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A Review of Trade Preference Schemes for the World's Poorest Countries

By Sam Laird

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ICTSD welcomes feedback and comments on this document. These can be forwarded to Paolo Ghisu (pghisu@ictsd.ch) or Anne-Katrin Pfister (apfister@ictsd.ch).

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LIST OF ABBREVIATIONS AND ACRONYMS

AGOA	African Growth and Opportunities Act
APTA	Asia-Pacific Trade Agreement
BPoA	Brussels Programme of Action
CAP	Common Agricultural Policy
CBI	Caribbean Basin Initiative
CBTPA	Caribbean Basin Trade Partnership Act
CNL	Competitive Needs Limitation
DFQF	Duty-free, quota-free
EBA	Everything but Arms
EC	European Commission
ECCC	European Community Customs Code
EPA	Economic Partnership Agreement
EU	European Union
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GSP	Generalised System of Preferences
HS	Harmonised Commodity Coding and Classification System
ISI	Import-substitution Industrialisation
ITC	International Trade Centre
LDC	Least-developed Country
MFN	Most-favoured Nation
NAMA	Non-agricultural Market Access
NTB/NTM	Non-tariff Barrier/non-tariff Measure
ODA	Official Development Assistance
RCA	Revealed Comparative Advantage
RoO	Rules of Origin
SAFTA	South Asian Free Trade Agreement
SPS	Sanitary and Phytosanitary (measures)
TBT	Technical Barriers to Trade
TPR	Trade Policy Review
UNCTAD	United Nations Conference on Trade and Development
US	United States of America
USTR	United States Trade Representative
WTO	World Trade Organization

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FOREWORD

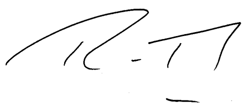
Forty-eight countries are currently classified by the United Nations as least developed countries (LDCs), designated as such for their low income, human assets weakness and economic vulnerability. With around 880 million people living in what are the world's poorest countries, LDCs constitute around 12 per cent of the world's population, but contribute to only 1 per cent of world trade.

Given the virtues of openness and of trade as an engine of growth, the current state of marginalization of LDCs in world trade could be a critical factor holding back their development. In this regard, the international community has put in place a number of initiatives aimed at stimulating LDCs' participation in the international trading system. Some of these initiatives include supporting LDCs with preferential market access and special and differential treatment regarding their international trade obligations.

Market access preferences entitle exporters from developing and least developed countries to lower tariffs or to duty- and quota-free access to third country markets. In general, LDCs have received special and preferential treatment for a wider coverage of products and deeper tariff cuts than developing countries. In spite of these schemes, however, LDCs' exports have not improved significantly over the last decades.

This study analyses the implementation of preferential trade schemes of seven major markets - Canada, China, European Union, India, Korea, Japan, and the United States – and simulates separately the impact on LDCs' exports of extending full DFQF market access and of concluding a NAMA agreement in the Doha Round.[1] The findings are in line with those of earlier studies: the Doha Round, even when successfully concluded, might not have a significant impact on LDCs' trade. However, an important contribution of this study is that a possible Doha Round scenario combined with DFQF market access could deliver significant gains to LDCs.

The study provides an overview of the preferential trade schemes in favour of LDCs by both developed countries and emerging partners, such as China, India and Korea, underscoring the fact that the latter could have more important impacts on LDC exports as south-south trade gathers greater momentum. The study also critically looks at rules of origin and discusses how they could be improved. Through this analysis, ICTSD aims to contribute to the on-going discussions in the WTO and beyond and provides information that LDCs' trade and development partners could consider in designing future preference schemes for the countries most in need.



Ricardo Meléndez-Ortiz
Chief Executive, ICTSD

EXECUTIVE SUMMARY

Helping LDCs through trade

Economists have long recognised the importance of trade for economic development. This has translated into a number of actions aimed at facilitating developing countries' participation in international trade. In an important initiative to boost the trade of the least-developed countries' (LDCs), WTO Director-General Renato Ruggiero announced in 1996 that he would seek duty-free, quota-free (DFQF) access for LDCs. His initiative was endorsed by the first WTO Ministerial Conference in Singapore later that year. The initiative was echoed in the UN Millennium Declaration of 2000, which undertook to address LDCs' special needs, including through duty- and quota-free access for essentially all their exports, as well as dealing comprehensively and effectively with the debt problems of low- and middle-income countries. The first operational scheme was announced by then EU Trade Commissioner Pascal Lamy in the run-up to the 2001 Brussels Programme of Action for LDCs. It was reaffirmed by the fourth LDC Conference(LDC IV) in Istanbul in 2011, where delegatesnoted that "trade will increasingly continue to be relied upon by LDCs to generate the resources for financing growth and development to complement those from Official Development Assistance (ODA) and private capital flows."

Scope of this report

This report examines how initiatives to help LDCs trade more effectively are implemented in seven key markets: Canada, China, the European Union, India, Japan, South Korea and the United States. It includes country and product coverage; limitations on the schemes; some estimates of their value, including the potential for improvements; and possible effects of concluding the WTO's decade-old Doha Development Agenda (DDA) negotiations. Finally, some improvements to the schemes are outlined so that these work towards better contribution of trade to the economic development of the LDCs

Coverage and limitations of DFQF schemes

The sectoral coverage of the Canadian, EU and Japanese schemes is quite comprehensive, while the major limitation in developed markets is the United States' less extensive coverage for imports of textiles and clothing. Developing markets tend to have lower rates, higher imports and higher coverage for fuels and raw materials. In other words, importing developing countries started by opening up markets more quickly and more deeply in areas where they have relatively few resources and where imports are needed for their own production and trade. Their schemes are, however, becoming increasingly comprehensive.

With few exceptions, inclusion as a beneficiary of an LDC preference scheme is dependent on the country's inclusion in the UN list of LDCs (and, in a few cases, some other conditions). Exclusion from preference schemes is then in most of the selected countries granting special LDC preferences linked to "graduation" from the LDC group, with a transition period in some cases. The EU and the US also have provisions for the exclusion of LDCs for political reasons, such as compliance with labour laws or protection of intellectual property. (This is somewhat different from preference-granting countries "rewarding" recipient countries for fighting drug trafficking, or protecting the environment, through giving them additional benefits under Generalised System of Preferences schemes).

In general, GSP schemes – including those for LDCs – do not preclude action under normal WTO rules, such as safeguards, anti-dumping or countervailing measures. However, given that preferences are unilaterally granted and can be unilaterally withdrawn, as well as the fact that LDCs pose few threats to major export markets, only a few preference-granting countries have developed sophisticated rules for the "graduation" of LDCs. Safeguards under GATT Article XIX have to be generally applied, and LDCs would be affected by such measures. There is, however, no indication that they have been the prime targets of such actions. There have been only a few cases of anti-dumping actions and no recorded instances of countervailing measures in the WTO. In addition, LDCs tend to benefit from a number of WTO rules that have *de minimis* provisions precluding actions that might otherwise be possible.

Another limitation on imports from LDCs arises from restrictive rules of origin, which estab-lish the level of processing that is required to obtain benefits. In Canada, and more recently the EU, rules of origin for LDCs have become less stringent than those for other GSP beneficiaries. These countries are also more permissive in permitting "cumulation", i.e. allowing LDCs to use imported materials from other beneficiaries under their GSP schemes without losing preferential treatment. Various studies argue that more liberal, transparent and harmonised rules of origin would benefit LDCs.

Performance of LDCs

The last decade has seen significant improvements in market access opportunities for LDC exports, which, combined with more and better directed aid for trade, have enhanced the economic performance of LDCs as a group. Their GDP grew at an average rate of some 6.3 percent annually over the decade up to 2009, but was negatively affected in 2010 so that the average from 2000 to 2010 dropped to 3.4 per cent. This was accompanied by some modest sectoral diversification (decline in agriculture, growth in industry and services). Of course, some LDCs have benefited from discoveries of oil, gold and other minerals, while others have experienced negative growth linked mainly to civil unrest, wars and natural disasters. However, while the growth of LDC exports of natural-resource-based products is dramatic, the fastest-growing exports also include a wide range of agricultural and manufactured products, including various apparel items, fruit and vegetables, nuts, coffee, and fish and crustaceans. The growth of these exports is crucial to LDCs that are not well endowed with high-value basic commodities.[2]

It is also notable that LDCs have succeeded in diversifying the destinations for their products beyond developed markets. Other developing countries now take some 49 percent of their exports, with China accounting for more than 20 percent of the total. This achievement is partly due to the concrete steps taken by other developing countries to provide improved market access for LDCs through multilateral, regional and bilateral initiatives. Countries such as China, Korea and India now grant valuable preferences for LDC products.

Improvements in LDCs' trade performance cannot be attributed solely to trade preferences; they have also enhanced their productive capacities and trade-related physical infrastructure, thanks in part to well-targeted aid for trade. However, developments on the demand and supply sides are not entirely independent of each other: increased demand for imports from LDCs has spurred investment, which has lifted their ability to meet that demand.

The future of DFQF schemes

This report confirms the findings of a number of studies indicating that LDCs stand to make further gains through improvements to the existing preference schemes. These studies have also concluded that the effects of the implementation of the Doha negotiations vary across LDCs.

Potential gains for LDCs from improvements to DFQF schemes are quite small in Canada, China, the EU and Japan. However, there are quite important potential gains to be made in the In-dian, Korean and US markets. The most significant of these would benefit textiles and clothing ex-ports to the US market from Bangladesh, Cambodia and Haiti. It is possible that further gains could be made by relaxing rules of origin, or using aid for trade to help LDCs meet standards in major export markets. Other studies cited in this report show that improving their schemes would have a minimal impact on preference-granting markets.

Consistent with other recent studies, it is estimated here that under some Doha scenarios there would be a net decline in LDC exports to the Canadian, EU and Japanese markets due to pref-erence erosion, with Bangladesh as the major loser. In the US, there is almost no change in the aggregate, but Bangladesh and Cambodia would gain significantly, while substantial losses are estimated for Lesotho and Madagascar. The estimates also show useful, albeit modest, gains for LDC exports to the Chinese, Indian and Korean markets.

