of income distribution are discussed in Section 3.6. Section 3.7 summarises our findings, emphasising the implications of our results for the question about product coverage in preferential trade arrangements with LDCs.

3.1 Theory

The economic benefits of extending the LDC trade preferences can be divided into three components:

- The value of higher prices on existing production and exports
- The value-added from production expansions
- The benefits created for (or diverted from) consumers in LDCs

Higher prices on existing production and exports

Trade preferences will increase the prices received by LDC exporters. Import tariffs and quotas raise the domestic price of goods in the importing country above the world market price. When LDC exporters are granted preferential access, they get behind the tariff walls and may thus charge a price that is higher than the world market price and still be able to sell their products in competition with other countries. With free market access, the price

received by LDC exporters will equal the domestic price in the importing country, provided there is no market power on the import side. Granting duty-free access to the LDCs will thus increase the export price by the present rates of duty.

With market power on the import side, the price increase will typically be less than the present duty rates, as the importers will be able to capture part of the potential gains from duty-free access.

The total value for the LDCs of higher prices on existing production and exports depends on the quantities exported into the markets where preferential access is provided. Three cases can be distinguished:

- No change in the export pattern.

 The total gain is then the price increase multiplied by existing export quantities
 - multiplied by existing export quantities supplied to the markets where preferential access is granted.
- Redirecting exports that presently enter other markets.
 - By redirecting exports that presently enter non-QUAD markets, the LDCs will obtain additional gains from preferential access in the QUAD. The extra value equals the price difference between QUAD and non-QUAD markets, multiplied by the export quantities being redirected.
- Redirecting existing sales from domestic LDC markets to the QUAD.

If LDC producers receive higher prices in the QUAD than in their respective home markets, it will be profitable to redirect goods that presently are sold in the home markets to the QUAD markets. Domestic consumption in the LDCs must then be satisfied through imports from third countries. This is called triangular trade or an import/export swap. The use of import/export swaps will further enhance

the gains from preferential market access, depending on the quantities redirected and the difference between home market prices in the LDCs and the prices received in the QUAD markets.

Value-added from production expansions

If higher prices for LDC exporters are transferred to LDC producers (which is not necessarily the case, as discussed in Section 3.6), there will be incentives to expand production. Higher production creates both extra revenues and extra costs. The gain for the LDCs is the difference between the additional revenues and the additional costs of production.

The value-added from expanded production depends crucially on the structure of costs. Other things being equal, gains will be higher in sectors with economies of scale, where unit costs decline with output, than in sectors where the unit costs increase as production expands. Higher export revenues might also make it possible to invest in new technologies that may reduce production costs and enhance the economic surplus. In some cases, the adoption of new technologies might even create beneficial spillovers to other industries, thus further boosting the economic gains.

Consumer welfare

Preferential market access for LDCs will benefit LDC consumers, although the gains are likely to be quite small. The effect on consumer welfare depends on what happens to domestic prices in the LDCs. Given that LDC production increases in the wake of preferential, duty-free access, there will be excess supply in the world markets, putting downward pressure on world market prices. A fall in world market prices will benefit LDC consumers. But since the LDCs' share of world markets in protected products in most cases is very small, the decline in world market prices will probably be negligible, and so will be the effect on consumer welfare in LDCs.

This argument presupposes that the LDCs do no raise their own import tariffs to prevent import/export swaps. For some food products, it may be undesirable for the LDCs to become too reliant on supplies from third countries, as might be the case if import/export swaps are extensively used. In order to limit the degree of import/export swaps, import tariffs could be raised. That would increase the domestic price level and thus induce domestic producers to supply the home market. Such policies would harm consumer welfare. However, for a country that is a net exporter of the relevant commodity, any consumer losses will be more than outweighed by the benefits to producers. Hence, everyone can be better off if redistribution policies are put in place. This shows that the effect of preferential market access on consumer welfare in LDCs depends to a large extent on domestic policies in these countries.

A graphic exposition of the arguments of this section is presented in Appendix 2.

3.2 Measuring the benefits – the methodology

In order to arrive at a theoretically satisfactory measure of the total gains for LDCs of duty-free and quota-free access in the QUAD, we need information about (see Appendix 2 for details):

- The price responsiveness of demand and supply in the LDCs, import demand in the QUAD countries and export supply in other countries
- The quantities produced and consumed in the LDCs
- The preference margin (measured in absolute values)

Data are scarce in many of these areas, in particular concerning price responsiveness. It has not been possible, within the time frame of this study, to undertake a comprehensive and systematic numerical assessment of the gains and losses for LDCs. Our approach is a more pragmatic one, using available data to shed light on the potential magnitudes involved. We

provide three different types of measures of the potential gains of duty-free access. We say "potential" because all three measures assume that there is no market power in importing countries, implying that the LDCs receive the entire preferential margin (see Section 3.6 for a discussion of market power).

1. A measure of the potential gains from higher prices on existing exports to QUAD.

This is a measure of the pure price effect of higher prices on existing exports to the QUAD. It does not take into account the benefits of redirecting existing sales in non-QUAD markets, nor the value added from increased production. This measure may be a reasonable indicator of the potential short-run gains from duty-free market access, given that import/export swaps are not used.⁹ We have used data on existing customs duties on LDC imports in the QUAD in order to produce this measure.

2. A measure of the potential gains from redirecting existing sales in non-QUAD markets (including the potential gains from import/export swaps).

In principle, the potential gains of redirecting existing sales in non-QUAD markets can be estimated by multiplying the existing levels of sales with the preferential margin in the QUAD under duty-free access. In practice, however, it is unrealistic to assume 100% utilisation of import/export swaps. Our estimates are therefore based on assumptions about less than full utilisation of this possibility. Our estimates are also confined to a limited range of products; the lack of data has prevented us from measuring the aggregate gains over all product categories.¹⁰

3. A measure of the potential increase in export revenues (including gains from higher prices on existing exports and gains from increased production).

The main problem with the two measures above is that they do not take into account potential value added from increased production. Unfortunately, no estimate of this value added is readily available. However, Hoekman et al. (2001) provides estimates of the potential increase in export revenue from freer market access in the QUAD. This measure overlaps the two measures above, since benefits from higher prices on existing exports are included. It also includes a measure of the extra revenues from increased production, but the main problem is that it does not subtract the extra costs generated by the production increase. Note also that potential gains from import/export swaps are not included.¹¹

3.3 Measure I: The value of existing customs duties

The QUAD countries collect about 220 mill. USD annually in customs duties on their imports from LDCs. As shown in Figure 3.1, more than 80% of these duties is collected by the USA. Canada also collects a disproportionally high share of the duties. The EU, while representing almost 60% of the total QUAD imports, collects less than 4% of the customs duties.

⁹⁾ With reference to Figure A2.2 (see Appendix 2), this measure corresponds to the area C+F+G, which in principle may be greater or smaller than the gains without import/export swap (i.e. B+C+D).

¹⁰⁾ With reference to Figure A2.2, this measure (assuming 100% utilisation of import/export swaps) corresponds to the area A+B+C+E+F+G, which may be smaller or larger than the actual gains when import/export swaps are fully utilised (i.e. A+B+C+D+E+F).

¹¹⁾ With reference to Figure A2.2, the measure provided by Hoekman *et al.* corresponds to the area C+D+H+I+J, which surely may differ considerably from the "ideal" measures (i.e. A+B+C+D+E+F or B+C+D).

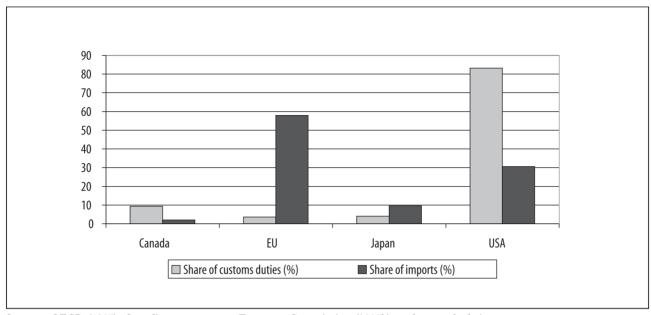


Figure 3.1 QUAD customs duties and imports from LDCs

Sources: OECD (1997), Canadian government, European Commission (2000b), and own calculations.

The customs duties collected by the QUAD countries on the imports from LDCs amount to 1.1% of total LDC exports and 0.13% of total GDP in the LDCs (UNCTAD 2000a). Hence, the removal of import tariffs will not raise incomes in the LDCs significantly unless there is a change in the export volumes to the QUAD.

Removal of tariffs will mean more for some LDCs than for others. In Canada, 92% of the customs duties were collected from Asian LDCs and Bangladesh alone accounted for 77%. We would expect a similar pattern in the USA as well as the customs duties in the USA are related exclusively to the imports of clothing, and because exports of these products from Africa are very low. Therefore, if some of the current tariff revenues are transferred to the LDCs, the main beneficiary will be Bangladesh. But even for Bangladesh, the values at stake are not sufficiently large to make a major difference. If we assume, for the sake of illustration, that 80% of the reduced tariff income accrues to Bangladesh, that would mean an increase in GDP of 0.4%. Although such an increase in income certainly would be welcome, it would not mean a big leap forward for this country, which has experienced annual grow

rates in real GDP of 4–5% during the period 1990–98 (UNCTAD 2000a).

In fact, the value of existing customs duties in the clothing sector is a very good estimate of the short-term gains of duty-free access. The reason is that under the Multifibre Agreement. imports of clothing to the USA and Canada are restricted by quotas until 2005. The exporters administer these quotas so that the value of the quotas accrues to the exporting countries. Import tariffs in the US and Canada reduce the market value of the quotas. By removing the tariffs, the market value of quotas would increase by the value of the existing customs duties. Hence, these duties are good indicators of the short-term gains of duty-free access. But for a country like Bangladesh, which has demonstrated its ability to develop a thriving export industry, the main benefits of reduced tariffs will in the long run be more related to the possibilities of expanding production and export volumes as competitiveness is improved.

The overall benefits that can be reaped by LDCs from higher prices on existing exports to the QUAD are quite limited. Most of the customs duties collected by the QUAD on LDC imports are related to the clothing sector. The

widespread use of quotas in this sector implies that the value of the customs duties is a reasonably good estimate of the short-term gains from duty-free access.

3.4 Measure II: Benefits from redirecting existing sales

So far, we have implicitly assumed that the removal of tariffs and quotas influences neither the export pattern of the LDCs nor the consumer prices in the QUAD. We do not want to stop there, although we realise that further analysis, due to the lack of data, to a certain extent will take us into the realm of speculation. We will certainly not be able to make predictions about the total gains that can be reaped through changes in the export pattern. Our ambition is simply to shed some further light on the possible magnitude of these gains by focusing on selected cases that appear to be of relevance.

Redirecting existing sales to the QUAD countries may be accomplished by

- Redirecting existing exports that presently enter non-QUAD destinations
- Redirecting existing sales to local markets and satisfying domestic consumption via imports (import/export swap)

Redirecting exports that currently go to other destinations will be the easiest way of increasing exports to the QUAD markets in the short run. The existence of exports must imply that an export infrastructure has been established. Therefore, redirection of exports only requires that marketing channels are established in the QUAD markets (if they are not there already) and that the products satisfy consumer preferences and sanitary/phytosanitary requirements in the QUAD.

The LDCs will have much greater difficulties diverting sales from their domestic markets to the QUAD countries. It appears that such trade swaps are most likely for agricultural food products, for which only a few LDCs have established an adequate export infrastructure. In addition to building physical infrastructure, the LDCs must organise inspection bodies in order to ensure compliance with sanitary and phytosanitary regulations in the importing countries. They will also have to develop import infrastructure and internal distribution networks that can adequately serve domestic consumers. Finally, considerations about food supply security may make some countries reluctant to engage in import/export swaps in food products on a large scale.

The purpose of redirecting existing sales is to take advantage of high domestic prices in protected QUAD markets relative to the world market. But one should be aware that this price margin may decline over time, in particular for products where LDCs are able to capture a substantial market share in the QUAD. If domestic QUAD producers disappear from the market, the policies that support them are likely to disappear as well, together with the favourable price margins. Therefore, beneficial trade swaps are not likely to be sustainable in the long run unless the LDCs' imports continue to be of marginal importance in the QUAD.

Table 3.1 provides some illustrative examples of what LDCs might earn from diverting existing sales to the QUAD countries. All products considered face high tariffs in the EU at present. Most of them are highly protected in the Japanese market as well, but not in the USA and Canada. We calculate what the LDCs could benefit from diverting more of their existing sales towards the EU market under the assumption that LDC producers capture the whole preferential margin. First, we consider the benefits of redirecting exports that currently enter non-QUAD markets, and then we calculate the benefits from diverting 10% of their existing production (which presently by and large is used to serve domestic needs). We emphasise that these numbers are not based on an assessment of the actual export potential. That would require detailed analysis at the product and country level.

Table 3.1 Comparing the potential gains from redirecting exports and import/export swaps

	EU price (USD/t)	World price (USD/t)	LDC production (1000t)	Total LDC exports (1000t)	Value of redirecting existing exports (mill. USD)	Value of 10% import/export swap (mill. USD)
Cereals						
Wheat	123	109	7217	124.5	1.7	10.0
Maize	129	85	16335	183.5	6.1	72.4
Rice	554	277	40807	110.7	29.7	1130.2
Sugar	600	231	2056	280.1	10.3	75.9
Fruits/vegetables						
Bananas	609	332	5694	20.6	1.8	157.7
Tomatoes	727	584	1176	1.6	0.1	16.7
Meat						
Beef meat	2566	1640	2235	5.1	0.9	207.2
Poultry meat	1232	902	886	0.1	0.0	29.3
Sheep meat	3077	1363	1159	14.0	4.3	198.7
Dairy products						
Butter	2727	1207	109	1.932	2.9	16.6
Cheese	3231	1989	197	0.019	0.0	24.5
Total these products					58.0	1939.1

Sources: FAO on production and exports, European Commission (2001a) on prices, and GTAP version 4 on export shares to non-QUAD countries.

These figures should be interpreted with great caution. There is however, a clear tendency wherein the potential gains from a 10% import/export swap are significantly greater than the potential gains from redirecting existing exports. This is due to the fact that LDC exports of these products presently are very low relative to their production levels. When compared to the value of higher prices on existing exports to the QUAD (Section 3.3), the potential gains from import/export swaps also seem relatively large.

The probability of import/export swaps is greater for cereals and sugar than for meat and dairy products due to more stringent sanitary and phytosanitary measures for the latter categories. Thus, the potential for substantial gains from import/export swaps seems to be greatest in such products as sugar and rice. However, there are a number of reasons why we may have exaggerated the gains in the rice sector. First, Myanmar, which is excluded from

GSP treatment both in the EU and the USA, is the main LDC exporter of rice (90% of the total) and also an important producer (25% of the total). Moreover, the EU market for rice is too small to accommodate a 10% import/export swap; the export increase is almost twice the size of the EU market. If large quantities of rice are admitted into the EU market, the price is likely to fall dramatically, as will the potential gains for the LDCs. On the other hand, if some of the export is accommodated by the Japanese market, which is four times as large as the EU market, and with current prices exceeding the world market prices by a factor of five, substantial gains could still be attained in this sector.12

The potential gains from redirecting exports of textiles and clothing are probably limited, in part because the QUAD share of existing exports is very large (for clothing) and partly because consumer preferences differ greatly between markets.

¹²⁾ For other products than rice, LDCs would still have a minor market share in the EU (less than 4% in most categories, except bananas (16%) and mutton (8%)).

3.5 Measure III: Increased export revenue

We have yet to take into account the fact that the removal of tariffs and quotas may increase the level of production in the LDCs. This may create additional gains. Note, however, that a dollar increase in export revenue generated by increased production has a smaller impact on GDP than one extra dollar received on existing exports. The reason is that the gain on existing exports is a pure price effect, implying that GDP increases in step with the export revenues, while gains arising from a production increase come at a cost, since additional inputs must be used in order to increase production. A meaningful comparison between the two requires that only the value-added component (i.e. the extra export revenue minus the costs of inputs) is counted in the case of export revenues generated by increased production.