Conclusions

It is inevitable that the value of LDC preferences will decline as trade liberalisation proceeds, whether unilaterally or under WTO or regional agreements. However, the preferences are still a useful tool for boosting exports in the short term. They may also help attract foreign direct investment in countries and sectors covered by the schemes. Among the improvements that can be made are extended and greater stability of coverage (for example, under ten-year programmes), simpler and more liberal rules of origin, with greater scope for cumulation of origin across LDCs and GSP countries. This would also send a signal to investors that would boost efforts to build supply capacity in LDCs

It would also be helpful to the perceived transparency and stability of LDC DFQF programmes if objective rules, such as inclusion in the UN classification of LDCs– which takes account of wider criteria than income alone – were used to cover graduation from the schemes, including with an agreed transition period.

While DFQF treatment for LDCs is unilaterally given and may be unilaterally withdrawn, there is a case for clearer rules and improved transparency in the way exclusions are carried out. There should at least be an opportunity to discuss bilaterally, and at the WTO, any problems and alternative measures to withdrawal of benefits. Similar criteria might be developed for other WTO contingency measures, such as safeguards, anti-dumping and countervailing measures. It should be possible to develop an objective measure, such as Revealed Comparative Advantage, on which to base a graduation provision. There is also a case for phasing out DFQF provisions, if it is so decided, and/or providing some form of adjustment assistance to domestic industries in preference-granting countries, whose comparative advantage may be on the wane, rather than denying access to LDCs.

Within the WTO, developing countries have also argued that the withdrawal, or the threat of withdrawal, of preferences should not be used as leverage to further non-trade objectives. Examples include linking benefits to the application of environmental and social (labour) standards, protection of intellectual property rights and efforts to fight drug trafficking.

While the focus of this report is on duty- and quota-free schemes for LDCs, it is important to recall that improved market access and efforts to build LDC supply capacity are mutually complementary, as argued by EU Trade Commissioner Pascal Lamy when he announced the Union's "Everything But Arms" (EBA) scheme in 2000.

INTRODUCTION

The importance of trade for economic development has long been recognised by economists such as Ricardo, Smith, Mill, Marshall and Lewis. Trade has been described as the "engine of growth" (Nurske, 1961), as well as the "handmaiden of growth" (Kravis, 1970).[3] This notion was recognised in the GATT and later in a number of WTO legal texts, including the 1993 Ministerial Decision on Measures in Favour of Least-developed Countries (and later texts). The United Nations' Millennium Declaration of 2000 also highlighted the importance of trade for economic development in Millennium Development Goal 8, which called for the elaboration of a "global partnership for development."

At the 1996 G7 Summit, WTO Director-General Renato Ruggiero announced his intention to seek duty- and quota-free (DFQF) access for LDCs. The proposal was largely endorsed by the first WTO Ministerial Conference held in Singapore later that year.[4] The Millennium Development Declaration also undertook to address the special needs of LDCs, including through duty- and quota-free access for essentially all their exports. This idea later became a key component of the 2001 Brussels Programme of Action (BPoA), which noted that "trade will increasingly continue to be relied upon by LDCs to generate the resources for financing growth and development to complement those from Official Development Assistance (ODA) and private capital flows."[5] The BPoA also drew attention to the fact that LDCs' participation in international trade was severely limited by a number of factors, in particular demand- and supply-side constraints, as well as unfavourable market access conditions affecting the products of greatest export interest to them.

This report shows that there have been important improvements in the trade and economic performance of LDCs over the last decade. For instance, UNCTAD (2010b) has noted that "recent high rates of export growth have been key in driving their strong GDP growth performance" (page 8). However, the performance of individual countries varies considerably. Moreover, the export structures of LDCs remain concentrated on a few primary commodities and low-skilled labour-intensive manufactures (WTO, 2011c).

Several factors have contributed to the progress made by LDCs in recent years, including natural resource discoveries and better-targeted aid for trade. Although the extent to which preferences have helped LDCs' performance is hard to estimate, they appear to have had a positive direct effect. Indirectly, preferences have also helped create an environment in which investment in trade becomes more advantageous.

While developed countries are still the main markets for LDCs' manufactured exports, developing economies have become the major destination for their exports of minerals, fuels, copper, wood products, cotton and some food products, including vegetables and oil seeds. International prices for these items have been on the increase for the past decade (WTO, 2012). While developed countries offer close to 100 per cent DFQF coverage, there are exceptions, notably in the US. Access can be enhanced through assistance for capacity-building to meet standards and improving rules of origin, particularly in light of the erosion of preferences that is likely to occur on the completion of the Doha Round. On the other hand, the larger developing countries can significantly expand market access for LDCs. (These countries' preferences are less likely to be affected by Doha-related erosion, as discussed later.)

Preferences should also be seen as part of a two-pronged approach to help LDCs improve both demand and supply conditions. Better market access through DFQF programmes helps lift de-mand by reducing prices of LDC exports to foreign markets. However, this needs to be complemented by efforts to enhance LDCs' supply and productive capabilities, as well as trade infrastructure through aid for trade. Part of this effort entails support for the role of the private sector and encouraging foreign and domestic investment. Improved trading opportunities through DFQF schemes for LDCs can contribute to these efforts on the supply side.

This report looks first at the history and legal basis of DFQF schemes (Chapter 1). Chapter 2 examines the overall coverage of the schemes in seven selected markets (Canada, China, the EU, India, Japan, Korea and the US), including in terms of sectors and specific LDCs. It also examines some of the limitations of the schemes, such as exclusions for specific LDCs or sensitive products as well as graduation. Chapter 3 looks at the use of rules of origin in the selected markets to determine eligibility for DFQF schemes, including the possibility of cumulation of origin for eligible products. Chapter 4 attempts to provide an assessment of the impacts of DFQF schemes, although it is difficult to separate these effects from those resulting from other policy measures. Chapter 5 considers the future of DFQF schemes through fuller liberalisation, as well as the potential impact of implementing the results of the Doha Round. This draws on other studies, as well as calculations made specifically for this report. The concluding Chapter 6 draws together the key findings of the report and makes some suggestions that might be useful for the further development of DFQF schemes.

1. HISTORY, RATIONALE AND LEGAL BASIS FOR DFQF SCHEMES

1.1 History and Rationale

The idea of providing trade preferences to developing countries derives from the work of Prebisch and Singer in the 1960s, which underpins the Generalised Systems of Preferences (GSPs). The arguments were essentially: most-favoured nation (MFN) treatment did not provide equality with domestic producers or regional trade partners unless set at zero; MFN treatment did not take account of inequality in economic structures and levels of development; and, because the negotiations were conducted on the basis of reciprocity and the MFN principle, developing countries' exports continued to face high tariffs. Preferences were seen as helping to overcome these disadvantages.

Prebisch's proposals were subsequently adopted as a principle at UNCTAD II in New Delhi in 1968. The Conference agreed that "the objectives of the generalised, non-reciprocal, non-discriminatory system of preferences in favour of developing countries should be: (a) to increase their export earnings; (b) to promote their industrialisation; and (c) to accelerate their rates of eco-nomic growth."[6] It was also accepted that "special preferences should be granted to the less ad-vanced developing countries."However, in the early years the main focus was on the development of GSP schemes without any elaborate plans to give special benefits to LDCs, although they may have benefited from special provisions for handicraft products and avoided various exclusions, as discussed later.

A major breakthrough in developing special provisions for LDCs on a more general basis came when the first WTO Ministerial Meeting in 1996 largely endorsed Director-General Ruggiero's proposal to seek tariff- and quota-free entry for LDC exports to developed country markets. The proposal bore results when, in the run-up to the third LDC Conference in Brussels, EU Trade Commissioner Pascal Lamy announced the Union's intention to grant duty- and quota-free access to nearly all goods originating in least-developed countries. In February 2001, the EU adopted Regulation (EC) 416/2001, the so-called "EBA Regulation" (Everything But Arms), which grants duty- and quota-free access to imports of all LDC products, except arms and ammunitions (although quantitative restrictions were applied to bananas, sugar and rice for a limited period).[7]

The Brussels Programme of Action adopted by LDC III included, inter alia, a commitment by development partners to improve preferential market access for LDCs by working towards the objective of duty-and quota-free market access for all LDCs products, as well as to making market access improvements for LDCs on a secure and predictable basis, which should be combined with simplified rules of origin.

The BPoA also included commitments aimed at ensuring that LDCs benefited from the in-creased market access, and multi-donor programmes, such as the Integrated Framework for Trade-related Technical Assistance (IF), to upgrade production and export capacities. There was also a commitment to help LDCs participate in international standard-setting, and to meet and adhere to such standards. Moreover, it was recognised that LDCs needed help in coping with fluctuations in international commodity prices, including through assistance to developing their productive capacities, diversifying production and finding niche markets. Specific mention was made of strengthening local banking systems and other financial services to make them competitive, and assistance to enhance their supply capacity in tradable services, especially in tourism, air transport and other sectors of interest to LDCs.

While LDC IV (held in Istanbul in 2011) expressed some concern about the achievements of the BPoA, the plan's broad objectives were reaffirmed. Key priorities included the interlinked issues of trade, agriculture, commodities, food security and resource mobilisation. On trade, delegates agreed to "seriously work towards creating favourable market access conditions for all products originating in least-developed countries, including through the timely implementation of duty-free quota-free market access, on a lasting basis, for all least-developed countries, with simple, transparent and predictable rules of origin; and the reduction or elimination of arbitrary or unjustified non-tariff barriers and other trade-distorting measures."[8]

1.2 Legal Basis and Notification Requirements

In order to allow the Generalised System of Preferences to become legally operational, GATT Contracting Parties decided in June 1971 to waive the provisions of GATT Article I for a period of ten years to the extent necessary to permit them to grant preferential tariff treatment to products originating in developing countries and territories.[9] Finally, following the conclusion of the Tokyo Round in 1979, the Contracting Parties adopted a Decision on Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries (the Enabling Clause), which provided a legal basis for the granting of trade preferences, tariffs and non-tariff measures by developed Contracting Parties in favour of developing countries, as well as special treatment for LDCs in the context of any general or specific measures in favour of developing countries.[10]

It should be noted that the Enabling Clause does not provide legal cover for the granting of non-reciprocal preferences by developing countries in favour of LDCs. This was covered by a waiver under the WTO Decision of 15 June 1999 (WT/L/304), pursuant to the provisions of paragraph 3 of Article IX of the WTO Agreement. The waiver was extended by a General Council Decision in 2009 (WT/L/759) for another ten years[11] on the request of Brazil, China, India and the Republic of Korea (G/C/W/620).