A few studies of the potential increase in LDC export revenue from improved market access in the QUAD are available (Ianchovichina *et al.* 2000, Hoekman *et al.* 2001, UNCTAD 2000b). The study by Hoekman *et al.* comes closest to our needs, and we will therefore report some of its results.¹³

Hoekman *et al.* study the consequences of removing all tariff peaks (defined as tariffs above 15%) in the QUAD on imports from LDCs. Some important shortcomings of their study are: 1) In cases with tariff-quotas, they use out-of-quota tariff rates. Since LDCs in many cases enjoy duty-free access within quotas (e.g. for several agricultural products in the US and the

EU), this will lead to an overestimation of the gains. 2) If current exports are zero, the simulated export level will be zero when tariffs are reduced as well. Moreover, the model does not capture potential gains from import/export swaps. This suggests that gains may be underestimated. 3) The assumptions about supply capacity in LDCs are arbitrary. 14 4) The model does not take into account that rules of origin may prevent LDCs from taking advantage of preferential access. The latter point is a crucial one, because most of the gains come in the clothing sector, where rules of origin are a significant trade barrier for LDCs (see Section 4.4).

Hoekman *et al.* find that if the QUAD countries eliminate all tariff peaks *simultaneously*, LDC export revenue would increase by 11% (i.e. 2.5 billion USD). This is more than 10 times the current customs duties collected by the QUAD countries on LDC imports. However, as was explained above, one cannot compare these figures without deducting the additional costs of inputs related to the expansion of production.

The study also shows that the gains for LDCs would be much larger if the tariff peaks were eliminated in the US and Canada than in Japan and the EU. Indeed, the gains from an EU reform are

quite modest. Figure 3.2 shows the impact on LDC export revenue of removing tariff peaks in each of the QUAD countries (while trade policies are kept constant in the three other regions).

¹³⁾ The main problem with Ianchovichina *et al.* is that not all LDCs are included, and among the countries which are included, there are several non-LDCs. Our main problem with the UNCTAD study is that it does not take into account the supply constraints in the LDCs.

¹⁴⁾ A one percent increase in the export price is assumed to generate a 0.5 percent increase in export volumes for all products and countries.

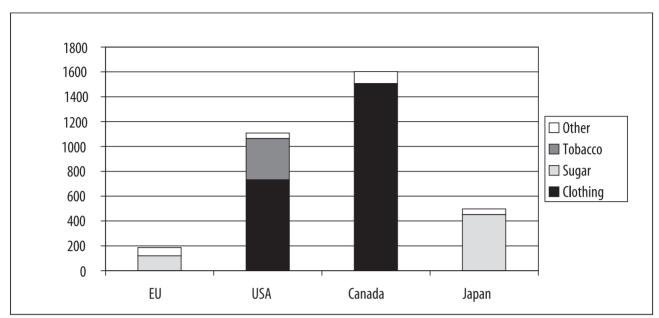


Figure 3.2 Increase in LDC export revenue with unilateral liberalisation (mill. USD)

Sources: Hoekman et al. (2001).

The potential increase in export revenue is concentrated in a few product categories; apparel, sugar and tobacco. In the US and Canada, where the main benefits are to be reaped, the share of apparel in the total revenue increase is 66% in the USA and 94% in Canada. In the US, another 30% of the revenue increase comes in the tobacco sector. Sugar is the main benefiting sector in the EU and Japan, reaping 64% of the revenue increase in the EU and 91% in Japan.

The gains will also be very unevenly distributed across LDCs. Exporters of apparel in Asia (e.g. Bangladesh, Laos, and Cambodia) are the main beneficiaries.

We believe that the gains in the clothing sector may be overestimated because exporters of apparel in Asia, particularly Bangladesh, have difficulties in satisfying rules of origin in a number of product categories (see the discussion about rules of origin in Chapter 5). On the other hand, the gains for certain agricultural products may be underestimated because current exports are low or absent due to high trade barriers.

3.6 The distribution of gains from improved market access

The estimates presented above rest on two important assumptions that we have not discussed up to this point, namely that i) the exporting country receives the full gains from lower tariffs and ii) within the exporting country, the gains will be passed on to producers of the export goods. In practice neither of these assumptions may hold. In this section we will discuss reasons why LDCs may not be the sole beneficiaries of improved market access for their goods in the QUAD and why producers of exports in these countries may not see the profitability of their activities increase if preferential margins in the QUAD are improved. The first issue is important for the magnitude of the gains to LDCs within existing levels of production. The second issue is of interest from a more dynamic perspective; the degree to which the benefits of improved market access is passed on to producers will determine the supply response, which is crucial to the impact such changes will have on income levels in the LDCs in the future. Finally, we also consider how free market access may affect the incomes earned by other groups than the producers within the LDCs.

Whether the LDCs will realise the total potential benefits from say a reduction in the tariffs levied on their exports, depends on the market structure for these products in the QUAD, both at the wholesale and at the retail level. Obviously, the markets in the QUAD that LDCs might supply are structured differently, both across countries and across products. Both state trading enterprises (STEs) and multinational companies (MNCs) are major actors in many markets for agricultural goods. Neither of these types of firms discloses many details about their activities. According to Article XVII of GATT, which regulates STEs in world trade, member countries are required to fill in a questionnaire on the operations of their STEs every three years. 15 However, the degree of compliance with the rules of notification is poor. In their study of STEs. Ingco and Ng (1998) found that between 1980 and 1994 only 45 countries submitted notifications. In fact, during this fifteen-year

period only Finland, Norway and Sweden provided the complete set of notifications. Hence, what could be learned about the activities of STEs across the globe from studying the notifications was obviously limited.

The situation is not much better with respect to private companies. Here, the problem is the fact that many of the largest agribusinesses are not publicly traded. Hence, they do not have to provide shareholders with information which makes it impossible to gather information about important variables such as sales, market shares, and profits. Impressionistic accounts suggest that some of these companies wield considerable power in markets for major agricultural goods. For example, UNCTAD (1999c, p. 12) provides the following, somewhat dated, estimates of market share concentration for some major agricultural commodities:

Table 3.2 World market shares of major trading companies around 1980

Commodity	Market Concentration
Wheat, maize, and soybeans	6 companies account for 85–90%
Coffee	6 companies account for 85–90%
Sugar	4 companies account for 60–65%
Bananas	3 companies account for 80%
Cocoa	3 companies account for 80%
Tea	3 companies account for 85%
Cotton	8 companies account for 85–90%

The fact that companies such as Cargill and Bunge & Born are among the major traders in several of these commodities reinforces the suspicion that competition might be limited, even though UNCTAD (1999c) suggests that the figures referred to above might overestimate the degree of concentration. Moreover, according to this study the five largest supermarket chains have a market share of more than 50% in most European countries, which indicates that limited competition in markets for agricultural goods might also be a problem at the retail level.

In fact, some of the major MNCs have operations extending all the way through the production chain to retailing processed foods and to consumers. Of course such diversification might limit the gains that LDCs could reap. If MNCs are important producers and exporters in LDCs of goods which LDCs actually or potentially could supply to the QUAD, they will be the beneficiaries of improved market access unless LDC governments are able to increase the taxation of their profits accordingly.

¹⁵⁾ It should be noted that this article is not restricted to firms owned by the government; STEs are defined to include private companies which have been granted special privileges by the governments of member countries with respect to trade.

This stark scenario is probably highly unlikely. A more realistic concern is that lack of competition in the import markets might deprive the LDCs of some of the potential benefits of duty-free, quota-free access to the QUAD. Once again, hard numbers and stringent analyses which could serve as foundation of a preliminary assessment of the severity of this problem, are lacking. However, the study by Morisset (1998) of the transmission of changes in world market prices to domestic prices in Canada, Japan, the US and three major members of the EU (France, Germany and Italy) indicates that market power could be important with respect to products such as rice, sugar and wheat. It is noteworthy that rice and sugar are among the goods for which the potential gains from market access are the largest (cf. Table 3.1).

Morisset (1998) finds that there is an asymmetry to the response of domestic prices to upward and downward movements in world market prices. Domestic prices in these countries respond much more strongly to price increases on world markets than they do to decreases in world market prices. A noteworthy example is coffee in the US: between 1975 and 1993, the price of coffee declined by 18% in the world market while consumers in the US saw an increase of 240% in the price that they were being charged. Morisset assesses possible explanations for such an asymmetric response and suggests that market power is a likely culprit. Thus, on the import side there is call for concern about the degree to which exporting countries will benefit from improved market access.

However, even if LDCs capture most of the gains from higher preferential margins and the abolishment of quotas, exporters need not see an increase in the profitability of their activities. The reason is that the governments might retain most of the benefits, either through direct taxation or through the operations of STEs. Ingco and Ng (1998) have evaluated the operations of STEs in 45 developing countries and classified countries according to the sectoral scope of their STEs and the strength of

their privileges (Table 4, p. 33). Among these were only three LDCs and only in Uganda were the STEs involved in export sectors. However, its regime was classified as weak. Ingco and Ng (1998) also provide a more detailed account of the involvement of STEs in the trade of developing countries in 1990 (Table 5, p. 34). It is interesting to note the diversity of their operations in some countries. In Benin, for example, STEs were involved in the exporting of dairy products and eggs, fish and fish preparations, vegetables and fruits, sugar and honey, beverages, crude fertilisers and the residual category of miscellaneous edible products. However, this tells us little about their relationship with producers, i.e. whether they have a domestic monopoly on buying the output, whether they stabilise producer prices and, if so, at what level relative to world market prices, and so on. These issues are clearly of major importance in determining the strength of the supply response to increased market access in the QUAD. However, in general the supply capacity also depends on other variables on which we have significantly more information. This is the subject of Appendix 3.

Finally, consider what may happen to income distribution within LDCs when the state does not tax away the income gains or otherwise intervene in the product markets. As was pointed out in Section 3.1, consumers in LDCs will gain (or at least will be no worse off) from preferential market access, provided LDC governments do not put up import controls in order to limit the use of import/export swaps. Hence, preferential market access is likely to benefit both consumers and producers.

What then about the income distribution between different factors of production? Drawing on standard trade theory, we expect an increase in the price of a good to increase the returns to production factors which are used intensively in the production of the good. Thus, when we find that exporters of apparel are the main beneficiaries from an elimination of tariff peaks in the QUAD (Section 3.5), we would expect the wages of unskilled labour, which constitutes the major input into production of

textiles and clothing, to increase in these countries.

The effects on income distribution of price increases for agricultural goods are slightly more complicated to analyse since we would need more details on how production is organised. For example, we would need to know whether sugar and tobacco plantations use machinery or labour to harvest the output. Unfortunately, we do not have the information needed to assess which factors of production would benefit in these cases.

Moreover, the consequences of price increases for returns to land, capital and labour are more complicated when the markets for inputs are malfunctioning, which is typically the case in LDCs. For instance, higher prices for apparel might reduce unemployment (and underemployment) instead of increasing wages. While this would also be a welfare gain, in this case factory owners, who presumably are relatively well off, would benefit from an increase in profits. Hence, the effects of improved market access on income distribution in LDCs must be evaluated on a case-by-case basis. Such an analysis is beyond the scope of this report.

3.7 Concluding remarks

This chapter has presented three different measures of the potential benefits for LDCs of duty-free access in the QUAD markets. All of them leave the impression that the potential gains for the LDCs as a group are indeed modest, even when measured relative to their presently low levels of income. The main reasons are that (1) most LDCs already enjoy quite liberal market access in important export markets, and (2) the ability of LDCs to take advantage of trade preferences is limited, due to supply capacity constraints. Moreover, the market power of firms in importing countries may imply that the potential benefits are not realised.

Nevertheless, there are significant benefits to be reaped for certain countries and in certain product groups. In particular, Asian LDCs may gain from improved access for apparel in the US and Canadian markets.

As for the agricultural sector, there is not much evidence in our analysis pointing to increased revenue on existing exports or to increasing production volumes. The former is due to very limited exports of protected products at present, and the latter is due to supply constraints, widely interpreted. However, we have identified potential, though extremely uncertain, gains from engaging in import/export swaps for some agricultural products, such as sugar and rice. The same can be said about meat exports, although the LDCs in this case have a much longer way to go in order to fulfil quality standards in the importing countries.

The fact that the benefits of duty-free and quotafree access are concentrated on a few product categories demonstrates the importance of extending free market access to *all products*. A clause about liberalisation of "essentially all" products will most likely reduce the benefits for LDCs substantially because the importing countries then typically will retain import controls in those categories where the benefits for LDCs can be reaped.

No doubt, the analysis suffers from several shortcomings. The most critical one is perhaps that the relationship between higher export prices and future supply capacities in LDCs is poorly understood. If higher export prices lead to the adoption of more productive technologies and to investment in infrastructure, the gains from duty-free and quota-free access may certainly increase substantially. Our inquiry into the present supply capacities in LDCs and what it would take to bring the capacities onto levels that could boost export volumes, leaves however, the sad impression that they have a long and difficult path ahead (see Appendix 3).

4 How Can the Gains be Secured?

This chapter discusses how preferential trade arrangements should be designed in order to serve the interests of the LDCs to the greatest extent possible. Our focus is on the following subjects:

- Binding of tariffs and procedures
- Safeguards
- Graduation
- Rules of origin

4.1 Binding of tariffs and procedures

4.1.1 Benefits of binding

Since GSP preferences are given on a unilateral and non-contractual basis, they can in principle be withdrawn at any point in time, both sectorwise and country-wise. Considerable uncertainty is therefore attached to future GSP preferences. Many LDCs are concerned that this uncertainty is limiting the impact of preferential trade arrangements on their economic development.

This uncertainty would be reduced if preferential tariffs were bound in the WTO. Countries that want to increase tariffs above bound rates have to go through a costly process in the WTO, including multilateral consultations where they need to defend their position based on a set of agreed upon criteria. They also have to offer compensation to the offended parties, and if the parties involved do not find a solution, the WTO Dispute Settlement Procedure can be applied. Hence, the costs of withdrawing bound preferences would be much greater than the costs of withdrawing the current GSP preferences.

In this section we discuss to which extent binding of preferences would favour the LDCs and how one may proceed to reduce the uncertainty attached to preferential trade arrangements. Although we consider binding of tariff preferences to be in the interests of LDCs, the benefits could easily be overstated. The argument for binding preferences is straightforward. Due to limited supply capacity, most LDCs have not been able to take full advantage of the preferences they have been offered. Supply capacity can only be enhanced through investments in infrastructure, education, machinery, etc., but such investments are hampered by uncertainty. Binding preferences would provide LDCs with more predictable trade relations and thus stimulate export growth. All recent market access initiatives, such as the EBA, lack this kind of predictability since they are provided within the GSP framework.

Not all LDCs seem to put the same emphasis on binding preferences. Our impression is that binding is more heavily emphasised by African LDCs than by the Asian LDCs. This may reflect that African countries have had the greatest problems with providing stable and predictable business environments for the export sector.

The effect of binding preferences should not be overstated. First, binding preferential tariff rates for LDCs cannot eliminate uncertainty about preferential margins, i.e. the difference between MFN tariffs and LDC preferential rates. As long as the future development of MFN tariff rates is uncertain, so will be the preferential margin. Duty-free access is probably of little value for the LDCs unless preferential margins vis-à-vis other exports are maintained, as is clearly demonstrated by Hoekman et al. (2001). Note also that if the LDCs are able to successfully penetrate export markets in areas with high preference margins, that may accelerate the reduction of MFN tariffs because the arguments for maintaining high tariffs will dwindle as domestic producers lose market shares.

Secondly, what matters for the investment climate is the total level of uncertainty, which in addition to uncertainty about trade preferences includes political uncertainty, uncertainty about domestic economic policies, etc. In many LDCs, major uncertainties are related to factors other than the trade preferences (cf. Appendix 3). Stable trade preferences would therefore not necessarily make a big difference.

Several of the preference-granting countries argue that the issue of binding is overemphasised by the developing countries because there is no evidence that preferences towards LDCs have been withdrawn. 16 We do not believe that the LDCs should be convinced by this argument because preferences have traditionally been granted either for products that are not particularly sensitive or to countries that do not have sufficient supply capacity to make use of the preferences. Past experience can therefore not be used to predict what will happen in the case of more radical liberalisation. On the other hand, governments that withdraw LDCs' preferences will probably do so at a political cost because such actions will conflict with official development policies. Development-oriented NGOs that monitor the implementation of duty-free access could play an important role in this context.

4.1.2 How can preferences be made more binding?

There are a number of ways in which current trade preferences for LDCs could be made more binding and thus more predictable. In addition to binding within the WTO, more binding contracts could be entered into between the LDCs and the preference granting countries, and domestic legislation could be used in developed countries to make trade preferences more secure. These arrangements could include not only a greater degree of tariff and quota bindings, but also more binding rules about safeguards, rules of origin, graduation and other procedural issues.

Unilateral/bilateral approaches:

 Make current GSP schemes subject to all WTO disciplines.

The simplest thing to do in order to increase predictability for LDCs would be for each of the preference granting countries to notify the WTO that their GSP schemes should be considered as binding

within the WTO framework. This implies, *inter alia*, that preferential tariff rates cannot be changed without compensating the LDCs and that the WTO dispute settlement procedure will be activated should a dispute arise. This would provide substantial improvement in the degree of predictability for LDCs. If the preference-granting countries really intend to provide secure access for LDCs within their current GSP schemes, such notifications should be executed immediately. If not, the LDCs may have a legitimate concern about the predictability of current preference schemes.

• Convert current GSP schemes into formal contracts with the LDCs.

A formal contract is more binding than unilateral concessions if the contract is enforceable. Although international agreements may be difficult to enforce through formal procedures, there is little doubt that written agreements may have a government impact significant on behaviour. Building provisions about compensation into the contract could probably further enhance the likelihood of compliance.

• Bind preferences in domestic legislation.

In several countries, the government has considerable discretionary power to change the GSP scheme. By defining procedures that increase the difficulty of making such changes, the degree of predictability might be enhanced. The US case of prohibiting GSP treatment of textiles by law is a negative example of how domestic legislation can be used to increase predictability. This approach would, however, offer far less security than the others mentioned above.

Plurilateral approaches:

• Plurilateral agreements between selected developed countries and the LDCs.

Agreements that encompass several developed countries are preferable over

¹⁶⁾ There are, however, examples that the benefits of preferential arrangements have been suspended by the use of safeguards (cf. the Norwegian ceiling on beef imports).

unilateral ones since they typically involve a greater degree of commitment, in part because such agreements tend to attract greater public attention. Such agreements could entail provisions on all levels, from agreements about procedures to be followed in preferential trade agreements, via common rules of origin and rules about safeguards, to lists of tariffs and quotas that the parties are committed to. The credibility of such contracts would be considerably enhanced if the contracting parties made the agreement subject to WTO disciplines, following the practice of other plurilateral agreements under the auspices of the WTO.

Multilateral approaches through the WTO:

Multilateral solutions through the WTO require a consensus agreement among all WTO members.

- Binding of preferential tariffs in the WTO through a waiver.
 - Binding preferences in the WTO would entail the application of all other WTO disciplines and would therefore imply a high degree of stability and predictability. Besides the possibility of unilateral notification of GSP schemes, preferences may be bound in the WTO through multilateral approaches, for instance by agreeing on a waiver to the MFN principle in the pattern of the Enabling Clause.
- Binding of preferential tariffs in the WTO through amendments of Articles I and II.

 Another way around this is to amend Articles I and II of the GATT agreement, which lay down the principles of MFN treatment. This will be a very demanding task, not only because countries will be unwilling to open negotiations on this very issue alone, but also because one would then have to discuss the very cornerstone of the entire international trading system.
- Ministerial Declarations by WTO member states.

Ministers may agree on principles that should govern the trading relations between LDCs and other WTO members. Although these principles will not be binding unless they are included in the WTO framework, they may function as an important political signal to the member states. A Ministerial Declaration is easier to achieve than bindings in the WTO because a lower degree of commitment may induce more countries to sign a Ministerial Declaration.

Binding in itself is of no value unless what is bound makes a difference for the LDCs. The following sections therefore discuss which trade rules favour the LDCs. We start by discussing the safeguard issue and then proceed with a discussion on principles relating to rules of origin.

4.2 Safeguards

Safeguards are those measures that may be invoked by an importing country to protect against imports that represent a threat or do actual harm to the domestic economy or domestic industries. The use of safeguards is regulated in the WTO through the Agreement on Safeguard Measures (ASM) (see Box 4.1). This agreement does not, however, apply to preferential trade arrangements such as the GSP. Some countries have included special safeguard clauses in their GSP schemes, while others have not (see Section 4.2.3).

The aim of this section is to define principles for the use of safeguards within preferential trade arrangements that are in the interest of LDCs. The ASM is used as a point of departure, since these rules offer stronger protection of export country interests than any other fully developed safeguard regulation.

Before proceeding, it should be noted that the restrictiveness of the ASM may have led countries to turn to other measures instead, such as antidumping duties. Recently, antidumping duties have increasingly been used by developing countries against other developing countries. However, the threat of antidumping measures normally should not be a

major problem for the LDCs. It will rarely be profitable for LDCs to engage in regular dumping, mainly because they have extremely weak home markets. However, it might be profitable to charge different prices in different export markets. There have been examples that such discrimination has provoked antidumping measures. From an LDC point of view, it is essential that such pricing policies cannot justify antidumping actions.

4.2.1 Safeguards and market access

Including safeguards in trade agreements may at first glance be seen as a way of diluting the value of the agreements. But this interpretation is too narrow. Of course, if tariffs were bound at zero rates, the LDCs would prefer that the possibility of employing safeguards did not exist. The problem is, however, that duty-free access would be much harder to achieve in the first place without leaving a line of retreat open to the importing countries. Safeguards therefore play an important role in the liberalisation of trade. This may be particularly important in the case of preferential access because such arrangements lack the reciprocity that is such an important driving factor behind multilateral trade liberalisations.

What matters for the LDCs at the end of the day is the real level of protection, i.e. the combined effect of tariffs, safeguards, rules of origin etc. Since there is a trade-off between tariffs and safeguards in the sense that one cannot get rid of both at the same time, one should ask which of them should be dismantled first from an LDC point of view.

Although we have not asked LDC representatives this question, there is reason to believe that they typically will have most to gain by concentrating their efforts on the removal of tariffs. Trade liberalisation always involves uncertainty about how severely domestic industries will be hit by foreign competition. History shows that vulnerable domestic industries have considerable influence on trade policies. This is certainly also the case in those sectors that are of importance to LDCs (e.g. agriculture and textiles/clothing). If safeguards

are not available, these sectors will probably use the uncertainty as an argument to keep tariffs at higher levels than are needed in order to ensure adequate protection. By using safeguards, protective trade measures will be invoked only in those cases where imports *actually* pose a threat or *actually* damage domestic industries, and not in those cases where the potential threat never develops.

In the following, we will discuss which safeguard principles for measures preferential trade arrangements should be adhered to in order to favour LDC interests. This discussion will have particular relevance if preferential tariffs are bound in the WTO, in which case one may consider negotiating a separate safeguard agreement for preferential trade. When it comes to unilateral and autonomous preferences, such as the current GSP schemes, safeguard measures play a somewhat different role. Formally, there is no need for safeguard measures in the GSP systems to protect national interests because preferences can be withdrawn at any time. There are, however, political costs involved, implying that it will normally be easier to suspend preferences by referring to explicit safeguard rules that have been established in advance. In reality, safeguard measures therefore serve similar purposes in the preference systems as in the case of bound tariffs.

4.2.2 Safeguards that favour LDC interests

At the fundamental level, safeguards favour LDC interests when 1) the possibility of using safeguards leads to increased market access for LDC (i.e. lower tariffs and quotas), and 2) the safeguards achieve their objectives for the importing country at the smallest possible cost for the LDCs. We shall assume that the first criterion is fulfilled. From the second criterion, we have derived a list of more specific principles.

Safeguards should

 Address a well-defined, serious injury in the importing country

- Be based on a clear and restrictive definition of serious injury
- Not be applied without a proven, causal link between LDC imports and the injury
- Specify generous limits for LDC market shares and LDC import growth below which the LDCs will not be targeted by safeguards
- Not limit the overall size of the market more than necessary
- Not prevent LDCs from capturing market shares from other exporters
- Not be implemented without compensation to the LDCs

While the first four principles deal with the question of *when* safeguards are to be applied, the three last ones deal with the question of *which* measures should be implemented.

A well-defined and serious injury

Safeguards should address a well-defined and serious injury in the importing country. Imports in themselves can hardly represent a problem for any country. An injury will therefore not arise unless imports cause adjustment problems in the domestic economy. Safeguard rules should specify a list of the variables that are of such importance to the importing country that rapid adjustments may qualify as a serious injury. The WTO Agreement on Safeguards includes a long list of such variables, such as the level of production and sales, productivity. profits and employment (see Box 4.1). It is far from obvious that all these variables should qualify as potential serious injury in the context of LDC imports. Can a loss in sales ever be classified as serious injury if profits and employment are maintained at reasonable levels? Another example of a dubious injury variable is the price-criterion used in the WTO agreement on safeguards in the agricultural sector.

Box 4.1 Safeguards in WTO agreements

A WTO member may restrict imports of a product temporarily if its domestic industry is injured or threatened with serious injury caused by a surge in imports. The Agreement on Safeguards (ASM) in the WTO sets out strict requirements for safeguard actions.

The ASM sets out criteria for assessing whether "serious injury" is being caused or threatened, and the factors which must be considered in determining the impact of imports on the domestic industry. By the domestic industry one means the total group of producers of like or directly competitive products. An import surge justifying safeguard action can be a real increase in imports (an absolute increase) or an increase in the market share of imports (relative increase). The latter need not imply the former as changes in market shares depend on both changes in import quantity and in the size of the total market. Other relevant factors are the share of the domestic market taken by increased imports, changes in the level of sales, production, productivity, capacity utilisation, profits and losses and employment. The existence of a causal link between increased imports of the product concerned and serious injury or threat thereof has to be documented. When factors other than increased imports are causing injury to the domestic industry at the same time, such injury shall not be attributed to increased imports.

Safeguard investigations by national authorities should be transparent, follow established rules and practices and avoid arbitrary methods. The authorities conducting investigations have to announce publicly when hearings are to take place and provide other appropriate means for interested parties to present evidence. The evidence must include arguments on whether a measure is in the public interest.

When imposed, a safeguard measure should be applied only to the extent necessary to prevent or remedy serious injury and to help the industry concerned to adjust. Where quantitative restrictions (quotas) are imposed, they normally should not reduce the quantities of imports below the annual average for the last three representative years for which statistics are available, unless clear justification is given that a different level is necessary to prevent or remedy serious injury. According to ASM, a safeguard measure should not last more than four years, but can be extended to eight years if the measure is needed and there is evidence that the industry is adjusting.

Safeguards cannot be applied towards developing countries whose market share is below 3% of total imports, provided that the combined market shares of developing countries do not exceed 9%.

There are special safeguard rules in the WTO Agreement on Agriculture, which apply in the trade in agricultural products. These rules put far less restrictions on the use of safeguards than does the ASM.

Source: World Trade Organisation

Most countries consider that adjustments leading to a significant reduction in employment represent a welfare problem. This is therefore an example of a variable that probably should be included in the list of potential injuries.

From an LDC point of view it is also important that "safeguards" are not used as a means to address domestic issues in LDC countries. This relates to the current debate on the use of trade measures to promote labour standards in developing countries. Several countries have included such provisions in their GSP systems. One reason for this is that competition from producers with low labour standards is said to be "unfair", implying that one should have the possibility to "safeguard" domestic producers. We will not enter into a discussion on whether importing countries have a right to do so, but we want to underscore that conditions of this kind have nothing to do with safeguard mechanisms. They are rather types of conditionalities proposed by importing countries to influence the domestic policies of exporting countries. We know that developing countries have been quite critical of including a social clause in the WTO. Neither do they have any interests in including social clause in preferential trade arrangements.

A clear and restrictive definition of serious injury

The application of safeguard measures should be based on a clear and restrictive definition of serious injury. For example, if the relevant variable is changes in employment, the safeguard rules should specify, or at least indicate, the rate of change that is required in order to qualify as a serious injury. Such clarity is important in order to increase the predictability of the trading regime. Restrictiveness is important in order to ensure that one strikes a fair balance between the export interests of LDCs and the concerns of the far more developed importing countries.

On way of ensuring a restrictive definition of serious injury is to require that the interests of the users of imported products are taken into account during the safeguard investigations. When the interests of consumers and firms using imports as intermediates are counted, the application of safeguard measures tend to be reduced (Finger 1998).¹⁷ This is one important reason for the reduction in the application of antidumping measures by the EU and the USA in recent years.

A restrictive definition of serious injury can also be ensured by requiring that the relevant market is widely defined. Within the WTO framework, the relevant market is usually defined by terms such as "like products" or "directly competitive products". Both these terms are vague and need to be interpreted. A wide interpretation would generally favour LDC interests, because it would reduce the probability that a serious injury arises within the defined market. "Competitive products" will typically represent a wider definition of the market than "like products" and is therefore preferable. A problem with this criterion is, however, that it is not very transparent and predictable. A possible solution might be to define "competitive products" through direct reference to tariff classifications.

Clarity is important in order to minimise *lobbying* (Hoekman and Leidy 1993). Indicators of injury such as employment, profits, utilisation of capacity, productivity and prices can be manipulated by the firms. If a firm knows in advance that a reduction in employment can lead to more protection in the future, it has incentives to reduce employment to obtain protection. The presence of safeguards also provides incentives to blame imports for any injury or adjustment problem.

Hoekman and Leidy (1993) therefore argue that *import penetration* is the only acceptable criterion. It is least susceptible to strategic behaviour and is directly tied to the presumed source of difficulty. However, we disagree on this. Imports are a problem only insofar as they create domestic adjustment problems. We will therefore contend that it is a better solution for

LDCs that the criteria that may trigger safeguard measures are linked directly to the real injuries (e.g. reduced employment) and leave it to the importing countries to prove a causal link between the injury and LDC imports.

A proven, causal link with LDC imports

Safeguards should not be applied without a proven, causal link between LDC imports and the injury. A similar principle is included in the ASM, but our principle goes further by requiring that the causal link is not only with imports in general but with imports from LDCs. It may be the case that an increase in imports may come partly from LDCs and partly from other countries. From the LDCs' point of view, it is then important that safeguards against LDC imports under preferential agreements are not justified unless the import increase from LDCs alone would be sufficient to cause serious injury. Such a rule would clearly discriminate against other import sources, but that is indeed the purpose of preferential trading rules.

Generous lower limits for LDC market shares and import growth

Safeguards should specify generous limits for LDC market shares and LDC import growth below which LDCs will not be targeted by safeguards. Since LDCs have very small market shares in most markets, even a large increase in LDC exports will have a negligible impact on the importing countries. Establishing rules that prohibit the use of safeguards against small suppliers would therefore provide considerably greater predictability for the LDCs at a low cost for the importing countries.

The ASM includes rules of this kind; safeguards cannot be imposed against a developing country if the country is supplying less than 3% of the

imports of the product, except when the combined market share of the developing countries exceeds 9% of the market.

An alternative to restrictions related to market shares could be to connect them to import growth, guaranteeing that safeguards are not imposed if import growth does not exceed a certain limit. From an LDC point of view, a combination of criteria related to market share and import growth would clearly be preferable. Thus, exporting countries that are not yet established in the market could enjoy significant import growth sheltered by the market share rule, while exporting countries that are wellestablished and already have a market share close to the limit (e.g. 3%) can be sheltered by the import growth rule. This should not represent a problem for the importing country since any adjustments will occur gradually.

We have also considered whether the 3% rule applied in the ASM would be sufficiently generous from an LDC point of view. The answer is probably yes in most cases, but certainly not always, as is clearly demonstrated by the following example:

In 1999, the import shares of clothing from Bangladesh in Canada, the US and the EU were 2.6%, 3.1% and 2.3%, respectively (WTO 2001). Bangladesh was thus close to – or above – the 3% limit in all these markets. When we look at a more disaggregated level of product categories, the picture becomes even more worrying. Table 4.1 reports the market shares for Bangladesh in the 11 most important product categories in the US market, representing approximately 65% of its exports of clothing to the US. In only two of these categories is the import share below 3%. This shows that the 3% rule is not sufficiently generous for all LDCs.

Table 4.1 US imports of clothing from Bangladesh, year ending 11/2000

Category		1000 USD	Share of imports (%)
	Total MFA imports	2 193 781	3.06
340	Non-knit shirts, men	239 643	9.8
359	Other cotton apparel	214 949	18.0
347	Cotton men/boys trousers	176 176	3.5
341	Women/girls non-knit blouse	151 319	11.9
659	Other apparel	148 641	7.2
352	Cotton underwear	84 929	3.4
634	Other coats, men	83 491	6.6
348	Women/girls slacks	78 459	1.6
239	Baby garments	74 054	4.2
647	Trousers, men	73 717	4.2
338	Knit shirts	70 962	1.5

Sources: Otexa (2000).