The Enabling Clause requires WTO members to notify the introduction, modification or withdrawal of GSP benefits and furnish any other information they may deem appropriate. This refers only to developed country members; there is no such requirement for developing countries that apply LDC preferences under existing or prior waivers. However, while developed country members have submitted extensive notifications to the WTO, it is not certain that these are complete. For instance, in October 2001 the WTO noted that "the elaboration, by the WTO Secretariat, of a study on the functioning of GSP schemes was complicated by the lack of comprehensive and easily usable notifications by Members and lacunae in the data available on the application of the GSP schemes' preferences in general" (WT/COMTD/W/93).

2. COVERAGE BY PREFERENCE-GRANTING COUNTRY, PRODUCTS AND TRADE

2.1 Overview of the Selected Schemes

As a result of progressive expansion in recent years, the coverage of preference schemes in favour of LDCs is now extensive. However, there are a number of exceptions in relation to country coverage (mainly for political reasons) and import-sensitive products. A broad overview of the schemes in the markets covered by this report is provided in Table 1. It shows the coverage, margin of preference and main sources of information and was modified using more recent data for China and Korea. Table 2 gives a brief overview of the main exceptions in developed market schemes in 2010, based on WTO documentation.

Table 1: Overview of coverage and sources of information on LDC schemes of selected markets

Preference granting country	Description	Beneficiary (ies)	Coverage/margin of preference	References
Canada	GSP - Least-developed Countries' Tariff Programme (LDCT) Entry into force: 1 January 2003, extended until 30 June 2014	LDCs	With the exception of over-quota tariff items for dairy, poultry and egg products, Canada provides duty-free access under all tariff items for imports from LDCs.	WT/COMTD/W/159 WT/COMTD/N/15/ Add.1 and Add.2
China	Duty-free treatment for LDCs	LDCs	As of 1 July 2010, China has granted zero-tariff treatment to 4,762 tariff lines - which accounts for nearly 60 per cent of its total tariff lines. China intends to continue to expand this coverage with the aim of achieving the final objective of reaching 97 per cent of tariff lines under zero-tariff treatment.	WT/COMTD/N/39 WT/COMTD/N/39/ Add.1 WT/COMTD/N/39/ Add.1/Rev.1
EU	GSP - Everything But Arms (EBA) initiative Entry into force: 5 March 2001	LDCs	Since 1 October 2009, the EBA has been granting DFQF access for all products from all LDCs (except arms and ammunitions). The EU introduced revised rules of origin for the GSP, as of 1 January 2011, simplifying rules specially for the LDCs.	WT/COMTD/N/4/ Add.2, Add.4 and Add. 5 WT/TPR/S/214/ Rev.1 http:// ec.europa.eu

Table 1: *Continued*

Preference granting country	Description	Bene-ficiary (ies)	Coverage/margin of preference	References
India	Duty-Free Tariff Preference Scheme (DFTP) Entry into force: 13 August 2008	LDCs	Duty-free access on 85 per cent tariff lines at HS 6 digit level by 2012.	WT/COMTD/N/38 http://commerce.nic.in/trade/international_tpp_DFTP.pdf
Japan	GSP – Enhanced duty- and quota-free market access Entry into force: 1 April 2007 Extended till 2021	LDCs	Duty-free access on 8,859 tariff lines (or 98 per cent at the tariff line level), covering over 99 per cent in terms of the import value from LDCs.	WT/COMTD/N/2/Add.14 and Add.15
Korea, Rep. of	Presidential Decree on Preferential Tariff for LDCs Entry into force: 1 January 2000	LDCs	As of January 2012, Korea has provided duty-free access to LDCS covering 95 per cent of its tariff lines.	WT/COMTD/N/12/Rev.1 WT/GC/M/120 WT/COMTD/N/12/Rev.1/Add.1

Table 1: *Continued*

Preference granting country	Description	Bene-ficiary (ies)	Coverage/margin of preference	References
United States	GSP for least-developed beneficiary developing countries (LDBDC) On October 21, 2011, President Obama signed legislation to reauthorize the GSP program through July 31, 2013.	43 designa-ted LDCs	Preferential duty-free treat-ment for 3,511 products from 128 designated beneficiary countries (BDCs) and territo-ries, including 43 least devel-oped beneficiary developing countries (LDBDCs); an addi-tional 1,464 products are GSP-eligible for LDBDCs (2011).	WT/COMTD/N/1/Add.7 WT/COMTD/N/1/Add.8 WT/TPR/S/235/Rev.1 http://www.ustr.gov
	African Growth and Opportunity Act (AGOA) Entry into force: 18 May 2000, ex-tended until 30 September 2015	40 desig-nated sub Saharan African Countries (including 26 LDCs)	1,835 products, available for duty-free treatment, in addi-tion to products designated for duty-free treatment under GSP.	WT/COMTD/N/1/Add.3 WT/TPR/S/235/Rev.1 WT/L/754 WT/L/818 and Corr.1
	Caribbean Basin Trade Partnership Act (CBTPA) Entry into force: 1 October 2000, extended until 30 September 2020	17 desig-nated be-neficiaries (including one LDC, i.e. Haiti) in Central America and the Caribbean	Duty free for most products, including textiles and apparels. The Haitian Hemispheric Opportunity through Partner-ship Encouragement (HOPE) Act of 2006 provided new trade benefits, especially of apparel imports from Haiti. The HOPE II Act of 2008 en-hanced duty-free treatment for qualifying apparel imports from Haiti. The Haiti Economic Lift Program (HELP) Act of 2010 provided duty-free treatment for additional textile and apparel products from Haiti.	WT/TPR/S/235/Rev.1 WT/L/753 WT/L/817 http://www.ustr.gov

Source: WTO (2012)

Notes: This table represents a non-exhaustive list of non-reciprocal multilateral market access initiatives undertaken in favour of LDCs. Extensive additional notes relating to the coverage of the various groups are included in the original WTO document.

Table 2: DFQF access in GSP schemes of developed Members, 2010

Country	Duty-free coverage and exclusions	Number of Dutiable lines (national tariff lines)
Canada	98.8 per cent (dairy, eggs and poultry)	102
European Union	99.8 per cent (arms and ammunitions)	22
Japan	98.2 per cent (rice, sugar, fishery products, articles of leather)	164
United States	82.4 per cent (dairy products, sugar, cocoa, articles of leather, cotton, articles of apparel and clothing, other textiles and textile articles, footwear, watches, etc.)	1,834

Source: WTO (2012)

In general, preference-granting countries have not developed complex rules to preclude LDCs or products from their schemes, nor has there been much need. On the one hand, LDCs do not pose a significant threat to producers in the major markets due to their generally limited supply capabilities. On the other hand, LDC preferences are unilaterally granted and there is no requirement in the WTO, other than notification, to justify the withdrawal of such preferences. The exclusion of sensitive products from some schemes, and the right to remove preferences without complex WTO procedures, explain why only a few of the selected markets have elaborate safeguards or graduation schemes. In the US and the EU, for instance, such measures seem more targeted at GSP beneficiaries in general rather than LDCs. Additional protection is available under the selected markets' rules of origin, which are quite complex as further discussed in Chapter 3.

There has been little use of anti-dumping actions against imports from LDCs. The main exception is Bangladesh, which has been the targeted by Brazil (jute bags), India (lead batteries) and the US (shop towels).[12]

There is no evidence of countervailing measures against subsidised LDC exports in the markets covered by this report.

Like all WTO members, the seven selected countries can raise tariffs beyond bound MFN rates under normal WTO safeguards (GATT Article XIX). However, while Article XIX safeguards must be applied to all trading partners, it does not seem that LDCs have ever been the source of problems leading to safeguard actions.

As to formal "graduation", there seems to be no standard response among preference-granting countries. The question of smoothing the transition process for countries graduating from LDC status is under discussion in the UN Ad Hoc Open Ended Working Group, which includes representatives from various UN agencies and the WTO. When the issue was raised at the Working Group's February 2012 meeting, the Co-Chairs expressed the hope that recommendations could be developed allowing LDC-specific support to be phased out gradually, if it could not be maintained, with due consideration of country-specific conditions. Following its graduation, the Maldives expressed appreciation for the continuation of EU-EBA preferences, as well as those granted by China.[13] The EU delegate said that as a matter of practice the EU would maintain DFQF preferences for three years following graduation.

2.2 Key Features of the Individual Schemes[14]

Canada's GSP scheme, first introduced on 1 July 1974, is described in detail on the web-site of the Canadian Border Services Agency. The programme was modified in 2000 to improve market access for LDCs by extending product coverage and liberalising rules of origin. This was notified to the WTO Committee on Trade and Development under the Enabling Clause. All products are covered and eligible for full duty- and quota-free treatment with the exception of supply-managed agricultural products, namely dairy, poultry and egg products. Goods covered by the Canadian system receive a margin of preference from MFN rates that varies across products. Handicrafts from all beneficiaries that meet certain criteria and goods originating in LDCs generally benefit from duty-free treatment.