Not limiting the market size more than necessary

Safeguard measures should not limit the overall size of the market more than necessary.

A general principle from economic theory is that policy instruments should be targeted as directly as possible at the problem they are intented to address. This implies for instance that if the government's primary concern is unemployment and adjustment problems, it will be more efficient to use (labour) subsidies rather than tariffs or quotas.

In principle, subsidies would also be better than trade measures from the LDCs' perspective. While both measures reduce the price received by exporters, subsidies will increase total demand since the consumer price in the importing country is reduced. The overall market size is therefore enhanced by subsidies. Tariffs have the opposite effect; by increasing the consumer price in the importing country, total demand is reduced.

From the importing country's point of view, the important issue is to maintain a given level of employment. If safeguard measures contribute to larger total demand, this objective can be accomplished at lower costs for LDC exporters than if total demand is reduced.

There are also problems related to the use of subsidies, of course. Subsidies involve financial costs for the importing country, and they may be quite easy to manipulate for purely protectionist purposes. Such consideration must be weighed against the benefits for LDCs of having access to a larger market.

Allowing LDCs to capture market shares from other exporters

Safeguard measures should be implemented in way that allows LDCs to capture market shares from other exporters. From the importing country's point of view, the important issue is to reduce the *total imports* to a tolerable level. This can be achieved without harming LDCs if the safeguards discriminate against non-LDC exporters.

Consider a situation where preferential market access for LDCs has caused a surge in the imports from these countries at the same time as imports from non-LDCs also attain a considerable level. Assume that safeguards are then warranted with reference to a special safeguards agreement for LDCs in the WTO. From the LDCs' point of view, it will then be important that any quotas are not limited to LDCs alone, even if they are the source of the problem. By imposing quotas on non-LDC exporters as well, for instance in proportion to past levels of imports, the LDCs might be able to capture market shares from other exporters.

Note also that the principle of allocating quotas according to past performance is too conservative from an LDC point of view, since it tends to discriminate against potential new entrants that previously did not have the capacity to export.

Compensating the Least Developed Countries

Safeguards against imports from LDCs should not be implemented without compensation.

The ASM says that when safeguards are applied, an exporting country can seek compensation (through lower tariffs on other products) through consultations. If no agreement is reached, the exporting country can retaliate by raising tariffs on imports from the country that has implemented safeguards. By providing compensation, the importer's *costs* of implementing safeguard measures increase. When the costs of protection increase, it is less likely that protection is implemented in the first place.

One common characteristic of LDCs is the high export concentration ratios (see UNCTAD 1999e). A high concentration ratio makes it more difficult for importing countries to find other markets/products where they can compensate (by lowering tariffs and/or increasing imports) since the country in question normally trades few products and, as shown in Chapter 2, most LDC exports are already duty free. In the event that compensation is not provided, LDCs lack resources to retaliate. Thus other compensation mechanisms than those in the ASM need to be developed. At any rate, it should be clear that if no compensation can be provided, safeguard measures should not be applied. Safeguards should also be applied for a temporary period only and be progressively liberalised in order to reduce inefficiencies. By defining a clear cut off point for the use of safeguards, the incentives for domestic adjustment in the importing country increase.

In order to ensure compensation, it is also important that all available safeguard measures, as well as "safeguard substitutes", are encompassed by the same compensation requirement. Otherwise, importing countries would be tempted to substitute cheaper measures for the more expensive ones (cf. the previous discussion on the use of antidumping measures rather than the standard safeguard clause).

4.2.3 Safeguards applied by QUAD in their GSP systems

Most countries have included safeguards in their GSP systems. But since it is relatively easy to withdraw preferences altogether, the rules are usually not developed in great detail or with a high level of precision. This section provides a brief description of some of the safeguards in the QUAD GSP systems. Two points are made. First, the present rules do not conform particularly well with the principles set out in the previous section. Secondly, in order to bind preferential tariffs, the safeguard measures in the GSP systems will need considerable revision.

Canada's GSP rules explicitly refer to the multilateral safeguards in GATT 1994. Canada will thus take emergency action in respect of products that are imported in such quantities and under such conditions as to cause or threaten to cause serious injury to domestic producers of like or directly competitive products by withdrawing or modifying its preferential concession. If there is an injury and the removal of GSP concessions will remove the injury, a public inquiry will be conducted, and the Government may withdraw the GSP concession or establish tariff rate quotas.

The European Union has a special safeguard mechanism in its GSP system. The criteria are whether an imported product "causes or threatens to cause serious difficulties to a Community producer of like or directly competing products".

The definition of the market is *narrow* as it refers to directly competing products, while the requirement of serious difficulties is *weaker* than for instance serious injury required by the ASM. One does not need to prove that imports

have caused or threaten to cause a serious injury; one need only examine the possible existence of serious difficulties. In such an examination a very broad range of variables are to be taken into account:

- Reduction in market shares of Community producers
- Reduction in their production
- Increases in their stocks
- Closure of their production capacity or low rates of capacity utilisation
- Low profitability
- Employment
- Trade
- Prices

The EBA also includes a temporary safeguard (anti-fraud) measure that can be applied in the case of massive increases in imports in relation to the exporters' usual levels of production and export capacity. For imports of particularly sensitive products causing serious disturbance to the Community markets and their regulatory mechanism, the commission may suspend the preferences.

Neither the US nor the Japanese GSP systems have particular safeguards against LDCs. In the US GSP system, preferential treatment of non-LDCs can be withdrawn when a particular country has a certain amount of imports (cf. the rules on "competitive needs"). These rules do not apply to the LDCs, although the limit was by far exceeded for certain LDC products. The reason for this is most likely that the industrial products that are of particular interest for the developing countries (such as textiles, clothing, footwear and electronic articles) do not benefit from GSP preferences in the US and thereby do not pose a real threat. If LDCs are provided with free market access in textiles and clothing, this might change. This point is underscored by the Trade and Development Act, which provides preferential treatment to Sub-Saharan and Caribbean exports of clothing. The act includes provisions on safeguards in the case of a "surge of imports which is damaging or threatening the US industry".

Safeguards in Japan's GSP system are mainly based on ceilings, but the LDCs are exempted from these regulations.

4.3 Graduation

Preferential market access that is provided under conditions relating to low income levels, such as the LDC initiatives, contains an inherent disincentive to utilise the preferences because preferences may be lost if the country utilises the system successfully. For the LDCs, graduation would mean that trade preferences would be significantly reduced. But they would not disappear entirely, since the LDCs would be eligible for normal GSP treatment even after graduation.

The main argument for including a rule about graduation in preferential trade arrangements is that this makes it easier to target the benefits of the trade preferences towards those countries that are most needy.

4.3.1 The disincentive implied by graduation

The possibility of graduation does not seem to pose a major disincentive for the LDCs at present because most LDCs are very far away from fulfilling the graduation criteria.

GDP per capita is the main criterion used to determine whether a country should be included in the UN list of LDCs. Moreover, indices of physical quality of life and economic vulnerability are used. In order to be included in the list, GDP per capita must be below 900 USD. The graduation limit is 1035 USD (UN 2000).

Most LDCs have a long way to go to meet the criteria for graduation. UNCTAD (2000a) has calculated how long it will take to reach 900 USD per capita (which was the graduation limit before the last review) if the real growth rates of the 1990s persist. The results are shown in Table 4.2. Except for those countries that are already there, only Lesotho will reach the threshold by the end of 2015. Unless growth rates increase substantially, the graduation question will not become an urgent issue for a very long time.

Table 4.2 How long will the LDCs take to reach \$900 per capita income levels if current trends persist?

Already there	18–25 years	25-50 years	50-100 years	>100 years	Negative or stagnant growth rate
Cape Verde Eq. Guinea Maldives Samoa Vanuatu	Bhutan Lao PDR Lesotho Sudan	Bangladesh Guinea Mozambique Uganda	Benin Cambodia Eritrea Ethiopia Mauritania Nepal	Burkina Faso Malawi Mali Yemen	Angola Burundi Chad Dem. Rep. of Congo Gambia Guinea-Bissau Haiti Madagascar Niger Rwanda Sierra Leone Solomon Island Togo Tanzania Zambia

Sources: UNCTAD (2000a).

Botswana graduated from the UN list in 1994. A superficial investigation of the export levels and trends in Botswana during the 1990s reveals no indication of weaker export performance after graduation. This is true also when we filter out the exports of diamonds, copper, nickel, and soda ash (which typically face zero MFN tariffs), and beef (for which Botswana has retained its export quotas in the EU). A more thorough analysis is needed, however, to determine the real impact of graduation on Botswana's export performance.

4.3.2 Graduation principles

How should graduation rules and procedures be designed to serve the interests of LDCs? Different answers to this question will be obtained depending on whether we ask the country that is supposed to graduate or the countries that are still far away from the graduation limit. The latter group would prefer immediate graduation, without any transition periods, if that would benefit their own export interests. In most cases, though, it seems

unlikely that the graduation of a single LDC would have a great impact on the other countries in the group. Let us therefore concentrate on the interests of the country that is graduating.

It is of course possible to decide that countries that graduate from the UN list should still retain their LDC trade preferences. 19 The main reason why it would be difficult to defend such a procedure as a general principle is considerations about horizontal equity; a situation might arise where two countries at the same level of development are treated differently because only one of them is a former LDC. Some rules on graduation therefore seem inescapable.

Given that graduation limits must be defined, it is important for the graduating country that the rules and procedures do not unnecessarily weaken the prospects for economic growth or create abrupt structural changes in the economy. Several implications follow from this general principle:

¹⁸⁾ We thank Hildegunn Kyvik Nordås for making the data available on which our calculations are based.

¹⁹⁾ Norway has followed this route in the case of Botswana.

Allow for a reasonable transition period after araduation

Businesses that anticipate changes in their export opportunities will take action in advance to reduce the costs of structural change. It is therefore of utmost importance that businesses have accurate information about *when* trade preferences will be removed. Without such information, they may start the readjustment processes too early or too late, thus imposing unnecessary costs on the domestic economy.

It is difficult to predict exactly when a country will graduate from the UN list. Although the formal criteria are reasonably transparent, the criteria tend to change somewhat over time, and separate judgements are occasionally made that may postpone the decision about graduation. The point in time of graduation is therefore unpredictable. In order to eliminate this uncertainty, the graduating country should retain its trade preferences for a well-defined period of time after graduation from the UN list. The transition period should be long enough to allow structural adjustments in the graduating country to take place at minimal costs. In practice, this means that the transition period should last at least until fixed investments are fully depreciated, which in many cases may imply transition periods of 10–20 years.

Of course, during the transition period, a situation might arise where similar countries are treated differently. But as long as the transition period is well-defined and justified by the economic arguments presented above, the equity-arguments will not have the same force as when trade preferences are extended to previous LDCs for an indefinite period of time.

Do not increase import restrictions gradually during the transition period

To obtain a smooth transition in the graduating country, it might appear to be preferable to tighten import restrictions gradually. But if such a gradual adjustment is beneficial, it may be accomplished by the graduating country itself through export restraints. The preference-

granting countries should therefore wait until the end of the transition period before implementing any import restrictions.

Do not allow for sectoral graduation

The GSP systems of several countries contain rules about sector wise graduation (e.g. the USA and the EU). Such rules may be extremely damaging for many LDCs because their exports are typically concentrated on a few products. As shown in Section 3.5, improved market access in the QUAD would typically stimulate LDCs' exports significantly in only a few product categories. If graduation can be applied in specific sectors, the potential gains from duty-free and quota-free access might therefore be significantly reduced. *It is thus of utmost importance that sectoral graduation rules cannot be applied against LDCs*.

At present, sector-wise graduation is not a big problem for the LDC. In the US, LDCs are exempted from sector-wise graduation. In the EU, LDCs might in principle be hurt by sector-wise graduation, but the rules are designed in such a way that this will not occur in practice. The EU is currently in the process of explicitly stating an exemption for LDC graduation in their GSP regulation.²⁰

4.4 Rules of origin

According to the mandate, this study is supposed to take the present rules of origin as given, at least in the short run. As was pointed out in Section 3, rules of origin may severely limit the benefits that LDCs can reap for duty-and quota-free access. Hoekman et al. (2001) have shown that most of the potential gains from duty-free access accrue in the clothing sector. However, a considerable share of this potential cannot be realised under the present rules of origin.

All preferential trade arrangements must specify what is needed for a product to confer origin in a country that is eligible for preferential treatment. Even though the rules of origin restrict the opportunities of LDCs to take advantage of preferential market access, these rules cannot be regarded as a barrier to trade since they are a precondition for granting preferential access in the first place. Nevertheless, it is clear that the importers may use the rules of origin as a trade barrier by making the rules unduly complex or restrictive, exactly what the LDCs claim the industrialised countries have done by employing rules of origin that are unreasonably restrictive and by not harmonising the rules across product groups and across countries.

Harmonisation of rules of origin (ROO) in the GSP systems would reduce the *information* requirements and therefore the costs of utilising the GSP system. A reduction in costs would probably increase the utilisation rates (see below).

The importance of harmonisation is further underscored by the lack of harmonisation between non-preferential ROO and preferential ROO and the fact that a country may face different sets of rules of origin in different preferential arrangements. For instance, in the beginning of the 1990s, the United States had six different sets of preferential origin, the European Community had fourteen, while Canada had six (Vermulst 1994, 435). Such a system lacks predictability because it is based on "a case-by-case approach". There is also a tendency to have more liberal rules of origin for countries with closer political or economic ties. The extent to which that it is easier to confer origin for, say, a Sub-Saharan LDC than for an LDC in Asia, such differences will represent a type of discrimination against LDCs in Asia.

A harmonisation program for non-preferential ROO is currently in place (cf. Box 4.2) and

provides a potential solution to the rules of origin problem, as it creates the possibility that the QUAD will apply non-preferential ROO in their GSP systems as well. This would benefit LDCs, not only because transaction costs would be reduced, but probably also because ROO in many cases are stricter for preferential trade than for non-preferential trade. This has generally been the case for the QUAD countries (Vermulst 1994).

However, one should not be too optimistic regarding a harmonisation of preferential ROO. Countries tend to design ROO in their GSP systems to suit their domestic interests. These vary among countries. Many countries have signalled that they do not want to discuss preferential ROO until the harmonisation of non-preferential ROO is completed. The problems related to non-preferential ROO are difficult enough by themselves. Moreover, the countries know that once an agreement is obtained on non-preferential ROO, the pressure to do the same for preferential ROO will be strong. These mechanisms work together to reduce the probability of reaching a multilateral agreement on ROO.

4.4.1 Rules of origin and utilisation of GSP

Products that are wholly obtained in a country will always confer origin in that country. Rules of origin are therefore not a problem for the majority of LDC exports because most agricultural products and raw materials are naturally wholly produced within one country. The problems arise with industrialised products, in particular with respect to textiles and clothing. Several Asian LDCs have a considerable capacity to produce apparel if they are allowed to freely import the intermediates. Their ability to do so is, however, limited by the rules of origin in the QUAD.

Box 4.2 Rules of origin

Rules of origin are the criteria used to define where a product was made. In a completely open world, there is no need for rules of origin because it would make no difference where the products originate. Moreover, when there are tariff barriers, the importance of origin is modest as long as trade-restrictive measures are used non-discriminately. Rules of origin are an essential part of trade rules because a number of policies discriminate between exporting countries, such as quotas, anti-dumping actions, countervailing duties and preferential tariffs (GSP and free trade agreements).

WTO members shall ensure that their rules of origin are *transparent*; that they do not have restricting, distorting or disruptive effects on international trade; that they are administered in a consistent, uniform, impartial and reasonable manner; and that they are based on a positive standard (they should state what does confer origin rather than what does not).

According to the WTO agreement on rules of origin, WTO members shall aim for harmonisation of non-preferential rules of origin. There is no similar obligation as regards preferential rules of origin.

Sources: http://www.wto.org and interviews in the WTO secretariat.

One indicator of the significance of rules of origin is to compare the imports that would be eligible for GSP treatment if formal

requirements were fulfilled with the imports that actually receive preferences.

Table 4.3 Utilisation rate of GSP preferences in the QUAD, 1997

		LDCs		
	Imports GSP	Imports GSP Imports GSP Utilisation rate		Utilisation rate
	covered (1000 USD)	received (1000 USD)	(%)	(%)
Canada	8 537	4 656	54.5	65.9
EU	2 888 780	770 768	26.7	55.9
Japan	313 753	228 913	73.0	42.5
USA	2 719 570	790 655	29.1	61.1

Source: UNCTAD (1999d)

As shown in Table 4.3, a substantial share of the imports that are covered by GSP does not receive preferential treatment. Notice that the utilisation rate for LCD beneficiaries in the EU, the US and Canada is lower than the utilisation rate for all beneficiaries, even though LDCs typically receive a higher preference margin.

In other cases, low preferential margins may be too low to warrant the efforts needed to receive GSP treatment. A low utilisation rate for Angola in the US might for instance be explained by the fact that the preference margin is only a few cents per barrel.

However, non-compliance with rules of origin is also a major explanatory factor. By looking at utilisation rates in the EU we observe that some Asian countries that typically have large exports of textiles and clothing, have a very low utilisation rate, even though preferential margins are significant. For instance, only 27% of the imports from Bangladesh to the EU receive preferences, although most of this trade is apparel and thus receives a substantial preferential margin. The explanation is that Bangladesh is not able to satisfy EU rules of origin for apparel based on woven fabrics (although they qualify for knitted products). Bangladesh has to rely on imported fabrics (only 15% of woven fabrics are produced domestically, as compared to 60% of knitted fabrics). Without building up a domestic textile industry, Bangladesh is likely to face similar problems in the US and Canada if textiles or clothing products receive larger preferences in these markets. In this case, more liberal rules of origin would be far more important than simply a harmonisation.

Table 4.4 EU GSP imports and utilisation rates by country, 1997

Beneficiary	Imports GSP	Imports GSP	Utilisation rate
country	covered (1000 USD)	received (1000 USD)	(%)
Afghanistan	10 862	2 292	21.1
Bangladesh	1 940 533	532 478	27.4
Bhutan	1 293	190	14.7
Cambodia	176 835	18 359	10.4
Laos	99 527	17 228	17.3
Maldives	26 603	18 757	70.5
Myanmar	137 847	18 705	13.6
Nepal	171 694	135 869	79.1
Yemen	32 762	18 662	57.0
TOTAL LDCs	2 888 780	770 768	26.7
All GSP beneficiaries	115 939 676	64 784 642	55.9

Source: UNCTAD (1999d)

4.4.2 Two different origin principles

The general rule when inputs are imported is that products must undergo a substantial transformation in order to confer origin. Two different principles or tests are applied to define a substantial transformation. At times, both types of criteria are used in combination:

- 1) Change of tariff heading. A change must normally occur at the four-digit level. The change in heading is referred to as a *tariff jump*.
- 2) A percentage criterion, either as a maximum percentage of imported intermediates, or as a minimum percentage of domestic content.

There is no clear answer to the question of which principle would favour LDCs. Nonetheless, we can point out the following:

- The percentage criterion is less transparent and predictable than the change of tariff heading because a separate judgement is needed for each exporting country and because prices and costs may vary over time.
- The percentage criterion penalizes efficient, low cost producers.

- The percentage criterion may easily be adjusted incrementally. Even a small adjustment may have severe impacts on LDC exporters.
- If the percentage criterion is used, LDCs would want the requirements for domestic content to be below 20–25% in order to take full advantage of preferential market access. For instance, the value added (as a share of product price) of a typical product in Bangladesh, say a woven pair of trousers, produced on the basis of imported fabrics is 27% (Rahman and Bhattacharya 2000). The percentage increases when grey fabrics are imported and when accessories are produced domestically, but only when production is based on imported yarn, the value added exceeds 50%.²¹
- When the change-of-tariff-heading approach is used, LDCs will benefit if the required number of tariff jumps is small. In the EU and Japan, textiles and clothing must satisfy a "double jump" in order to confer origin. LDCs such as Bangladesh, which do not produce woven fabrics domestically, are unable to fulfill this requirement. If only a single jump was required, the potential gain for LDCs of duty-free and quota-free access would be substantially enhanced.

²¹⁾ This implies that clothing exporters in Bangladesh will not be fully able to take advantage of the rules on regional cumulation in the Everything-But-Arms regulation in the EU. Under the cumulation rule, more than 50% of the product value must stem from domestic sources.

5 Main Conclusions

We have described the present import barriers faced by Least Developed Countries (LDCs) in the European Union, the USA, Japan and Canada (i.e. the QUAD) and analysed which benefits the LDCs could possibly gain from duty-free and quota-free access in these markets. We have also discussed how preferential trade arrangements for the LDCs should be designed in order to serve their interests. Our main findings and conclusions are:

Present import barriers

All QUAD countries currently provide preferential market access for the LDCs under their respective *Generalised System of Preferences* (GSP). The scope and depth of the preferential trade agreements vary greatly within the QUAD.

In addition to the GSP, all LDCs but the Asian ones, benefit from the *Cotonou Agreement* with the EU, and Sub-Saharan LDCs benefit from special arrangements in the USA under the *African Growth and Opportunity Act*.

Due to extensive trade preferences at present, duty-free and quota-free access will typically be of less value for the LDCs than for other developing countries.

Benefits from duty-free and quota-free market access

Potential benefits of duty-free and quota-free access include: 1) Higher prices on existing exports, 2) Price gains from diverting sales from other markets (other export markets or domestic markets) to the QUAD countries, 3) Increased value added through expansion of production.

The aggregate benefits of duty-free and quota-free access for the LDCs are likely to be modest, even when measured relative to their present low levels of income. The main reasons are that (1) most LDCs presently enjoy quite liberal market access in important export markets, and (2) the

ability of LDCs to take advantage of trade preferences is limited, due to constraints on supply capacity.

Nevertheless, some LDCs will reap significant benefits in a few product categories. The most important one is clothing, but producers of agricultural products, such as sugar and tobacco, will benefit as well. There are also potential benefits related to the export of rice and meat from LDCs, but these benefits will be more difficult to realise.

Our measures of the gains from duty-free and quota-free access suffer from several shortcomings. The most critical one is perhaps that we have little understanding of the relationship between higher export prices and future supply capacities in LDCs. If higher export prices lead to the adoption of more productive technologies and to investment in infrastructure, the gains from duty-free and quota-free access may increase substantially. However, our inquiry into the present supply capacities in LDCs and what it would take to bring the capacities up to levels that could boost export volumes, leaves the sad impression that they have a long and difficult path ahead.

Designing preferential trade arrangements

With respect to the design of preferential trade arrangements for the LDCs, we believe that the most important issue for the LDCs as a group is to have the product coverage of provisions for free market access extended to all products. Since the benefits of duty-free access are concentrated in a few product categories, which typically are quite sensitive import products in the QUAD, the importing countries may significantly reduce the benefits for LDCs of free market access by retaining their import controls in only a few product categories.

The benefits for the LDCs of free market access would be further enhanced if the importing countries were to make *their preferential trade arrangements more binding*. At present, trade

preferences for LDCs may be withdrawn at any time because they are provided on a unilateral and autonomous basis. The simplest way of making preferences more binding would be for the importing countries to notify the WTO that their preferential trade arrangements should be considered as binding within the WTO framework. A number of other approaches are available as well, including plurilateral and multilateral solutions. Note, however, that it is impossible to eliminate the uncertainty surrounding preferential margins as long as regular, non-preferential tariffs are subject to negotiations. The benefits to be gained from binding tariffs the LDCs face at zero rates should therefore not be overstated.

The possibility of using safeguard measures may play an important role in the liberalisation of trade. Making trade preferences for LDCs more binding will undoubtedly call for a revision of the safeguard provisions as well. Although the Agreement on Safeguards in the WTO contains elements that may form the basis for safeguard provisions in preferential trade arrangements, the LDCs would have liked to see a number of its provisions rewritten in order to allow for more differential and favourable treatment of the LDCs.

In order to favour the interests of LDCs, safeguards should be designed so that the objectives for the importing countries can be achieved at the smallest possible costs for the LDCs. It follows from this general principle that safeguards that apply to preferential trade should

- Address a well-defined, serious injury in the importing country
- Be based on a clear and restrictive definition of serious injury
- Not be applied without a proven, causal link between LDC imports and the injury
- Specify generous limits for LDC market shares and LDC import growth below which LDCs will not be targeted by safeguards
- Not limit the overall size of the market more than necessary
- Not prevent LDCs from capturing market shares from other exporters
- Not be implemented without compensation to the LDCs

Graduation from the UN list is not a relevant issue for most LDCs in the foreseeable future. But when a country graduates, we recommend that trade preferences be retained until fixed investments are fully depreciated, e.g. for a period of 10–20 years, in order to reduce the costs of adjustment. Moreover, there should be no gradual increase of import restrictions during the transition period.

Rules of origin are a necessary part of any preferential trade agreement. The present rules of origin in the importing countries are, however, a major obstacle to the realisation of the benefits of duty-free and quota-free market access for LDCs, especially in the clothing sector.

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Appendix 1 Basic LDC statistics

Country	Population (million)	GDP per capita (current USD)	Exports of goods and services (million constant 1995 USD)	Exports of goods and services (% of GDP)
Afghanistan	25.1			
Angola	12	623	3243.3	51.8
Bangladesh	125.6	340	5841.9	13.8
Benin	5.9	388	645.7	23.3
Bhutan	0.8	524		33.2
Burkina Faso	10.7	241	392.7	13.8
Burundi	6.5	135	121	8.1
Cambodia	11.5	250		34.1
Cape Verde	0.4	1192	124.3	24.9
Central African Republic	3.5	304	294.9	15.9
Chad	7.3	233	374.0	19.3
Comoros	0.5	370	49.7	16.7
Congo, Dem. Rep.	48.2	144	2095.5	
Djibouti	0.6			
Equatorial Guinea	0.4	1058	751.5	101.8
Eritrea	3.9	168	135.3	19.9
Ethiopia	61.3	107	1127.2	15.8
Gambia, The	1.2	342	192.8	51.1
Guinea	7.1	508	911.9	21.6
Guinea-Bissau	1.2	177	35.4	14.9
Haiti	7.6	506	424.0	11.5
Kiribati	0.1	525	727.0	11.5
Lao PDR	5.0	254		3.7
Lesotho	2.1	385	329.9	33.5
Liberia	3.0	363	329.9	33.3
Madagascar	14.6	257	652.2	21.2
Malawi	10.5	160	579.2	30.5
Maldives	0.3	1402	379.2	30.3
Mali			770.0	22.6
Mauritania	10.6	254	778.9	23.6
		391	471	41.1
Mozambique	16.9	230	449.6	11.7
Myanmar	44.5	200	1151.6	22.2
Nepal	22.9	209	1151.6	23.2
Niger	10.1	202	354.7	16.3
Rwanda	8.1	250	122.8	5.4
Samoa	0.2	1038		
Sao Tome and Principe	0.1	288	11.8	29.3
Sierra Leone	4.9	133		22.0
Solomon Islands	0.4	723		
Somalia	9.1			
Sudan	28.3	366		
Tanzania	32.1	250	1010.5	18.4
Togo	4.5	339	499.7	33.7
Tuvalu				
Uganda	20.9	324	951.5	10.3
Vanuatu	0.2	1315		
Yemen, Rep.	16.6	260	858.3	34.5
Zambia	9.7	347	1450.6	29.4

Source: World Bank (2000).

Appendix 2 Economic benefits of duty-free access (graphic illustration)

As pointed out in Section 3.1, the benefits of preferential, duty-free access for the LDCs can be broken down into (1) higher prices on existing production and exports, (2) increased value added from increased production, and (3) effects on consumer welfare. Figures A2.1 and A2.2 illustrate the relationship between these components.

Think of a single product that is produced and consumed in three regions; the QUAD (Q), the LDCs (L), and all other countries (O). The export supply in other countries is denoted X_O and increases with the price. The import demand in the QUAD markets is denoted M_Q , and decreases with the price. In the LDC region, we have drawn both the demand curve (D_L) and the supply curve (S_L) . The export supply from the LDCs (X_L) is the difference between supply and demand, i.e. $X_L = S_L - D_L$. The equilibrium is found where the total import demand from the QUAD equals the total export supply from LDCs and other countries, i.e. when $M_Q = X_O + X_L$ or $M_Q = X_O + S_L - D_L$

We assume that the QUAD have imposed a uniform import tariff *t*. The tariff drives a wedge between the consumer price in the QUAD markets and the prices received by exporters from other countries. Given that the domestic price in the QUAD shall exceed the world market price by the tariff rate *t*, the equilibrium

import quantity in the QUAD will be M_Q^0 and the world market price will be P_W^0 . At this price, the LDCs will consume the quantity D_L^0 , produce the quantity S_L^0 and export $S_L^0 - D_L^0$ to the QUAD. Other countries will export the quantity X_Q^0 .

Consider now the effect of giving the LDCs duty-free and quota-free access in the QUAD, while all other countries have to pay the same tariffs as before. The export price of LDC producers will now exceed the world market price by the tariff rate t and thus be equal to the consumer price in the QUAD (P_{Ω}^{0}) . This price increase stimulates production in the LDCs. For a given world market price, the LDCs will now produce and export a larger quantity. Obviously, increased export supply from the LDCs will induce a positive shift in the aggregate export supply, leading to a fall in both the world market price and the consumer price in the QUAD. The decline in consumer prices in the QUAD countries leads to increased imports into the QUAD (trade creation). But the increase is smaller than the increase in exports from LDCs since a lower world market price will reduce exports from other countries (trade diversion). Note that consumption in the LDCs increases despite the increase in LDC exports. This is due to increased imports into LDCs from other countries

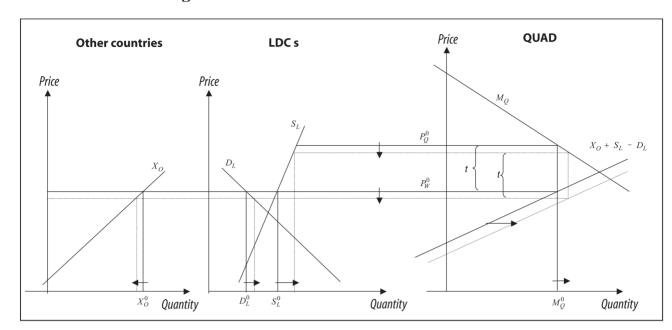


Figure A2.1 Preferential market access for LDCs

Figure A2.2 illustrates in greater detail which kinds of gains may accrue to the LDCs from free market access on a preferential basis. It is important to note that the net gains depend to a large extent on what happens to domestic consumers in the LDCs. Although we have not discussed transport costs here, we will assume that such costs will induce LDC producers to supply their home markets before turning to the export markets, given that they do not have preferential access in the export markets. It is not obvious that this pattern is continued when LDC exporters receive preferential access in the QUAD, because the LDC producers will then obtain a higher price in the QUAD than in their home markets. It may be profitable for the LDCs to export all their produce to the QUAD markets and satisfy domestic demand through imports from other countries (import/export swap).

Benefits if import/export swaps are used

If the LDCs export all their produce to the QUAD and import what they need for domestic consumption from third countries at the world market price, the gains from preferential market access will be as follows (see Figure A2.2):

Higher price on	
existing production:	A+B+C
Value added of increased	
production ²² :	D
Increased consumer	
surplus ²³ :	E+F
Total benefit	A+B+C+D+E+F

Note that if an import/export swap is used, preferential market access implies gains for both consumers and producers in LDCs. Producers obtain higher prices in their export market at the same time as declining world market prices will benefit LDC consumers. This is an important difference between preferential market access and a multilateral reduction in trade barriers. In the latter case, the world market price would have increased due to increased import demand. This would impose a welfare loss on consumers in LDCs in general and on net importing LDCs in particular.

Benefits if import/export swaps are not used

LDCs will not necessarily be willing to rely on imports for the satisfaction of domestic consumer demand, for instance due to

²²⁾ This is the extra revenue less the additional costs. Costs are measured as the area under the supply curve, which represents the marginal costs of production.