Under the provisions of the Canadian Customs Tariff, preferences may be removed by the Governor in Council on the recommendation of the Minister. Although the removal criteria are not explicitly spelled out, language related to safeguards is similar to that of GATT Article XIX, which re-quires evidence of "serious injury" or threat of serious injury. This does not refer explicitly to the LDC tariff, whose withdrawal does not need to meet any WTO requirement other than notification. However, if Canada were to increase a tariff rate on imports from an LDC beyond the MFN rate, normal safeguard procedures would apply.

The Chinese DFQF programme entered into force 1 July 2010.[15] While the scheme initially had more limited coverage than others discussed in this report, it has already been extended so that China now covers around 97 percent of tariff lines. There are no examples of graduation from LDC status under the Chinese scheme, other than the Maldives, where China decided to continue to apply LDC preferences beyond graduation under UN provisions.

According to China's December 2011 WTO notification, its programme currently covers 4,788 tariff lines (8-digit level), accounting for 60 per cent of all tariff lines. In addition, Chinese customs data shows that imports from LDCs under the programme amounted to US$42.2 billion in 2010, accounting for 98.7 per cent of China's total imports from these countries. China plans to further open its market to LDCs by expanding the programme's coverage to 97 per cent of all tariff lines.[16]

The European Union's Everything But Arms (EBA) programme, which entered into force on 5 March 2001, was enacted by Council Regulation No. 416/2001 as a modification to the EU's existing GSP scheme. The EBA is in an integral part of the Union's overall GSP schemes, which are currently covered by a 10-year programme running to 2015. Unlike GSP preferences for developing countries in general, the special arrangements for LDCs under the EBA are in force for an unlimited period of time. This is intended to reduce uncertainty in preferential market access(although the EU can, in principle, modify this unilaterally).

In 1995, the EU eliminated nearly all quantitative limitations on imports from LDCs. Only three products were not liberalised immediately: bananas, rice and sugar. These were subject to phase-in periods of five to eight years, which have now expired.

In 2011, the EU made an important modification to the general schemes by eliminating GSP benefits for a wide range of countries, based partly on income levels and the availability of alterna-tive benefits. The reason for this was a desire to concentrate trade benefits on LDCs. The EU also explained that the modifications were intended to provide increased predictability, transparency and stability.[17] Moreover, the system is to become open-ended, instead of being subject to reviews every three years. The proposals, which are expected to be placed before the European Parliament in 2014, "will make it easier and more attractive for EU importers to purchase from GSP beneficiary countries. In addition, procedures are to become even more transparent, with clear, better-defined legal principles and objective criteria" (Europa web-site).[18]

The EU's GSP scheme maintains a graduation mechanism under which benefits are phased out for specific sectors or countries that have reached a degree of competitiveness that enables them to increase exports without GSP treatment. In principle, this also applies to LDCs.[19] The EU may implement transitional measures for LDCs that are expected to "graduate" from the UN list. EC regulation No 1547/2007 (20 December 2007) established a transitional period for withdrawing the Republic of Cape Verde from the list of LDC beneficiary countries. A similar measure was later applied to the Maldives.

The EU may also exclude LDCs from benefits for political reasons. For example, Myanmar was dropped from the list of GSP countries in 1997 (Council Regulation 552/97) based on previous regulations, which provided that preferences could be withdrawn in certain circumstances, including the practice of any form of forced labour as defined by ILO Conventions 29 and 105.

India's DFQF scheme, which entered into force in August 2008, applies to all UN-designated LDCs. To be eligible, they need to submit to the Government of India a Letter of Intent and details of officials responsible for issuing certificates of origin.[20] India also has some reciprocal preferential trade agreements that include LDCs: the South Asian Free Trade Agreement (SAFTA), which covers Bangladesh, Bhutan, the Maldives (an LDC until January 2011) and Nepal, as well as the Asia-Pacific Trade Agreement, which also includes Bangladesh.

Although benefits can be withdrawn unilaterally at any time, India has elaborated rules for the suspension of preferences and the use of safeguard measures.[21] Preferences may be suspended for certain irregularities (fraud, etc.), where imports under the scheme "significantly exceed the usual levels of production and export capacity of a beneficiary country", or on graduation on the basis that the beneficiary is no longer an LDC. (However, after graduation from the UN list, the Maldives continues to receive benefits under SAFTA). In addition, India may suspend or reduce tariff preferences or other measures on the grounds that imports are causing "serious difficulty" to domestic production, paralleling GATT Article XIX safeguards, but only with respect to LDC beneficiaries.

The Japanese GSP scheme was introduced on 1 August 1971. Duty- and quota-free market access for "essentially all products" originating from all 48 UN-designated LDCs was announced in December 2005 in Japan's "Development Initiative for Trade."[22] The scheme has since been modified, and the current version (dating from April 2007) is in force until 2021.[23] This is in keeping with Japan's practice of providing long-term stability in its preferential access schemes.

Japan reserves the right to unilaterally designate, withdraw, suspend, or limit the beneficiaries or products that receive preferential treatment under the GSP scheme. A beneficiary country is removed from the scheme when it has been classified in World Bank statistics as a high-income country during the three preceding years. (This is a narrower definition than that of the UN, which takes other development indicators into account.)

Japan conducts an annual review under which a highly competitive product originating in a developing country beneficiary is excluded from GSP treatment if imports(a) account for more than 50 per cent of the value of Japan's total imports of that product over three years, and (b) exceed ¥1. 5 billion in value over the same period. However, this does not apply to LDCs.

Korea's preference scheme for LDCs was first announced in the "Presidential Decree on Preferential Tariff for Least-developed Countries" in January 2000. It was notified to the WTO in April 2000 (WT/COMTD/N/12/Rev.1). The programme covers the 48 LDCs recognised by the UN.

Initially, preferential tariffs applied to just 80 items, but the scheme was extended in November 2011 to 95 per cent of Korea's tariff lines (4,802 items in the 6-digit HS 2007).[24]

The decree establishing the DFQF scheme does not mention graduation, suggesting that the UN listing is the key criterion for eligibility. However, Korea's 2008 Trade Policy Review (conducted by the WTO)noted that "The Minister of Strategy and Finance (MOSF) may withdraw or modify unilateral trade preferences if considered appropriate taking into account the country's income level, volume of imports, and international competitiveness of the product and country concerned" (*op.cit.*).

Korea's provisions for possible exclusion of countries/products from its LDC scheme are similar to those under normal WTO safeguard rules. For example, the presidential decree notes that in "cases where a sharp increase in the import of products eligible for a preferential tariff causes, or threatens to cause, serious injury to domestic industries which produce like products, or directly competitive or substitutable products, for the purpose of protecting the domestic industries, the relevant Ministry or interested person may request the Minister of Finance and Economy to suspend the application of preferential tariffs to the product in question."[25]

The United States' scheme for "Less Developed Beneficiary Developing Countries" (LDBDC) is a sub-category of its GSP. Preferences are also accorded to LDCs under the African Growth and Opportunity Act (AGOA) and to Haiti – the only LDC in the Western Hemisphere – under the Caribbean Basin Initiative (CBI). The LDBDC scheme currently covers 44 LDCs, with South Sudan the most recent addition to the list. Excluded countries include Equatorial Guinea, Eritrea, Lao PDR, Myanmar, Senegal and (North) Sudan. These exclusions appear to be politically motivated.[26]

The scheme provides for duty-free entry, rather than a margin of preference for all developing countries.[27] The main difference in the treatment of LDCs and other developing countries is the extent of coverage: LDCs benefit from 1,430 more duty-free tariff lines than the 3,451 enjoyed by other GSP beneficiaries. However, there are limits to the amount of goods that can be imported duty-free. Any imports above the limit are dutiable at the MFN rate.

The list of GSP-eligible products from all beneficiaries includes most non-sensitive dutiable manufactures and semi-manufactures, as well as selected agricultural, fishery and primary industrial products that are not otherwise duty-free. Certain import-sensitive articles are excluded from GSP treatment, including most non-silk textiles and apparel, watches, footwear, luggage, flat goods, work clothes and certain other apparel. The products that receive preferential market access only when imported from least-developed beneficiaries include petroleum, certain chemicals and plastics, animal and plant products, food items, beverages and tobacco products. While GSP benefits for textiles and apparel are limited, certain handmade folkloric products are eligible. The list of eligible countries includes several Asian LDCs (Afghanistan, Cambodia, Nepal and Timor-Leste). Such agreements provide the basis for extending duty-free treatment to exports produced primarily by women and the poorest, often rural, residents of beneficiary countries.

Modifications to product and country coverage are considered each year by the GSP Sub-committee of the Trade Policy Staff Committee. Interested parties, including beneficiaries and US firms, may request modifications, which – if accepted by the sub-committee –are brought into force by means of a Proclamation of the President.

Over time, the US has expanded the number of criteria that beneficiaries must meet. The main conditions relate to protection of intellectual property, respect for labour rights and the resolution of investment disputes. While the TRIPS Agreement is not specifically mentioned in the US GSP Handbook of ILO Conventions, the United States has excluded some countries from certain benefits on the basis of non-compliance with TRIPS.[28] US law also allows the US Trade Representative to offer additional benefits to countries that co-operate with the United States. These conditions are taken into account in relation to petitions for waivers under the competitive needs limitations (CNLS).

Designated less-developed beneficiary developing countries are excluded from the CNLs that govern the exclusion of countries/ products from the US GSP scheme. These limitations aim to prevent the extension of preferential treatment to countries that are considered competitive in the production of an item.[29]

2.3 Coverage by Tariff Lines and Trade, Tariff Treatment, and Utilisation of Preferences

Duty-free coverage. While the large majority of imports from UN-designated LDCs enter Canada, China, the EU and Japan duty-free, only 68.5 per cent of US imports from LDCs do so. The corresponding percentages for India and Korea are 5.7 per cent and 39.1 per cent (Table 3).[30] (Korea intends to increase the coverage of its preferential tariff for LDCs to 95 per cent in 2012.)[31] According to the WTO (2011d), the share of tariff lines that benefited from duty-free treatment in 2009 amounted to 98.8 percent in Canada, 99.3 per cent in the EU, 72.1 per cent in Korea, 98 per cent in Japan and 84.2 per cent in the US.