²³⁾ Consumer surplus is what consumers would be willing to pay for a commodity less what they actually pay. Consumer surplus is measured as the area between the demand curve and the price line.

considerations of security of food supplies. To induce domestic producers to supply the domestic market, the LDC governments might put up import controls that ensure that the producers get the same price on their domestic sales as on their exports. In the absence of

transport costs, the domestic consumer price must then be at the same level as prices in the QUAD markets. Without the possibility of an import/export swap, LDC consumers will be hurt by preferential market access.

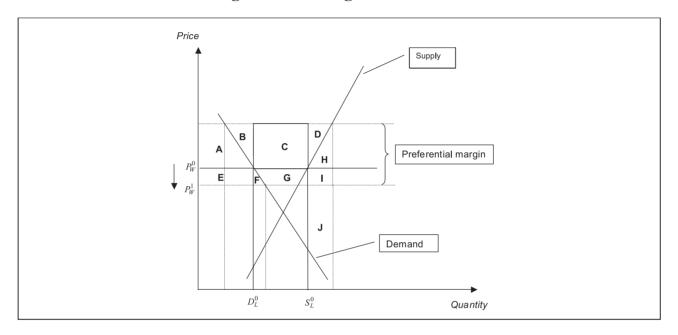


Figure A2.2 LDC gains and losses

The net benefits for an LDC of preferential market access, given that import/export swaps are prevented by import trade barriers, are:

Higher price on existing production: A+B+C
Value added of increased production: D
Reduced consumer surplus: E+F
Total benefit B+C+D

In general, we cannot use Figure A2.2 to compare the relative benefits of preferential market access with and without export/import swaps because the world market price may be lower when the LDC imposes import restrictions. However, if LDC consumption is small relative to the world market, as will most often be the case, this price effect will be negligible. In that case – as shown in Figure A2.2 – the utilisation of import/export swaps will make the LDCs better off by the area A+E+F. The improvement is entirely due to higher consumer welfare.

Appendix 3 Supply Capacity in Least Developed Countries

A3.1. Introduction

In the long run, the impact of any improvement in access for LDCs in their export markets on their economic development depends on their capacity to make use of these opportunities. The purpose of this appendix is to evaluate the current supply capacity of LDCs in general and the likely development of this in the coming years. Of course, the possibilities for exploiting gains from improved market access depend on supply capacities for specific products and the future changes in these, which will vary across products and countries. Given the nature of this study, it is not possible to be specific with respect to products and countries. Instead, we aim at painting a picture of "the average LDC". We start by describing aggregate productivity in LDCs and their productive capacity using the most recent data available.²⁴ In order to assess the likely path of their future capacity to produce and export goods and services, we then look at current investment in productive inputs and current policies. The conclusion is that export supply in LDCs is likely to be fairly inelastic in the short to medium term.

A3.2. An assessment of current LDC productivity and capacity

A3.2.1 Productivity levels and their determinants

The most important criterion (though not the only one) used by the UN in classifying countries as least developed is income. The World Bank classifies most countries in the

world by income; according to their classification 40 out of the 47 LDCs are countries with low income per capita.²⁵ This means that LDCs constitute about two thirds of the countries in the low-income group. However, the average LDC is still poorer than the average low-income country; in the 1990s, the difference was about 40% when income is measured in terms of purchasing power. Therefore, even though a few LDCs (generally very small) are (lower) middle-income countries, it seems most relevant to compare their performance to the group of low-income countries. Moreover, it is likely that many of their most important competitors (today or in the near future) in export markets are lowincome countries.

Table A3.1 shows that both totally and with respect to the important agricultural sector, the average worker in LDCs is significantly less productive than his counterpart in low-income countries.²⁶ At the end of the 20th century, the labour productivity gap between LDCs and lowincome countries stands at 65%.²⁷ Since the average for low-income countries includes the LDCs, the gap between LDCs and non-LDC lowincome countries is even greater than this high figure suggests. In agriculture, which is important in terms of employment, output and exports in both groups of countries, the gap is even larger. Even though what little data there is seems to suggest that the agricultural productivity of land is about the same in LDCs and low-income countries, the conclusion that

²⁴⁾ Except where otherwise noted, the data are taken from or based on the World Bank (2000). The usual caveat about data quality in poor countries applies. Moreover, note that the number of countries included in the averages shown below has been maximised, which means that it varies both across variables and periods.

²⁵⁾ Tuvalu is the only LDC not classified by income by the World Bank. Low-income countries are countries with a GNP per capita below \$760 in 1998.

²⁶⁾ Unfortunately, the data in the World Bank (2000) do not allow us to calculate labour productivity in manufacturing. Mayer (2000) gives estimates of productivity levels in the first half of the 1990s relative to 1980 in the manufacturing sector as a whole as well as in nine sub-sectors for 14 low-income countries, of which five are LDCs (see Table 7, p. 24). The picture painted by these estimates is mixed. For example, in Zambia labour productivity in manufacturing had dropped by 40%, while the corresponding numbers for the Central African Republic and Bangladesh were 30% and 20%, respectively. On the other hand, in the Gambia, there has been a 20% increase since 1980 and in Malawi the increase was as large as 60%.

²⁷⁾ And these averages even mask the fact that over the course of the decade, the latter group of countries have improved their productivity rate by more than 50% while for the LDCs, productivity essentially remained stagnant.

the poverty of LDCs is caused by the low productivity of their productive inputs is hard to escape. In this sense, the supply capacity of LDCs seems limited, since it will take large amounts of inputs to produce extra output.

Table A3.1 Productivity in constant 1995 US\$

Variable	Country group	Average 1990-94	Average 1995-98
GDP per worker	LDCs	459.2	473.8
	Low income	608.3	780.3
	Ratio	0.75	0.61
Agricultural value added per worker	LDCs	302.5	300.5
	Low income	528.7	528.8
	Ratio	0.57	0.57
Agricultural value added per hectare of agricultural land	LDCs	218.0	
	Low income	232.7	
	Ratio	0.94	

Notes: GDP per worker is GDP at factor cost divided by the economically active population.

Table A3.2 is a good place to start a discussion on the causes of the low productivity in LDCs. It is based on data from an important recent study of the productivity of nations (Hall and Jones 1999). They measure labour productivity relative to the US for 126 other countries in 1988 (the US is the country with the highest level of output per worker in their study), and relate the productivity gap to inputs of fixed capital and human capital, as well as to total factor productivity (TFP). TFP is a residual category incorporating the differences in productivity, which are not attributable to different levels of specific inputs.

We first of all see that production per worker in LDCs was on average only about 4.5% of the US level.²⁸ This enormous productivity gap was a function both of the amount of inputs of capital and of TFP. The physical capital intensity of the average LDC was more than 40% below that of the US. With respect to human capital, the gap was even greater. Hence, not surprisingly, LDC

workers have much less capital, both fixed and human, to work with. This is an important reason why their productivity is below that of average workers in every other income group. However, the major reason for the productivity gap - which is 20% even compared to lowincome countries - is the low level of TFP. While the figures in Table 4.2 refer to a single year, this conclusion is in line with that of a number of recent studies which find that TFP is more important than capital accumulation when it comes to explaining cross-country differences in income and growth.²⁹ The residual category called TFP is a function of factors such as the level of technology and the allocation of inputs among sectors. In turn these are influenced by the economic policies and institutions of a country. Since the accumulation of capital is also to a large extent determined by policies and institutions, there clearly is a great potential for gains from institutional and policy reforms in terms of expanding the productive capacities of LDCs.

²⁸⁾ It is noteworthy that there are two outliers among the LDCs, Yemen and Bangladesh, which at levels of production per worker of 21.2 and 12.7, respectively, are head and shoulders above the rest of the group. If they are excluded, the average drops to 4.1.

²⁹⁾ See e.g. King and Levine (1994), Klenow and Rodriguez-Claire (1997), Prescott (1998) and Easterly and Levine (2000).

	Productivity	Sources of productivity		
	Production per worker	Physical capital intensity	Human capital per worker	Total factor productivity
LDCs	4.5 %	58.1 %	39.7 %	19.4 %
Low-income	5.4 %	61.7 %	41.3 %	21.1 %
Ratio	0.83	0.94	0.96	0.92

Table A3.2 Productivity levels and sources, 1988 (% of US figures)

One important caveat with respect to accounting exercises such as the one Table A3.2 is based on is that capital stocks are not directly observable, and so one is forced to rely on estimates based on investment rates. But investment need not produce capital - an accumulated input valued for its future contributions to output. The importance of this point is obvious to anyone who has ever visited a poor country. However, as pointed out by Pritchett (2000), this has been ignored in empirical studies of growth and income. The numerous and infamous "white elephants" demonstrate that for a variety of reasons, this problem is most severe with respect to public investment. An important implication is that high rates of capital accumulation (whether in the private or the public sector) need not result in high growth rates.³⁰ Indeed, in this respect improving the efficiency of investment particularly in the public sector – might be at least as important as high levels of investment spending.

One type of public investment which is particularly important for the expansion of exports is investment in public infrastructure. Getting the products to the markets (and inputs to the place of production) requires an adequate

and reliable transport infrastructure, e.g. roads and ports of sufficient quality. This takes on added importance in LDCs due to the fact that most of them are located far from the QUAD markets. Moreover, 16 of them are landlocked and thus face the disadvantages of having to send most of their products through neighbouring countries. These include additional costs such as fees for shipping and handling and duties to the government of the transit country.³¹ Thus, it becomes even more important that the transport infrastructure in landlocked countries does not impose avoidable burdens on exporters due to lack of capacity or low quality. Moreover, a study undertaken by UNCTAD (UNCTAD 1999b) concluded that in Africa, where most of the LDCs are located, intra-national transport costs are for the most part higher than international transport costs. This probably reflects the fact that in Africa, as well as in LDCs in general, the quality of transport infrastructure is poor. For example, in 1988 25% of the main paved roads and 51% of the main unpaved roads were in poor condition.^{32,33}

Other types of infrastructure are important for export production as well. Communicating with foreign markets in today's world presupposes a telecommunications infrastructure which is

³⁰⁾ Another important implication is that accounting for the contribution of various factors to income levels and growth is not possible without an estimate of the efficiency of investment. Studies that ignore this variable will invariably attribute a greater role to physical capital accumulation than is warranted; likewise the contribution of TFP will be underestimated. The measurement of human capital is encumbered by a number of other methodological and empirical problems as well, see e.g. Pritchett (1997) and Klenow and Rodriguez-Claire (1997). In which direction these problems bias empirical estimates of human capital is difficult to say.

31) Limao and Venables (1999), for instance, find that the median landlocked country in their sample has transport costs which are 58% higher than the median coastal country. Also see Radelet and Sachs (1998), who show that natural geography has a strong influence on shipping costs, with high shipping costs in turn causing low growth of manufactured exports and GDP per capita, and UNCTAD (1999a).

³²⁾ These numbers and those that follow are taken from the largest database on infrastructure indicators assembled so far. It is described in Canning (1998).

³³⁾ The scale of this problem in the year in question in countries like Guinea (50% and 100%, respectively), Guinea-Bissau (35% and 88%) and Chad (90% and 100%) is simply mind-boggling.

both extensive in terms of coverage and reliable. Telephone systems in LDCs can hardly be called reliable; it has been estimated that in 1990 only 60% of the calls placed locally got through. In Burundi, Chad, Ethiopia, Lao PDR, Madagascar, Mozambique, Mauritania, Nepal, Sudan and Uganda, 50% or more of such calls failed! Finally, modern production depends on the supply of energy. Reliability is an important issue with respect to energy supply as well. For example, violent changes in voltage can destroy electronic equipment, such as computers, unless it is protected by security devices. Such fluctuations are not uncommon in LDCs. Brownouts – the disruption of electricity supplies – is also a well-known phenomenon in these countries. Both of these problems make for cost disadvantages for LDC producers due to direct and indirect losses from a lack or poor quality of public infrastructure. The poor quality of energy supply networks is well illustrated by the fact that in 1990, 20% of the electricity produced did not reach an end user in the average LDC.34

Population growth is rapid in many LDCs. This makes for large cohorts of youths which have to be supported by small cohorts of adults. If the degree of underemployment and unemployment of labour can be reduced, this constitutes an enormous potential for expanding output through increases in labour supply. On the other hand, as is too often the case today, if adults cannot find productive voung employment, their talent and effort are wasted, and they must continue to be supported by older generations without contributing to the economy. Such an outcome is particularly depressing when the newcomers to the labour force have more education on average than older workers (this is typically the case in developing countries) because then past investments in education are wasted and future private investment could be discouraged. Moreover, the rapid growth of the population generates a need for such public services as health and education. If met, taxation will increase now or in the future (when any public debt issued to pay for the expansion of services has to be repaid). This could discourage the economic activities on which the taxes are levied. If the demand for such services is not satisfied by the government, given low levels of income which are unequally distributed, most young people will not accumulate human capital. This will hamper the growth in future capacity. LDCs are walking this tightrope now. In 1995–98, the economically active population only constituted 53.2% of the total.³⁵ Since life expectancy is low in these countries, this is mostly due to a large share of individuals below 15 years of age.

Insight into the level and rate of accumulation of human capital can be gained by looking at education levels. In constructing Table A3.3, we have made use of the best available crosscountry data on educational achievement, 1995 is the latest year for which data have been collected. In that year, the average adult in an LDC had only 2.37 years of schooling. In countries such as Guinea-Bissau, Mali, and Niger the average was less than a year! Equally as bad is the fact that over half of the population in LDCs aged 15 or above had no schooling. And it is equally disturbing to note that gender gaps are large. For example, almost two thirds of adult females had no schooling in 1995 while less than half of the males were in that sad situation. Since there is no reason to believe that ability is distributed unequally between the sexes, this implies an enormous waste of talent in LDCs.

³⁴⁾ In countries such as Bangladesh (34%), Haiti (31%), Mozambique (29%) and Nepal (29%), 30% or more of the electricity produced was lost that year.

³⁵⁾ Corresponding numbers for the three income groups are 61.1% (low income), 62.8% (middle income) and 67% (high income).

Table A3.3 Educational attainment 1995

	Total years of education			Pero	entage no educa	tion
Country group	Adult pop.	Females	Males	Adult pop.	Females	Males
LDCs	2.37	1.79	2.97	57.5	66.0	48.7
Low-income	3.03	2.36	3.71	50.4	58.9	41.8
Ratio	0.78	0.76	0.80	1.14	1.12	1.17

Source: Authors' calculations based on the data in Barro and Lee (2000).

The projections of Barro and Lee (2000) for the year 2000 suggest improvement, but this is minor compared to the scale of the task. Moreover, it takes time to accumulate educational capital, so rapid increases in education levels are not to be expected. Thus, in the near future levels of human capital will continue to be low when measured by this indicator. This sad conclusion is reinforced by numbers which show that LDCs are not managing to provide their children with schooling. Only about 60% of the children in the relevant age classes go to primary school. The corresponding figure for secondary school is only half of that again. Needless to say, this is way below what other countries achieve, even at roughly comparable levels of income. Moreover, a significant proportion of the children leaves before completing the first level of schooling, no doubt in order to contribute to family income by working. However, this means that their future contribution to national income will be much less than it could have been. In the globalised economy of today, the importance of education is magnified, so this does not augur well for the future export supply capacity of LDCs.

The situation is not much better with respect to health. As already mentioned, life expectancy is extremely low in LDCs. In 1998, it was a paltry 51.3 years. A third of the children were malnourished and 15% of them died before their fifth birthday. The sad state of the health system in LDCs is clearly to blame for this human calamity. For example, in the 1990s there were on average 833 patients per doctor and health staff only attended 36% of births. There is certainly an enormous need for expanding and upgrading health systems in the LDCs.