Table 3: Tariff treatment of LDC exports in selected markets, 2009

Market	Sector	GSP-LDC duty scheme					Imports from UN-LDCs (million US$ and percentage)			
		Number of tariff lines		Number of tariff lines with imports from LDC beneficiaries						
		Dutiable (no.)	Duty free (%)	Total	Dutiable under MFN	Dutiable under GSP- LDC scheme	TOTAL	Dutiable	Duty free (%)	Weighted applied duty
Canada	**Total**	**96**	**98.8**	**2,021**	**1,165**	**0**	**2,746.2**	**0**	**100**	**0**
	Agriculture	96	93	299	134	0	39.5	0	100	0
	Non-agriculture	0	100	1,712	1,031	0	1,127.6	0	100	0
	Ores	0	100	9	0	0	72.4	0	100	0
	Petroleum	0	100	1	0	0	1,506.8	0	100	0
EU	**Total**	**63**	**99.3**	**3,632**	**2,814**	**28**	**26,022.1**	**429.6**	**98.3**	**0.1**
	Agriculture	41	97.9	581	437	24	2,857.6	241.8	91.5	0
	Non-agriculture	22	99.7	3,032	2,377	4	13,713.3	187.8	98.6	0.2
	Ores	0	100	17	0	0	857.8	0	100	0
	Petroleum	0	100	2	0	0	8,593.5	0	100	0
United States	**Total**	**1,834**	**82.4**	**1,635**	**1,077**	**567**	**20,661.5**	**6,509.7**	**68.5**	**5.2**
	Agriculture	278	84.5	229	138	6	351.3	0.5	99.9	0
	Non-agriculture	1,556	81.9	1,398	937	561	7,826.9	6,509.2	16.8	13.8
	Ores	0	100	6	0	0	96.5	0	100	0
	Petroleum	0	100	2	2	0	12,386.8	0	100	0
China	**Total**	**-**	**-**	**1,123**	**964**	**-**	**27,482.7**	**3,127.2**	**88.6**	**0.8**
	Agriculture	-	-	131	123	-	807.7	802.1	0.7	14.1
	Non-agriculture	-	-	971	841	-	2,964.5	2,325.1	21.6	3.1
	Ores	-	-	20	0	-	1,984.9	0	100	0
	Petroleum	-	-	1	0	-	21,725.5	0	100	0

Table 3: *Continued*

Market	Sector	GSP-LDC duty scheme					Imports from UN-LDCs (million US$ and percentage)			
		Number of tariff lines		Number of tariff lines with imports from LDC beneficiaries						
		Dutiable (no.)	Duty free (%)	Total	Dutiable under MFN	Dutiable under GSP- LDC scheme	TOTAL	Dutiable	Duty free (%)	Weighted applied duty
India	**Total**	**-**	**-**	**1,671**	**1,585**	**-**	**6,620.6**	**6,242.3**	**5.7**	**7.6**
	Agriculture	-	-	276	255	-	1,491.3	1,169.9	21.6	14.7
	Non-agriculture	-	-	1,383	1,318	-	2,079.1	2,022.1	2.7	6.8
	Ores	-	-	11	11	-	202	202	0	2
	Petroleum	-	-	1	1	-	2,848.3	2,848.3	0	5
Korea	**Total**	**3,320**	**72.1**	**1,093**	**944**	**411**	**1,710.3**	**1,041.8**	**39.1**	**1.4**
	Agriculture	1,309	17.5	129	127	104	77.7	29.5	62	4.8
	Non-agriculture	1,992	80.5	955	816	306	1,586.6	982.1	38.1	1.3
	Ores	9	81.3	8	0	0	15.7	0	100	0
	Petroleum	10	0	1	1	1	30.3	30.3	0	3

Source: WTO (2011d), merging Tables 11 and 12 for the selected markets only.

Table 3: *Continued*

Market	Sector	Memo items			
		Number of MFN tariff lines			Imports from World
		TOTAL	Duty- free tariff lines (%)	Tariff lines with world imports	(million US$)
Canada	Total	8,309	53.6	8,064	312,266
	Agriculture	1,370	41.5	1,250	24,580
	Non-agriculture	6,905	55.8	6,782	267,325
	Ores	33	100	31	1,785
	Petroleum	1	100	1	18,576
European Union	Total	9,569	24.3	9,276	1,516,545
	Agriculture	1,990	18.1	1,775	102,912
	Non-agriculture	7,536	25.5	7,459	1,167,586
	Ores	41	100	40	16,921
	Petroleum	2	100	2	229,126
United States	Total	10,449	35.8	9,995	1,484,075
	Agriculture	1,792	20.3	1,491	74,880
	Non-agriculture	8,612	38.8	8,464	1,264,331
	Ores	43	76.7	38	2,468
	Petroleum	2	0	2	142,395
China	Total	7,867	8.3	7,264	1,002,618
	Agriculture	1,092	6.9	872	47,592
	Non-agriculture	6,735	8.2	6,363	795,783
	Ores	39	71.8	28	69,960
	Petroleum	1	100	1	89,283
India	Total	11,277	2.8	9,495	311,821
	Agriculture	1,431	4.3	946	9,108
	Non-agriculture	9,785	2.6	8,504	217,826
	Ores	60	0	44	4,922
	Petroleum	1	0	1	79,965

Table 3: *Continued*

Market	Sector	Memo items			
		Number of MFN tariff lines			Imports from World
		TOTAL	Duty- free tariff lines (%)	Tariff lines with world imports	(million US$)
Korea	Total	11,881	16.6	10,684	323,084
	Agriculture	1,586	5.8	1,328	14,923
	Non-agriculture	10,237	18	9,308	248,651
	Ores	48	79.2	39	8,753
	Petroleum	10	0	9	50,757

Source: WTO (2011d), merging Tables 11 and 12 for the selected markets only.

Notes: LDC beneficiaries are countries eligible for the national GSP-LDC scheme, excluding other preferential agreements; some UN-LDCs may be excluded; on the other hand, some countries not necessarily UN-LDCs may be included. UN-LDCs are the 49 LDCs as defined by the UN. "Non-agriculture" covers NAMA products with the exclusion of ores and petroleum. Weighted applied duties exclude non-ad valorem duties (except for the US). China data are provisional. India data are for reference year 2008. '- implies that data on preferential treatment for LDCs are not available or not relevant (see WTO, 2011d). "Dutiable" means non-zero rates. Japan is not covered in WTO table on which this table is based.

In 2011, China informed the WTO that its DFQF scheme had already expanded to cover 60 per cent of tariff lines, while India reported that its LDC benefits amounted to 85 per cent of total tariff lines. India's duties on these items are slated to be eliminated over five years through equal annual reductions. In addition, New Delhi has committed to reducing preferential duties on 468 products (about 9 per cent of all tariff lines) on the basis of a prescribed margin of preference (based on applied rather than bound MFN rates) over five years. Duties will not be cut on some 326 tariff lines, which have been placed on an "exclusion list". Over time, the countries covered in this report have made their DFQF schemes more attractive to LDCs. Rates have been reduced, and coverage in terms of lines and imports has increased (Table 4).[32] In 2010, Canada and Japan's simple average rate for total non-oil trade was 0.3 per cent. The EU's average tariff was 0.9 per cent and that of the US3.3 per cent. For China, India and Korea, the corresponding rates were 6.0 percent, 12.6 per cent and 10.2 percent.

Since 2000, the share of duty-free non-oil and non-arms imports – as a percentage of all such imports – has increased substantially in all markets examined here with the exception of the EU, which recorded a 20 percentage point decline. However, this statistic should be treated with caution, since exclusions were known to be reduced in the 2000-2010 period. The explanation is that the statistics are based on lines with recorded trade, and the percentages can affected by changes in trade patterns, products and trading partners.

Table 4. Tariff rates, ratios of free to total tariff lines and imports from LDCs 2000 & 2010 (%)

Importer / Product group	Av. rate		Free/total imports		Free/total lines	
	2000	2010	2000	2010	2000	2010
Canada						
Agricultural Materials (SITC 0+1+2-27-28+4)	0.5	0.2	75.5	89.6	97.4	99.8
Agricultural Raw Materials (SITC 2-22-27-28)	0.3	0.1	82.4	97.2	99.8	100.0
Food (SITC 0+1+22+4)	0.6	0.2	74.0	88.9	96.5	99.7
Fuels (SITC 3)	0.0	0.0	100.0	100.0	100.0	100.0
Ores & Metals (SITC 27+28+68)	0.0	0.0	100.0	100.0	100.0	100.0
Chemicals (SITC 5)	0.1	0.1	94.3	96.7	2.7	100.0
Manufactures	7.4	0.3	74.8	97.0	13.4	100.0
Other manufactures (SITC 6+8-68)	9.2	0.4	63.3	96.5	6.0	100.0
Textiles as 26+65+84 of SITC Rev.1	15.6	0.7	32.1	96.2	7.0	100.0
Machinery & Transport Equipment (SITC 7)	0.0	0.0	100.0	98.5	100.0	99.6
Miscellaneous Goods (SITC 9)	0.0	0.0	100.0	100.0	100.0	100.0
Total less arms (95)	7.2	0.4	67.5	95.0	34.0	100.0
Total non-oil trade	6.2	0.3	75.2	95.7	31.0	100.0
China						
Agricultural Materials (SITC 0+1+2-27-28+4)	19.0	5.3	7.6	62.2	0.0	75.5
Agricultural Raw Materials (SITC 2-22-27-28)	13.7	3.2	1.9	63.4	0.0	72.1
Food (SITC 0+1+22+4)	23.8	6.9	14.1	60.0	0.0	82.1
Fuels (SITC 3)	3.0	2.0	0.0	28.7	0.0	99.7
Chemicals (SITC 5)	16.6	6.3	0.0	43.7	0.0	56.8