A3.2.2 Sources of low labour productivity in agriculture

The importance of the agricultural sector to the economies of LDCs - in 1998 it constituted 33% of GDP and employed 72% of the labour force (UNCTAD 2000a) – and the fact that improved market access in the EU and Japan would mainly concern agricultural products imply that a closer look is warranted. A snapshot of agricultural productivity in LDCs has already been provided; Table A3.4 gives some clues to why labour productivity in particular is low in this sector. First of all, we see that the level of mechanisation is low in LDC agriculture. Lowincome countries have on average twice the number of tractors per hectare of arable land. Secondly, cultivation is mainly rain-fed and not based on irrigation. Once again, the gap between LDCs and low-income countries is huge: while on average more than a quarter of the crop land of the former group of countries is irrigated, in LDCs the corresponding number is only half this. The fact that this is comparable to the share of cropland irrigated in high-income countries (not shown) is irrelevant because LDC agriculture faces quite different conditions in terms of e.g. climate and soil. For example, African countries face variable rainfall, high evaporation and thin soil layers, conditions which place a premium on a stable water supply. In fact, 40 out of the 47 main LDCs can be defined as tropical countries, and being located in the tropics has been shown to impose severe constraints on economic development in general and agricultural production in particular (with the exception of tropical products, of course).36 Since irrigation systems are a form of infrastructure (whether privately or publicly

³⁶⁾ See e.g. the classic study by Kamarck (1976) and the recent contributions of Bloom and Sachs (1998) and Gallup, Sachs and Mellinger (1998). The latter calculate that in 1995 the average income of temperate regions measured in terms of purchasing power was four and a half times that of tropical ones.

provided), Table A3.4 illustrates that the general picture of infrastructure in LDCs painted above is accurate with respect to the agricultural sector as well. Thirdly, other inputs associated with modern agriculture also seem to be lacking

in LDC agriculture. Fertiliser consumption is of minor importance in LDCs compared to the extent it is used in countries in other income groups.

		Average 1990-94	Average 1995-97
Tractors per hectare of arable land ¹	LDCs	0.3	0.3
	Low income	0.5	0.6
	Ratio	0.6	0.5
Irrigated land (% of cropland)	LDCs	12.4	12.1
	Low income	27.9	29.7
	Ratio	0.44	0.41
Fertilizer consumption	LDCs	154.6	169.9
(100 grams per hectare of arable land)	Low income	994.8	1174.7
	Ratio	0.16	0.14

¹The average in column four is over 1995–96.

This lack of complementary inputs is surely an important reason why agricultural workers in LDCs are less productive than their counterparts in other countries. Hence, it constitutes an important barrier to expanding supply in LDCs. Clearly, there is a great need for investment in agriculture if the potential gains from improved market access for agricultural goods in QUAD markets are to be realised. This is all the more important because it is unlikely that LDCs will be able to expand the agricultural area much. On average, they now have less productive land than other countries. Over 1990-94, for example, agricultural land constituted only about 36% of the total land area compared to 40% for all developing countries.³⁷ Given that much of this area already is marginal in terms of agricultural production, as illustrated by the expansion of the Sahara desert in Africa and the soil erosion on the steep hillsides of Nepal, there are in general severe limits to expanding production through extending the land under cultivation. Hence, the extent of the supply response to improved market access will be determined by the extent to which inputs other than land can be applied more intensively in LDC agriculture.

Overall, this section has shown that productivity and capacity are currently low in LDCs. The next section discusses the likelihood of this situation improving in the coming years.

A3.3 Improving productivity and expanding capacity: economic policy perspectives

We have seen that there is a great need for investment in LDCs if their supply capacity is to increase. This conclusion holds with respect to both fixed and human capital, and covers both the economy in general and the agricultural sector in particular. By investigating current levels of investment, we can evaluate whether improvement is ahead. From Table A3.5, it does seem that these countries are making an effort to rectify the situation. Rates of net domestic fixed investment are comparable to those of both low-income and middle-income (not shown) countries. However, these are estimates of total net investment, i.e. including public investment. Over 1990-94, we have estimated that the shares of the private and public sector gross investment, in total gross investment were about the same.³⁸ Thus, it is important to bear in mind that the efficiency of the investment taking place might be low.39

³⁷⁾ These numbers have been calculated from FAOSTAT data.

³⁸⁾ These estimates are based on data in the Global Development Network Growth Database assembled by Easterly and Yu (2000).

³⁹⁾ The astonishing conclusion of Devarajan, Easterly, and Pack (2000) – that in Africa neither private nor public investment is productive – testifies to the importance of this issue.

Table A3.5 Savings and investment 1990s

		Average 1990-94	Average 1995-98
Net domestic savings (% of GDP)	LDCs	-3.9	-2.2
	Low-income	2.0	1.5
Net domestic fixed investment (% of GDP)	LDCs	11.5	12.1
	Low-income	13.1	13.5

Moreover, the average rate of net domestic savings was negative both in the first and in the second half of the last decade. This observation has two important implications: 1) that LDCs have not managed to reduce their rate of indebtedness during the 1990s; 2) that sustaining the investment effort depends on financial flows from abroad.

Table A3.6 Debt indicators LDCs 1990s

1	t value lebt	(% of GNP) (% of exports of (% of ce		(% of exports of			t service government revenue)
% of exports of goods and services (1997)	% of GNP (1998)	Average 1990–94	Average 1995–98	Average 1990–94	Average 1995–98	Average 1990–94	Average 1995–98
250.3	88.9	2.8	3.6	14.6	13.9	15.6	16.5

High levels of debt are currently a major problem for the LDCs. In fact, more than half of them (26) are classified as heavily indebted by the World Bank. In present value terms, they owed almost 90% of their gross national product in 1998 (Table A3.6) Although the HIPC (Highly Indebted Poor Countries) initiative holds the promise of reducing the debt to manageable levels for many LDCs, they would still have to adjust in order to qualify for debt relief.⁴⁰ This means that the timing and magnitude of any reduction are uncertain. Moreover, what is not forgiven must be repaid at some point in time. Hence, there is uncertainty about future tax rates. This might deter investment in physical capital, which is often irreversible, making investors reluctant to commit themselves in the face of uncertainty about future returns, of which taxes are one important determinant.

Table A3.6 also reveals that the drain caused by debt service is a major determinant of the poor fiscal performance of LDCs. More than 15% of the central government's revenue is on average

spent on servicing public and publicly guaranteed debt (PPG). While fiscal data for LDCs are sparse, an analysis of 17 such countries for which data exist shows that interest payments by themselves constituted 8.8% of total public expenditure in 1990–94. In sum, these bits and pieces of data go a long way towards explaining why the overall budget deficit, including grants, reached almost 5% of GDP in the first half of the 1990s. Since grants should not really be counted as ordinary revenues, the fact that total expenditure exceeded current revenue by 9% of GDP in this period underscores even more strongly that if LDCs are to improve their savings rates, public saving must increase.

Moreover, foreign aid is the only really important source of external financing for LDCs. Figures A3.1a) and A3.1b) show that in the 1990s aid flows have been several orders of magnitude larger than inflows of foreign direct investment (FDI), and FDI is the second most important source of foreign funds for LDCs.

⁴⁰⁾ At the end of 2000, 30 of the 41 HIPCs were LDCs. Of these, two (Angola and Yemen) had been categorised as sustainable cases, one (LAO PDR) was not seeking debt relief, 22 had and 11 had not reached the decision point.

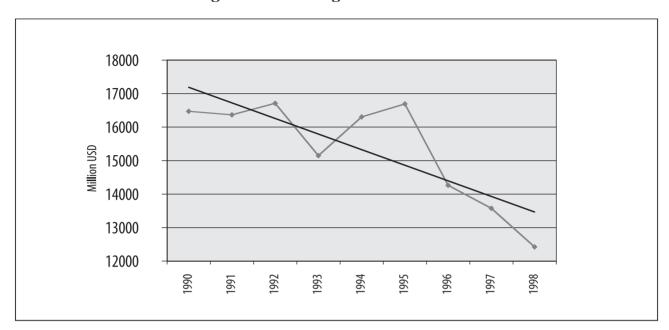
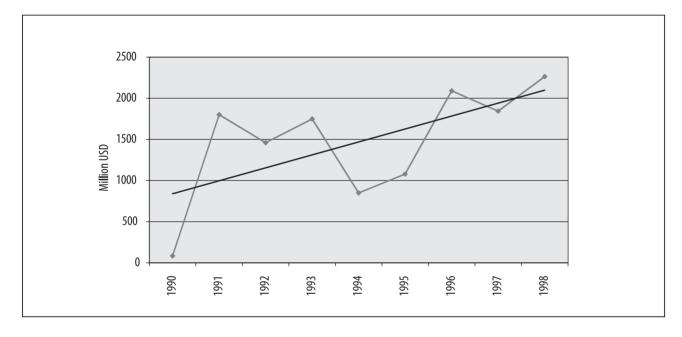


Figure A3.1a Foreign Aid in the 1990s





There are of course many reasons for the extreme dependency of LDCs on foreign aid. They are not creditworthy in private international capital markets. Their financial markets are underdeveloped. Thus, neither private bank lending nor portfolio flows are important to these countries. Although there

has been some improvement during the 1990s, FDI bypasses LDCs to a large extent. Thus, given that foreign aid flows have declined sharply in the latter half of the 1990s and cannot be expected to make a major recovery, LDC governments must address their own imbalances immediately.⁴¹ In fact, this might be

⁴¹⁾ The figure in fact underestimates the fall in aid since the flows are measured in nominal terms. Also note that this means that the increase in FDI in the latter half of the decade is not as significant as it seems.

an opportunity to reduce their extreme dependence on aid, something which is particularly important because inflows of aid discriminate against export production by appreciating the real exchange rate.

In combination with significant debt relief, fiscal reforms will free resources for public investment in areas that are important to supply capacity – infrastructure, education and health. However, this is only a potential, and there is no guarantee that LDC governments will make the most of an improvement in the fiscal situation. If their current prioritisation of health and education is anything to go by, one should not be too optimistic.⁴² Neither spending on education nor spending on health seems to be given the priority needed to address the deficits. GDP shares of educational expenditure are below those of low-income countries (Table A3.7), and we know from Table A3.3 that today

the LDCs lag behind these countries with respect to educational attainment. Similarly, as a proportion of GDP, health spending in LDCs is below the share of resources low-income countries devote to health. However, the share of *public* spending on health is on a par with or exceeds that of low-income countries. Still, given low income levels and severe demographic pressures, the absolute amount of resources devoted is unlikely to make for much progress in education and health in the next decade or so. This conclusion is strengthened if we take into account the fact that several studies show that public spending (whether on education or health) has little effect, if any, on outcomes.⁴³ This might be due to corruption or mismanagement, or simply reflect that the composition of spending is inoptimal.⁴⁴ Thus, once again we must bear in mind that what matters for outcomes is both levels of spending and the efficiency of spending.

Table A3.7 Spending on health and education in the 1990s

		Average 19	990–94	Average '	1995-98
Variable	Group	Education	Health	Education	Health
Total spending (% of GDP)	LDCs	2.8	3.8	2.6	4.1
	Low-income	3.3	4.1	3.0	4.2
Public Spending (% of GDP)	LDCs	3.5	2.0	3.4	2.4
	Low-income	3.7	2.0	3.5	2.1

Note: Public spending on education is in % of GNP, and these averages are over 1990-93 and 1994-97 (1994-96 for low-income countries), respectively.

For private investors, fiscal policy is only one among several different types of public policies which are important for their decisions. In fact, macroeconomic policy uncertainty and volatility have repeatedly been shown to be detrimental to investment and growth. Table A3.8

demonstrates that the record of LDCs in this respect is mixed. In terms of inflation, LDCs do not seem to do too badly if one excludes Angola and the Democratic Republic of Congo, which have experienced hyperinflation. However, with respect to exchange rates there is clearly room

⁴²⁾ LDCs seem to devote a greater share of their expenditures to capital outlays than low-income countries. Comparing 17 LDCs with 29 low-income countries reveals that over 1990–94 capital expenditures constituted a third of total expenditures in the former group, while in the latter this share was only a fourth. We do not know what proportion of these outlays is related to infrastructure investment nor the efficiency of spending.

⁴³⁾ See e.g. Filmer, Hammer, and Pritchett (1997), Filmer and Pritchett (1999) and Gupta, Verhoeven and Tiongson (1999), as well as the references cited therein.

⁴⁴⁾ For example, a study by the World Bank (1995) shows that developing countries tend to devote a much larger share of their education budgets to higher education than OECD countries do, even though the social returns to primary and secondary education exceed the return on higher education. Other common examples of misallocation are schools without schoolbooks and hospitals without medicine.

for improvement. The black market premium, defined as the ratio of the parallel market rate to the official rate minus one, is a good indicator of the extent to which official exchange rate policy is compatible with other policies, as well as other economic fundamentals. That is, it is a good proxy for overvaluation of the currency. While once again the average is not way out of line, it excludes the extreme outliers Afghanistan, Liberia and Myanmar.⁴⁵ In the

worst of these, Liberia, the premium approached 5000%, which most likely is a world record. And overall, a third of the countries for which there is data had premiums exceeding 20% on average, which must be considered high.⁴⁶ Exchange rate overvaluation penalises the export sectors by reducing their revenues measured in terms of the national currency. Thus, if sustained over time, such policies discourages investment in these sectors.

Table A3.8 Financial and monetary indicators in the 1990s

	Avg. 1990-94	Avg. 1995-98
Inflation, consumer prices (annual %)1)	22.3	15.7
Black market premium ^{2),4)}		15.1
Real interest rate (%) ³⁾	7.7	8.0
Money and quasi money (M2) as % of GDP	25.9	25.8
Interest rate spread (lending rate minus deposit rate)	7.8	11.7
Interest rate spread (lending rate minus LIBOR)	16.6	20.7

Notes: Includes all LDCs for which there are data except: ¹⁾ Angola and Democratic Republic of Congo; ²⁾ Afghanistan, Liberia, Myanmar and Sudan; ³⁾ Excluding Angola; ⁴⁾ second average is for 1996–98.

Burundi ■···· Lesotho 🗕 – Malawi Uganda Congo, Dem. Rep. Zambia

Figure A3.2 Real Effective Exchange Rates (1995=100)

⁴⁵⁾ Sudan was also excluded from the average because the figures seemed wildly implausible. The ratio of the official to the parallel rate was about nine in 1997 and 1998, implying that people exchanging currencies in the parallel market only would get one ninth of what they would get in a bank. It seems highly unlikely that a parallel market could exist in such a case.

⁴⁶⁾ This is in fact one of the criteria used by Sachs and Warner (1995) to determine whether an economy is open or closed.

That all is not well with the exchange rate policies of LDCs is also illustrated by Figure A3.2, which records the development of the real effective exchange rates (REERs) of the most important LDCs for which there are data. This variable is defined as the weighted average of a country's exchange rates with its major trading partners divided by a price deflator (of e.g. import costs). The figure paints a disturbing picture of extreme volatility in some countries. Malawi is the worst case; from 1993 to 1994, for example, its REER depreciated by 40%. Only two years later, it appreciated by almost the same amount, and then another two years on it depreciated by 27%. In such circumstances, it is clearly impossible for exporters to predict their returns.⁴⁷ This will negatively affect their willingness to invest. Governments of countries such as Malawi should take a leaf out of the book of the government of Lesotho, which has been the most successful LDC in terms of economic growth over the last decades. Figure A3.2 illustrates that among other things, the government of Lesotho has managed to keep the real exchange rate relatively stable, thus making an important contribution towards keeping the macroeconomic environment its producers encounter predictable.⁴⁸

Returning to Table A3.8, we have a few final points to make about monetary and financial policies and the development of the financial sectors of LDCs. Firstly, on average the real interest rate is positive, but not extremely high. Thus, at least in the 1990s LDC governments have not pursued a policy of financial repression, which governments in many developing countries did in the 1970s and 1980s, with major negative consequences for the accumulation of capital. Saving is not particularly attractive when rates of return are

negative, but real interest rates of 7–8% provide healthy returns to savings without unduly discouraging investment.

Secondly, the financial sectors of LDCs are underdeveloped. This can be seen from the ratio of money and quasi money (M2) as a percentage of GDP, which is only about 25%.⁴⁹ In high-income countries, this ratio is well above 50%, implying that the economies of the LDCs are to a considerable extent still not monetised. More advanced financial institutions such as banks and stock markets are of even less importance.

Thirdly, there is evidence of weak competition in the financial sector, as measured by the gap between lending and deposit rates. An average spread of almost 12% in the latter half of the decade is clearly not a sign of fierce competition for customers. This discourages investment, which is to a large extent financed by borrowed funds in LDCs, and savings intermediation. The latter is important in allocating capital to the most productive firms and sectors of the economy; and we have seen that TFP is very low in LDCs. A well-functioning financial sector also pools risks, of which there are plenty for LDC producers. Thus, financial development in general and improved regulation of financial markets in particular could make an important contribution towards building future supply capacity.50

Finally, the spreads of lending interest rates over the London Interbank Overnight Rate (LIBOR) demonstrate both that LDCs are considered highly risky by international capital markets,⁵¹ which among other things (such as political risk) is probably related to the volatility of real exchange rates, as shown in figure A3.2,

⁴⁷⁾ Moreover, one should not forget that this uncertainty comes in addition to a host of other factors which are highly volatile in LDCs. An example is the terms of trade, which affect producers of exports both directly through their effect on the prices they receive for their products and are charged for their imported inputs and indirectly through their effect on the government's fiscal position and the availability of foreign exchange. The extreme volatility of LDC terms of trade is well illustrated by the case of Guinea-Bissau. It saw a deterioration of 28% from 1990 to 1992, followed by an increase of 36% in the next year and another 28% drop from 1993 to 1995.