Table 4. *Continued*

Importer / Product group	Av. rate		Free/total imports		Free/total lines	
	2000	2010	2000	2010	2000	2010
Manufactures	18.5	6.0	1.6	46.5	0.0	62.5
Ores & Metals (SITC 27+28+68)	2.0	0.0	40.8	100.0	24.6	100.0
Other manufactures (SITC 6+8-68)	19.3	0.6	2.4	82.6	0.0	93.2
Textiles as 26+65+84 of SITC Rev.1	25.9	6.6	0.0	45.5	0.0	63.8
Machinery & Transport Equipment (SITC 7)	15.1	3.3	0.0	50.0	0.0	49.8
Total less arms (95)	19.4	6.6	7.8	41.6	0.6	23.6
Total non-oil trade	17.7	6.0	6.3	47.7	4.8	96.9
EU						
Agricultural Materials (SITC 0+1+2-27-28+4)	0.0	0.2	83.7	85.1	98.8	95.4
Agricultural Raw Materials (SITC 2-22-27-28)	0.0	0.3	100.0	85.7	100.0	91.4
Food (SITC 0+1+22+4)	0.1	0.2	80.9	85.0	98.4	96.1
Fuels (SITC 3)	0.0	1.2	100.0	53.8	100.0	97.6
Ores & Metals (SITC 27+28+68)	0.0	0.0	100.0	99.3	100.0	100.0
Chemicals (SITC 5)	0.0	1.6	99.8	51.4	100.0	99.3
Manufactures	0.0	1.1	100.0	64.9	100.0	94.6
Other manufactures (SITC 6+8-68)	0.0	1.1	100.0	71.5	100.0	97.2
Textiles as 26+65+84 of SITC Rev.1	0.0	0.7	100.0	92.5	100.0	98.0
Machinery & Transport Equipment (SITC 7)	0.0	1.1	100.0	57.4	100.0	55.7
Miscellaneous Goods (SITC 9)	0.0	0.0	100.0	100.0	100.0	100.0
Total less arms (95)	0.0	0.9	92.6	75.3	99.7	97.4
Total non-oil trade	0.0	0.9	94.8	70.9	99.7	95.7
India (tariffs & trade 1999, 2009)						
Agricultural Materials (SITC 0+1+2-27-28+4)	24.9	23.9	12.6	25.5	33.9	90.7
Agricultural Raw Materials (SITC 2-22-27-28)	13.1	11.4	20.6	28.3	1.6	83.9
Food (SITC 0+1+22+4)	34.4	30.7	6.3	23.4	59.6	91.4
Fuels (SITC 3)	21.7	2.6	0.0	27.8	0.0	99.9
Ores & Metals (SITC 27+28+68)	30.3	4.6	0.0	1.3	0.0	0.0
Chemicals (SITC 5)	34.3	10.2	0.0	0.0	0.0	0.0
Manufactures	34.6	9.5	0.2	4.5	0.0	1.2
Other manufactures (SITC 6+8-68)	35.7	9.4	0.2	0.2	0.0	0.0
Textiles as 26+65+84 of SITC Rev.1	35.2	9.3	0.0	21.9	0.0	88.6
Machinery & Transport Equipment (SITC 7)	28.5	9.5	0.0	17.6	0.0	30.9
Miscellaneous Goods (SITC 9)	40.0	10.0	0.0	0.0	0.0	0.0
Total less arms (95)	31.8	13.1	4.5	7.5	19.5	59.0
Total non-oil trade	31.1	12.6	4.1	9.1	21.5	41.1

Table 4. *Continued*

Importer / Product group	Av. rate		Free/total imports		Free/total lines	
	2000	2010	2000	2010	2000	2010
Japan (tariffs & trade 2000 & 2010)						
Agricultural Materials (SITC 0+1+2-27-28+4)	2.9	0.4	45.9	90.5	44.3	94.2
Agricultural Raw Materials (SITC 2-22-27-28)	0.3	0.1	93.4	98.7	98.8	99.4
Food (SITC 0+1+22+4)	4.0	0.5	25.5	86.9	39.2	93.8
Fuels (SITC 3)	2.1	0.0	19.0	100.0	0.0	100.0
Ores & Metals (SITC 27+28+68)	0.0	0.0	100.0	100.0	100.0	100.0
Chemicals (SITC 5)	0.0	0.2	94.3	84.6	97.6	95.3
Manufactures	0.3	0.3	93.9	97.1	99.6	99.2
Machinery & Transport Equipment (SITC 7)	0.0	0.0	100.0	98.6	100.0	100.0
Other manufactures (SITC 6+8-68)	0.3	0.3	93.0	97.2	99.6	99.2
Textiles as 26+65+84 of SITC Rev.1	0.2	0.1	94.7	98.8	99.9	100.0
Miscellaneous Goods (SITC 9)	0.0	0.0	100.0	100.0	100.0	100.0
Total less arms (95)	1.2	0.3	68.1	94.4	44.7	98.9
Total non-oil trade	1.0	0.3	73.4	94.7	64.2	97.1
Korea (tariffs &trade 1999, tariffs 2010 & trade 2009)						
Agricultural Materials (SITC 0+1+2-27-28+4)	10.0	43.6	0.4	24.2	0.0	57.3
Agricultural Raw Materials (SITC 2-22-27-28)	3.9	4.1	0.0	47.6	0.0	94.0
Food (SITC 0+1+22+4)	13.7	57.5	1.0	12.5	0.0	46.9
Fuels (SITC 3)	5.1	3.7	0.0	1.5	0.0	76.6
Ores & Metals (SITC 27+28+68)	2.6	0.0	0.0	100.0	0.0	100.0
Chemicals (SITC 5)	7.6	0.8	0.0	96.8	0.0	98.8
Manufactures	8.3	1.1	2.0	90.0	50.5	61.5
Other manufactures (SITC 6+8-68)	9.1	0.1	2.2	94.0	0.0	100.0
Textiles as 26+65+84 of SITC Rev.1	10.4	1.2	0.0	86.4	0.0	58.1
Machinery & Transport Equipment (SITC 7)	6.0	0.8	2.1	91.5	82.1	98.5
Total less arms (95)	9.1	1.6	1.4	80.4	0.0	59.5
Total non-oil trade	8.4	10.2	1.4	65.4	22.4	79.5
USA (tariffs & trade 2000, tariffs 2010 &trade 2009)						
Agricultural Materials (SITC 0+1+2-27-28+4)	1.1	1.1	87.5	88.6	86.4	88.0
Agricultural Raw Materials (SITC 2-22-27-28)	0.3	0.0	90.7	95.6	99.4	98.2
Food (SITC 0+1+22+4)	1.4	1.4	86.8	87.5	84.1	85.0
Fuels (SITC 3)	0.0	0.0	100.0	97.9	100.0	100.0
Chemicals (SITC 5)	0.5	0.1	94.9	98.9	99.7	83.4
Ores & Metals (SITC 27+28+68)	0.0	0.0	98.5	100.0	99.8	100.0
Manufactures	6.6	3.7	49.7	67.9	4.3	11.5

Table 4. *Continued*

Importer / Product group	Av. rate		Free/total imports		Free/total lines	
	2000	2010	2000	2010	2000	2010
Other manufactures (SITC 6+8-68)	7.7	4.5	38.2	60.0	3.5	10.3
Textiles as 26+65+84 of SITC Rev.1	11.6	6.9	10.5	38.5	0.8	8.1
Machinery & Transport Equipment (SITC 7)	0.2	0.1	91.9	98.7	90.0	83.6
Miscellaneous Goods (SITC 9)	0.0	0.1	100.0	97.1	100.0	99.9
Total less arms (95)	6.4	3.7	48.2	66.8	52.8	71.6
Total non-oil trade	5.7	3.3	55.0	71.7	14.5	18.8

Source: WITS TRAINS.

Notes: Average rates are simple average.

Sectoral coverage. For Canada, the EU and Korea, the number of duty-free lines for non-agricultural goods is higher than that for agriculture, while in the US there are slightly more duty-free lines in agriculture (Table 3). (The lower US coverage of industrial goods reflects exclusions in the textiles and clothing sector.)Developed countries grant 100 per cent duty-free entry to ores and petroleum from LDCs. Korea covers 81. 3 per cent of ores, but excludes petroleum entirely.

Further details for major sectors (on the basis of tariff lines where there is recorded trade) show lower DFQF coverage for agricultural goods in all markets except India. This reflects the fact that India's DFQF scheme covers a relatively limited number of industrial products, although those manufactures that are included face lower tariffs than agricultural goods (Table 4). Japan's coverage of agricultural materials and food products more than doubled between 2000 and 2010 (to around 95 percent), while coverage of agricultural raw materials remains unchanged at some 99 percent.

Even greater detail on the sectoral coverage of the six schemes in 2010 is included in the an-nex tables. These provide information at the 2-digit level of the Harmonised Commodity Coding and Classification System (HS) on the average rates effectively applied to LDCs as a group. These are typically the preferential rate, but in some instances could include the MFN rate where, for example, a particular LDC is excluded from preferential treatment for an item but there are imports at the MFN rate. The tables also containin formation on coverage in terms of the number of tariff lines and the share of trade.

The detailed data confirms the results from more aggregate data, including the high duty-free coverage of the Canadian and EU schemes with low rates on almost all major LDC exports. Japan has slightly higher rates and lower coverage for some food preparations (cereals, sugar, vegetables, meat and crustaceans) and for furs. In the US, textiles and clothing stand out as the sectors with the highest average rates and the lowest duty-free coverage in terms of lines and trade. (Since the US grants duty-free treatment rather than a margin of preference for eligible items, the areas with higher average rates for the 2-digit product group are a combination of items with zero rates – the preferential items – and products excluded from the scheme.)

China offers high levels of trade, low tariffs and high duty-free coverage in terms of tariff lines and share of imports from LDCs in areas such as oil seeds, ores, fuels, wood, copper and other base metals. This suggests that, at least initially, the Chinese scheme was sculpted to facilitate im-ports that were useful to domestic industry; a comment sometimes made about the US scheme.

India, whose scheme is relatively recent, has generally lower duty-free coverage than the other markets featured in this report. The country offers low rates and high coverage for fuels. A detailed examination of the trade data shows that India imports a wide range of coffee, tea and spices despite relatively high average tariffs, suggesting that the tariffs are imposed, at least in part, for revenue purposes (similar to excise taxes).

Like other developing markets examined here, Korea has low tariffs and high imports, as well as higher coverage of duty-free tariff lines, in areas such as fuels, raw hides and skins, and wood and copper, reflecting its own paucity of natural resources. It also has relatively low rates, substantial imports and high duty-free coverage in much of the textiles and clothing sectors.

Utilisation of preferences. It should be noted that not all imports of items that are nominally eligible for DFQF treatment enter the preference-granting country at the preferential rate. This can occur for a number of reasons, including non-compliance with the relevantrule of origin. As a result, available preferences are not always fully utilised.[33]

It is difficult to estimate the extent of under-utilisation as most countries (other than the US) do not separate out what is being imported from individual countries at preferential (reciprocal or non-reciprocal) rates and MFN rates. The WTO has made estimates of LDCs’ use of preferences for some of the markets selected for this report, showing that utilisation ranges from 82 to 89 per cent (Table 5).[34] One study of the Japanese scheme, not covered in the WTO source on which Table 5 is based, suggests that utilisation varies across products, with more sensitive items having lower utilisation rates.[35] The study also suggests that low utilisation (47.1 per cent in 2005) is linked to general trade liberalisation, making the use of preferences less interesting relative to the costs of providing the required documentation. This could also explain the low utilisation of imports under preferential schemes in Canada, the EU and the US, as shown in Table 5.

Utilization of preferences, 2009

Market	Per cent of total LDC imports: Eligible to any preference	Per cent of total LDC imports: Entering under any preference	Imports entering under preferential regime as a per cent of eligible imports
Canada	36.7	32.7	89.1
EU (low estimate) [b,c]	48.2	40.1	81.9
EU (high estimate)	49	41.4	85.9
US [d]	69.5	60.9	87.5

Source: WTO (2011d).

Notes: Results are not directly comparable between preferential schemes, due to difference in coverage and reporting. The EU low estimate includes GSP and other preferential schemes, while the range depends on the handling of “unknown treatments” that were compiled for the EU countries due to, inter alia, the variety of their preferential schemes and the manner of publication of their preference. The higher limit of the interval was ob-tained when the “unknown treatments” are considered as entering the market under preferential treatment; the lower limit is obtained when “unknown treatments” are treated as MFN treatment. The US result includes all preferential programmes: AGOA; CBI; Generalized System of Preferences (GSP); and GSP for Least developed beneficiary developing countries (GSP LDBC). Japan is not covered in original table in WTO document on which this table is based.

Changes over time. The decline in rates facing LDCs between 2000 and 2010 (Table 4) is even more pronounced over the last 20 years (Table 6; the trade effects on the right hand side of this table are discussed in the next chapter.) In 2010, imports from LDCs faced rates averaging from 0.0 per cent (rounded) in the EU to 5.5 per cent in China. However, rates facing LDC exports had already been substantially reduced in developed markets between 1990 and 2000. In the early 1990s, developing markets' imports from LDCs faced MFN rates of 13.1 per cent in Korea, 42. 3 per cent in China and 80.6 per cent in India. Those rates have been cut deeply as a result of autonomous liberalisation programmes over the last 20 years (Korea's reform was earlier), so that the rates facing MFN partners have fallen to 11.8 per cent in India and 9.6 per cent China. Nevertheless, the even greater reductions of rates facing the LDCs have given the man edge in those markets.

Table 6. MFN & Preferential rates against & imports from developed/developing countries and LDCs (%, US$ billion)

Canada	Tariff Year/Rates			Partner	Total Imports				Av. growth
MFN/Pref.	1989	2000	2010		1989	2000	2010	1989-2000	2000-2010
MFN	9.2	4.3	2.7	Total	187.3	396.9	689.8	10.1	5.4
Developed	7.0	1.0	0.7	Developed	175.7	352.8	476.3	9.5	3.1
Developing	6.0	2.2	1.2	Developing	11.2	43.8	205.9	16.6	15.2
LDC	2.2	0.7	0.1	LDC	0.4	0.3	7.6	3.5	33.0
China									
MFN/ Effectively applied	**1992**	**2000**	**2010**		**1992**	**2000**	**2010**	**1992-2000**	**2000-2010**
MFN	42.3	17.0	9.6	Total	145.5	377.7	2502.6	12.7	20.8
Developed	39.4	16.4	8.6	Developed	123.5	289.2	1433.8	11.2	17.4
Developing	38.4	16.5	5.7	Developing	21.2	80.5	982.4	18.1	28.4
LDC	39.0	17.6	5.5	LDC	0.7	8.0	86.4	34.6	26.8
EU									
MFN/Pref.	**1990**	**2000**	**2010**		**1990**	**2000**	**2010**	**1990-2000**	**2000-2010**
MFN	8.2	4.4	4.2	Total	469.6	1,215.3	2,124.0	10.0	5.7
Developed	0.5	1.1	0.8	Developed	274.9	543.9	759.5	7.1	3.4
Developing	0.2	1.2	0.7	Developing	180.9	649.1	1,322.6	13.6	7.4
LDC	0.2	0.0	0.0	LDC	13.7	22.2	42.0	4.9	6.6
India									
MFN/Pref.	**1990**	**1999**	**2009**		**1990**	**1999**	**2009**	**1990-99**	**1999-2009**
MFN	80.6	33.2	11.8	Total	14.2	46.6	200.7	14.1	15.7
Developed			5.3	Developed	10.6	29.5	135.3	12.1	16.5
Developing		19.4	4.6	Developing	3. 2	15.9	64. 2	19. 4	15. 0
LDC		18.1	0.9	LDC	0. 4	1.2	1.2	12.3	-0.3

Table 6. *Continued*

Japan									
MFN/Pref	**1990**	**2000**	**2010**		**1990**	**2000**	**2010**	**1990-2000**	**2000-10**
MFN	4.3	3.4	3.1	Total	148.0	203.9	249.3	3.3	2.0
Developed	3.2	2.0	1.2	Developed	16.0	12.6	2.7	-2.4	-14.3
Developing	3.0	2.5	1.8	Developing	17.2	43.7	54.1	9.8	2.2
LDC	0.9	0.5	0.3	LDC	0.7	0.4	1.0	-5.6	9.5
Korea									
MFN/Pref.	**1990**	**1999**	**2010**		**1990**	**1999**	**2010**	**1990-99**	**1999-2010**
MFN	13.1	9.0	11.9	Total	62.5	111.1	305.5	6.6	9.6
Developed			5.9	Developed	53.6	79.6	170.4	4.5	7.2
Developing			3.0	Developing	8.6	30.2	132.1	15.0	14.4
LDC			0.1	LDC	0.3	1.4	3.0	18.3	7.5
US									
MFN/Pref.	**1990**	**2000**	**2010**		**1990**	**2000**	**2010**	**1990-2000**	**2000-2010**
MFN	5.6	4.0	3.7	Total	591.4	1,549.0	1,995.5	10.1	2.6
Developed	1.9	0.4	0.4	Developed	432.5	892.8	894.0	7.5	0.0
Developing	0.9	1.7	0.6	Developing	154.4	641.8	1,063.4	15.3	5.2
LDC	2.0	2.1	1.0	LDC	4.5	14.4	38.0	12.4	10.2

Source: WITS.

Notes: Imports are the sum of MFN and preferential imports from the different partners. Nearest tariff year in database. Missing values imply MFN rate. China data shows only effectively applied and MFN rates, without notified preferences.

Individual LDCs. The average rates applicable to individual LDCs varied widely in the selected markets in 2010 (Table 7). However, since these averages are based only on lines where there was recorded trade, the spread of the averages reflects both exclusions and the composition of trade from different LDCs. (This is less of an issue for LDCs whose trade is more diversified.)

Table 7. Average applied rates on recorded trade items by selected donors against individual LDCs 2010 (%)

LDC	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Afghanistan	0.0	7.2	1.1	na	1.0	0.9	1.4
Angola	8.0	4.2	1.6	na	0.0	1.5	0.8
Bangladesh	0.0	8.9	0.8	na	0.3	4.6	5.9
Benin	0.0	2.9	1.0	na	0.0	106.3*	0.7
Bhutan	0.0	1.9	1.2	1.0	0.0	19.4	2.2
Burkina Faso	0.0	5.9	1.1	na	0.3	1.8	1.8
Burundi	0.0	1.1	0.0	na	0.0	0.0	3.8
Cambodia	0.0	0.7	0.8	na	0.5	12.2	7.8
Central African Republic	0.0	4.5	1.4	na	0.0	0.0	0.2
Chad	0.0	5.2	1.2	na	0.0	0.0	0.0
Comoros	0.0	10.6	0.0	na	1.5	10.0	0.0
Congo, Dem. Rep.	0.0	5.6	1.2	na	0.0	3.0	0.6
Djibouti	0.0	7.6	1.2	na	0.0	0.0	0.0
East Timor	2.8	1.4	0.7	na	0.0	1.5	na
Equatorial Guinea	0.0	0.6	1.5	na	0.7	0.0	0.0
Eritrea	3.3	2.2	1.1	na	0.0	0.0	5.0
Ethiopia(excludes Eritrea)	0.0	6.7	1.0	13.9	0.0	31.8	0.5
Gambia, The	0.0	6.2	1.0	na	0.0	0.0	0.6
Guinea	0.0	5.9	1.1	na	0.3	4.8	1.3
Guinea-Bissau	0.0	2.8	1.5	na	na	3.3	0.0
Haiti	0.0	10.2	0.0	na	0.0	3.4	4.3
Kiribati	0.0	2.5	1.0	na	na	1.3	0.0
Lao PDR	0.0	2.2	0.6	na	0.7	14.2	7.4
Lesotho	0.0	7.1	0.0	na	0.0	2.2	0.2
Liberia	0.0	2.5	1.1	na	1.1	0.8	1.6
Madagascar	0.0	7.4	0.0	13.6	0.0	6.1	0.8
Malawi	0.0	4.8	0.8	19.9	0.0	28.0	3.1
Mali	0.0	5.4	1.0	9.6	0.0	19.7	1.8
Mauritania	0.0	5.3	1.0	na	0.9	4.9	2.1
Mozambique	0.0	3.0	0.0	na	0.0	11.7	1.2
Myanmar	0.0	1.2	6.8	na	0.2	14.2	1.9
Nepal	0.0	11.3	0.8	na	0.2	5.4	5.5
Niger	0.0	5.9	1.4	26.0	0.0	1.2	0.1
Rwanda	0.0	5.5	0.0	6.7	0.0	0.9	0.3
Samoa	0.0	8.7	2.2	na	0.0	7.9	1.6
Sao Tome and Principe	0.0	5.9	1.3	na	0.0	12.8	0.0
Senegal	4.0	5.8	1.0	7.9	0.9	5.4	1.3
Sierra Leone	0.0	4.4	1.2	na	0.0	3.1	0.2
Solomon Islands	0.0	7.0	1.2	na	0.7	3.5	0.0
Somalia	0.0	4.2	0.5	na	0.3	na	1.0
Sudan	0.0	5.1	1.2	11.9	0.0	22.1	0.6
Tanzania	0.0	4.9	0.0	na	0.0	1.7	0.5