⁴⁸⁾ See e.g. Elbadawi (1998) for an empirical analysis which documents the importance of keeping the real exchange rate stable at its equilibrium level for non-traditional exports from developing countries.

⁴⁹⁾ M2 includes small and short-term monetary instruments such as currency and savings and demand deposits.

⁵⁰⁾ On the role of the financial sector in economic development, see the review by Levine (1997).

⁵¹⁾ LIBOR is the interest rate charged by London banks for funds lent to other banks, repayable in one day.

and the lack of competition in domestic financial markets. This completes a picture of bleak prospects for investment in fixed capital in the LDCs, and demonstrates that the possibility of improved market access inducing investment in supply capacity might not become a reality because many other conditions on which the willingness to invest hinges are not conducive to its realisation.⁵²

A3.4 Concluding remarks

The possible improvements in market access for LDCs in the QUAD that we have evaluated in this report hold out the promise of higher prices for their exports to these markets. As we have shown, this will lead to income gains for them. These consequences would certainly be welcomed in some of the world's poorest countries. However, it is clear that making the most of improved market access requires an expansion of export production.

Today, LDC economies are actually more open than those of low-income countries; trade constitutes a higher share of GDP in LDCs compared to low-income countries. However, this is not due to strong export performance. In this respect, LDCs do not do as well as the average low-income country, despite currently having better market access than the latter.⁵³

Of course the explanations for the relatively weak export sectors of LDCs are manifold. An important issue not analysed here is the lack of export infrastructure in the form of institutions that can ensure that the sanitary and phytosanitary standards of the importing countries are satisfied, control the quality of exports more generally and provide exporters with information about market conditions (including requirements for eligibility for preferential treatment). However, in this appendix we have shown that low productive

capacity must be suspected of being a major culprit. Productivity is low in LDCs, particularly with respect to labour. This is due to low levels of both physical and human capital. Rates of investment hold out the prospect of a reasonably rapid expansion of capacity in the coming years. However, the foundation on which accumulation is currently based is weak. We have seen that LDCs are not attractive targets for foreign investors at present. Moreover, their average rate of saving is negative. This means that foreigners are financing today's investment. In fact, the source of funds is almost exclusively foreign governments. However, aid flows are dwindling. Furthermore, debt levels are high, and the extent to which debt relief will be provided is unclear. Thus, it is uncertain whether the investment levels in Table A3.5 can be sustained without substantial increases in both private and public savings rates. The latter is particularly important due to the fact that governments are major providers of education and health. In these sectors LDCs have a mountain to climb, and their governments must start making much greater contributions to that expedition. They also need more funds to finance infrastructure investments if export supply capacities in their countries are to increase to reach the potential for exports which tariff-free, quota-free trade with the QUAD would create. Thus, fiscal reforms emerge as a key issue in capacity building. Reforming other economic policies would also help. Whether such reforms will materialise is hard to predict. However, even if they do it seems unlikely that LDC production for exports will increase substantially in the short to medium term. The burden of the past as manifested in low levels of labour productivity, inadequate infrastructure for transport and communication, and high levels of fertility is not shed overnight; nor is a Rome of economic and political stability built in a day.

⁵²⁾ Examples of important issues which space constraints prevent us from discussing are the degree to which the rule of law is respected, corruption is a major problem and the bureaucracy is competent. A growing body of empirical research supports the conclusion of Kaufmann, Kraay, and Zoido-Lobaton (1999a,b) that "governance matters". A brief examination of their data reveals that for every one of their six governance indicators that the LDC attains significantly lower grades than the sample median.

⁵³⁾ Moreover, cursory inspection of the few figures that could be obtained leads us to conclude that the level of export taxation is probably not very different in LDCs compared to other low-income countries.

Appendix 4 The mandate

STUDY OF THE ECONOMIC IMPACT ON THE LEAST DEVELOPED COUNTRIES (LDCs) OF THE ELIMINATION OF IMPORT TARIFFS ON THEIR PRODUCTS

A4.1 Background

Developing countries can gain market access through general tariff reductions made binding in the World Trade Organization (WTO), supplemented with tariff reductions and tarifffree treatment granted through Generalized System of Preference (GSP) schemes for imports from developing countries. GSP schemes are based on targets and guidelines agreed upon by the industrialised countries and the developing countries in UNCTAD in 1970. Their purpose is to stimulate imports from developing countries, particularly from the Least Developed Countries (LDCs), by granting them preferential treatment. It is up to each importing country to decide how to formulate its own national GSP scheme, and reciprocity is not required of the developing countries. Trade preferences under GSP schemes are based on Part IV of the GATT, but the trade preferences thus granted are not bound in the WTO.

Norway implemented a GSP scheme in 1971. The current scheme provides duty-free access for all products imported from LDCs with the exception of grain, meal and feed concentrates. A ceiling was also placed on the amount of beef that may be imported duty-free from LDCs each year under the GSP for 1998–2001.

The LDCs' share of world trade is still less than 0.5 per cent. According to the WTO (document WT/COMTD/LDC/W/11/Rev. 1 of 14 December 1998), 60 per cent of LDC exports go to the EU, Japan and the USA, and 34 per cent go to emerging markets in Latin America, East and Southeast Asia and southern Africa.

The study's point of departure consists of a number of proposals to grant duty-free access to products imported from the least developed countries:

- duty-free and quota-free access for all products from LDCs, bound in the World Trade Organization (WTO). Cf. proposal by the WTO General Director which he put forward in a speech (appended) to the Group of 77 Ministerial Meeting in Marrakech on 14 September 1999;
- duty-free and quota-free access for all products imported from LDCs except arms.
 Cf. EU Commission proposal of September 2000, presented in document IP/00/1034 dated 20 September (appended);
- duty-free access for "essentially all products" imported from LDCs. Cf. EU proposal in preparation for the Ministerial Conference in Seattle in 1999, presented in WTO document WT/GC/W/195 of 2 June 1999 (appended).

These proposals are expected to be the focus of considerable international attention during the preparations for the Third United Nations Conference on the Least Developed Countries which will be held in May 2001.

A4.2 Purpose of the study

The purpose of this study is to evaluate the economic impacts for the Least Developed Countries of various types of proposals for duty-free import of products from these countries. The effects of duty-free treatment on imports from LDCs to industrialised countries should be examined, as well as the effects of duty-free treatment on imports from LDCs to industrialised and advanced developing countries. The study should assess the major implications of duty-free access on the economies of LDCs in general, on individual sectors of special interest and on income distribution. The effects should be quantified

where doing so is feasible and technically justifiable.

A4.3 Scope of the study

The study should cover, but not necessarily be limited to, the following topics:

- 1. Current tariff regimes for LDCs, including GSP schemes (the defined base line)
- 2. The possible effects of the following tariff regime alternatives:
- 2.1 Duty-free access for all products imported from LDCs
- 2.2 Duty-free access for "essentially all products" imported from LDCs

The following considerations should also be discussed and evaluated in this context:

- 3. Product range issues (product coverage, with variations on "essentially all products")
- 4. Binding (including types and degrees of binding) of zero-rate tariffs in the WTO
- 5. Various safeguard mechanisms in the importing countries (such as the possibility of reinstating ordinary GSP tariff rates if import volumes of a given product reach a given percentage of the importing country's domestic market)
- 6. Graduation provisions to go into effect in response to a decision that a country no longer has LDC status
- Rules of origin. It should be assumed for the time being that the importing countries continue to apply their present rules of origin.

Under alternatives 2.1 and 2.2, it should be assumed that other relevant WTO factors, such as MFN (Most Favoured Nation) tariffs, are left unchanged. However, the report may discuss

any significant effects of changes in these tariff schedules if they are deemed relevant.

The study should discuss major implications for the LDCs. One possible additional study should examine the most important repercussions in other developing countries and in industrialised countries, with the countries in question appropriately grouped. Repercussions in Norway should be assessed separately. Any additional study must not be put out to tender unless funding is made available.

A4.4 Method

The study is expected to include:

- Literature studies (general literature on issues relating to duty-free imports from LDCs, safeguards and rules of origin; reports, studies and evaluations of zero-rate tariffs, available policy documents, particularly from the WTO and the EU, etc.)
- Statistics
- Interviews and other types of contact with persons with relevant knowledge on zerorate tariffs and their impact on LDCs (in Norwegian government ministries, the WTO, the ITC (International Trade Centre), UNCTAD, the World Bank, the OECD, the EU Commission, LDCs and delegations from other countries in Geneva, export promotion organizations for LDCs, importers, etc.)

A4.5 Study Group

The study should be carried out by a group or a team of two experts – one Norwegian and one foreign researcher would do – with expertise in the following areas:

- International trade policy
- Social and development economics

Norwegian and international development policy

Both members of the team must be fluent in English, and one of them should be fluent in Norwegian.

A4.6 Time Frame and Reporting

Work on the study should start in December 2000, and a draft is to be submitted by 8 March

2001. The study group will hold a half-day seminar in the second week of March (week 11) to present the results of the study and discuss them with representatives of relevant Norwegian institutions. The final report is to be submitted by 2 April. This report will contain all significant findings and conclusions. The report is to be written in English. The study group will be responsible for the validity of the data presented, for the analyses conducted and for the quality of the report.

Appendix 5 Institutions Visited

Norwegian Permanent Mission		Geneva
World Trade Organisation	Secretariat Working Group on the Integrated Framework and LDCs Issues	Geneva
	Technical Barriers to Trade	Geneva
	Safeguards	Geneva
	Rules of Origin	Geneva
UNCTAD		Geneva
Mission of Canada		Geneva
US Mission to the WTO		Geneva
Permanent Mission of Japan		Geneva
Permanent Mission of Bangladesh		Geneva
Permanent Mission of the Kingdom of Nepa	al	Geneva
Zambian Mission		Geneva
European Commission	DG Trade	Brussels
	DG Agriculture	Brussels
	DG External Relations	Brussels
	DG Development	Brussels

Appendix 6 Persons Interviewed

Name	Title	Affiliation
M. Abdul Mannan	Minister (Economic)	Permanent Mission of Bangladesh, Geneva
Dr. Shambhu Ram Simkhada	Ambassador	Permanent Mission of the Kingdom of Nepal, Geneva
Suresh Man Shrestha	Deputy Permanent Representative	Permanent Mission of the Kingdom of Nepal, Geneva
B. M. Bowa	Ambassador	Zambian Mission, Geneva
Edward Chisanga	First Secretary (Trade)	Zambian Mission, Geneva
Elin Østebø Johansen	Minister Counsellor	Permanent Mission of Norway, Geneva
Adair Heuchan	Counsellor	Mission of Canada, Geneva
Alicia D. Greenidge	Assistant Deputy Chief of Mission and Senior Counsellor	US Mission to the WTO, Geneva
Toshio Onishi	First Secretary	Permanent Mission of Japan, Geneva
Vivien Liu	Counsellor	WTO, Technical Barriers to Trade
Susan Hainsworth	Counsellor	WTO, Safeguards
Eki Kim	Counsellor	WTO, Rules of Origin
Chiedu Osakwe	Special Coordinator for LDCs	WTO, Secretariat Working Group on the Integrated Framework and LDCs Issues
Sajal Mathur	Economic Affairs Officer	WTO, Secretariat Working Group on the Integrated Framework and LDCs Issues
John D. A. Cuddy	Director DITC and Executive Secretary, LDC-III Conference	UNCTAD
Jean-Nicolas Marchal	Deputy Executive Secretary, LDC-III Conference	UNCTAD

Stefano Inama	Project Manager, DITC	UNCTAD
Luca Monge Roffarello	Associate Economic Affairs Officer, DITC	UNCTAD
Emily Mburu	Consultant	UNCTAD
Remco Vahl	Administrator, Trade Policy	European Commission, DG Trade
Claude Maerten	Assistant Deputy Director-General	European Commission, DG Development
John Richards	Deputy Head of Unit, Textiles	European Commission, DG External Relations
Marina Mastrostefano		European Commission, DG Agriculture
Michael Kattenbelt	Senior Administrative Assistant	European Commission, DG Agriculture
Leo Maier		European Commission, DG Agriculture
Gustavo Martin Prada	Head of Unit, Trade Analysis	European Commission, DG Trade

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4.87	NORAD's Provisions for Investment Support	5.97	Aid to Basic Education in Africa - Opportunities and
5.87	Multiateral bistand gjennom FN-systemet		Constraints
6.87	Promoting Imports from Developing Countries	6.97	Norwegian Church Aid's Humanitarian and Peace-Making
1 00	UNIFEM - United Nations Development Fund for Women	7.97	Work in Mali Aid as a Tool for Promotion of Human Rights and Democracy:
1.88 2.88	The Norwegian Multi-Bilateral Programme under UNFPA	1.91	What can Norway do?
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0.00	Tanzania	9.97	Evaluation of Norwegian Assistance to Worldview International
4.88	Import Support, Tanzania		Foundation
5.88	Nordic Technical Assistance Personnel to Eastern Africa	10.97	Review of Norwegian Assistance to IPS
6.88	Good Aid for Women?	11.97	Evaluation of Norwegian Humanitarian Assistance to the Sudan
7.88	Soil Science Fellowship Course in Norway	12.97	Cooperation for Health Development
4.00	D 11 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		WHO's Support to Programmes at Country Level
1.89 2.89	Parallel Financing and Mixed Credits The Wester's Count, Deals Study Parious	1.98	"Twinning for Dovelopment" Institutional Connection
3.89	The Women's Grant. Desk Study Review The Norwegian Volunteer Service	1.90	"Twinning for Development". Institutional Cooperation between Public Institutions in Norway and the South
4.89	Fisheries Research Vessel - "Dr. Fridtjof Nansen"	2.98	Institutional Cooperation between Sokoine and Norwegian
5.89	Institute of Development Management, Tanzania	2.00	Agricultural Universities
6.89	DUHs Forskningsprogrammer	3.98	Development through Institutions? Institutional Development
7.89	Rural Water Supply, Zimbabwe		Promoted by Norwegian Private Companies and Consulting
8.89	Commodity Import Programme, Zimbabwe		Firms
9.89	Dairy Sector Support, Zimbabwe	4.98	Development through Institutions? Institutional Development
1.00	Mini II along and Disaster I and I	F 00	Promoted by Norwegian Non-Governmental Organisations
1.90 2.90	Mini-Hydropower Plants, Lesotho Operation and Maintenance in Development Assistance	5.98	Development through Institutions? Institutional Development in Norwegian Bilateral Assistance. Synthesis Report
3.90	Telecommunications in SADCC Countries	6.98	Managing Good Fortune – Macroeconomic Management and
4.90	Energy Support in SADCC Countries	0.00	the Role of Aid in Botswana
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	of Women (INSTRAW)	8.98	Evaluation of the Norwegian Program for Indigenous Peoples
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1.01	Tr 1 (2011) 1 11c Tr 2r	11.00	Cooperation
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3.91	Diploma Courses at the Norwegian Institute of Technology The Women's Grant in Bilateral Assistance	12.90	Evaluation of the Development Cooperation between Norway and Nicaragua
4.91	Hambantota Integrated Rural Development Programme,	13.98	UNICEF-komiteen i Norge
1101	Sri Lanka	14.98	Relief Work in Complex Emergencies
5.91	The Special Grant for Environment and Development		
		1.99	WID/Gender Units and the Experience of Gender
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2.34	UN Organisations	9.99	(UNCDF)
	or organisations	10.99	Evaluation of AWEPA, The Association of European
1.95	Technical Cooperation in Transition		Parliamentarians for Africa, and AEI, The African European
2.95	Evaluering av FN-sambandet i Norge		Institute
3.95	NGOs as a Channel in Development aid		
3A.95	Rapport fra Presentasjonsmøte av «Evalueringen av de	1.00	Review of Norwegian Health-related Development Cooperation
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