Table 7. *Continued*

LDC	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Togo	0.0	6.6	0.9	na	0.1	2.7	0.8
Tuvalu	na	0.0	1.1	na	0.0	0.0	0.0
Uganda	0.0	4.3	0.0	15.7	0.0	3.5	2.1
Vanuatu	0.0	3.3	1.0	na	0.2	5.3	0.1
Yemen	0.0	7.6	1.0	na	0.7	7.6	2.8
Zambia	0.0	4.2	0.0	6.8	0.0	1.1	2.4
LDC average	**0.3**	**5.5**	**0.9**	**12.4**	**0.3**	**8.8**	**3.2**

Source: WITS TRAINS.

*Note: na means no trade recorded from LDC partner. Average is simple average only for lines with recorded trade. * Korea imported some $2,200 of oil seed at an average rate of 630%, thereby distorting the simple average. Most Korean imports from Benin are copper and alumium scrap at zero rate.*

There was also a significant spread in the ratio of duty-free lines to total tariff lines under which imports take place in the selected markets (Tables 8 and 9, covering 2000 and 2010, respectively).[36] As might be expected, developed countries provided higher coverage, with an expansion over the ten-year period. The low coverage of certain LDCs, such as Bangladesh in the US and Cana-dian markets, is attributable to the exclusion of imports of textiles and clothing. Other examples of low coverage are associated with political considerations, as discussed earlier.

Table 8. Ratio of duty-free to total tariff lines with imports from partner, 2000 (%)

Partner Name	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Afghanistan	92.7	2.1	99.3	0.0	100.0	0.0	17.9
Angola	100.0	0.0	94.3	0.0	28.6	0.0	100.0
Bangladesh	64.9	2.9	92.7	3.8	88.1	0.0	45.0
Benin	64.7	16.7	97.2	28.6	100.0	0.0	88.9
Bhutan	100.0	..	100.0	2.0	76.9	100.0	34.8
Burkina Faso	100.0	..	89.5	0.0	79.4	0.0	54.7
Burundi	100.0	50.0	98.2	..	87.5	..	92.0
Cambodia	50.0	12.7	91.8	0.0	68.5	1.5	13.5
Central African Republic	74.3	0.0	80.4	..	100.0	0.0	84.7
Chad	95.2	0.0	96.1	..	100.0	..	100.0
Comoros	100.0	0.0	98.9	..	83.3	..	100.0
Congo, Dem. Rep.	..	14.3	93.7	0.0	75.0	20.0	85.0
Djibouti	100.0	0.0	82.9	50.0	..	..	100.0
Equatorial Guinea	22.2	0.0	100.0	..	27.8	0.0	100.0
Eritrea	..	..	99.1	..	79.2	0.0	15.8
Ethiopia(excludes Eritrea)	93.8	10.8	90.1	14.3	100.0	0.0	92.1
Gambia, The	97.6	..	99.6	50.0	38.1	0.0	52.9
Guinea	89.6	0.0	97.1	0.0	51.5	0.0	83.1
Guinea-Bissau	100.0	0.0	98.8	50.0	..	0.0	100.0
Haiti	78.6	0.0	95.8	..	88.1	0.0	70.9
Kiribati	100.0	0.0	100.0	..	11.1	..	100.0
Lao PDR	50.8	6.0	79.4	..	92.9	0.0	2.3
Lesotho	46.2	0.0	100.0	..	100.0	..	8.8

Table 8. *Continued*

Partner Name	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Liberia	100.0	10.0	86.6	0.0	47.1	2.6	52.3
Madagascar	77.3	3.4	97.1	4.8	91.9	0.0	50.9
Malawi	84.0	..	83.0	0.0	80.0	0.0	66.7
Mali	98.0	0.0	96.8	0.0	100.0	0.0	76.8
Mauritania	80.8	14.3	99.6	0.0	62.0	0.0	17.0
Mozambique	71.4	0.0	88.8	10.0	83.3	0.0	96.8
Myanmar	46.2	10.5	89.8	2.2	72.3	1.7	21.6
Nepal	68.9	0.6	98.9	1.3	95.2	6.8	39.5
Niger	81.2	..	98.5	0.0	92.3	0.0	85.8
Rwanda	100.0	16.7	100.0	..	80.0	0.0	84.4
Samoa	66.7	0.0	72.9	0.0	47.1	0.0	70.9
Sao Tome and Principe	100.0	..	100.0	..	64.7	0.0	98.1
Senegal	69.2	5.6	97.3	6.7	30.8	3.7	43.5
Sierra Leone	80.0	21.4	95.0	0.0	81.8	0.0	67.2
Solomon Islands	100.0	0.0	100.0	0.0	57.9	0.0	88.9
Somalia	100.0	0.0	97.2	57.1	17.2	0.0	92.1
Sudan	100.0	4.8	96.1	30.8	45.3	0.0	85.7
Tanzania	87.5	8.0	99.0	9.5	77.5	0.0	89.9
Togo	59.3	20.0	96.0	0.0	100.0	0.0	76.5
Tuvalu	..	..	100.0	..	..	..	20.0
Uganda	96.4	0.0	98.5	26.7	35.4	0.0	86.7
Vanuatu	100.0	6.1	96.2	0.0	41.0	0.0	100.0
Yemen	100.0	0.0	99.9	7.4	45.1	0.0	90.9
Zambia	96.4	14.3	98.9	0.0	100.0	0.0	81.7
LDC average	75.2	6.3	94.9	4.0	72.7	1.3	55.4

Source: Data extracted from WITS.

Note: India and Korea - tariff year 1999, trade year 1999. . . Implies no lines with reported trade.

Table 9. Ratio of duty-free to total tariff lines with imports from partner, 2010 (%)

	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Afghanistan	100.0	39.5	62.4	..	90.3	83.1	81.9
Angola	36.4	64.7	46.7	..	100.0	79.4	95.6
Bangladesh	99.2	15.2	73.1	..	96.7	72.1	56.0
Benin	100.0	88.7	62.1	..	100.0	61.5	96.7
Bhutan	100.0	87.5	53.8	98.2	100.0	27.3	88.0
Burkina Faso	100.0	5.9	57.6	..	95.5	70.0	88.0
Burundi	100.0	93.3	100.0	..	100.0	100.0	78.6
Cambodia	99.3	94.8	72.3	..	95.8	74.1	40.1
Central African Rep.	100.0	45.2	49.5	..	100.0	100.0	94.8
Chad	100.0	44.0	46.5	..	100.0	100.0	100.0
Comoros	100.0	18.2	100.0	..	42.9	33.3	100.0

Table 9. *Continued*

	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Congo, Dem. Rep.	100.0	41.2	58.0	..	100.0	80.2	91.5
Djibouti	100.0	41.6	50.1	..	..	100.0	100.0
East Timor	68.6	78.1	71.8	..	100.0	25.0	..
Equatorial Guinea	100.0	73.3	41.6	..	100.0	100.0	100.0
Eritrea	65.8	70.7	67.5	..	100.0	100.0	66.7
Ethiopia(ex. Eritrea)	98.7	31.1	61.4	6.4	80.8	50.4	91.1
Gambia, The	100.0	59.0	68.3	..	100.0	100.0	91.1
Guinea	100.0	58.8	68.8	..	86.0	63.0	91.9
Guinea-Bissau	100.0	83.3	65.7	..	..	80.0	100.0
Haiti	98.4	14.5	91.2	..	100.0	66.1	71.5
Kiribati	100.0	80.0	44.4	..	100.0	31.7	100.0
Lao PDR	100.0	91.5	79.2	..	95.1	79.8	22.9
Lesotho	100.0	50.0	100.0	..	100.0	68.4	89.3
Liberia	95.6	81.8	50.6	..	74.1	69.6	64.3
Madagascar	98.4	41.0	100.0	2.2	97.8	81.9	85.0
Malawi	94.4	56.6	68.9	25.7	100.0	87.0	91.9
Mali	100.0	64.6	66.0	7.3	100.0	67.7	74.1
Mauritania	97.8	68.4	67.8	..	79.7	41.6	65.6
Mozambique	100.0	69.6	93.2	..	100.0	64.3	98.2
Myanmar	100.0	93.6	17.9	..	92.5	63.9	25.0
Nepal	99.4	13.4	74.4	..	98.0	82.5	50.5
Niger	100.0	45.0	49.3	0.0	100.0	88.5	88.1
Rwanda	100.0	49.1	100.0	1.8	100.0	93.8	88.2
Samoa	100.0	30.0	67.0	..	93.8	68.8	84.7
Sao Tome & Principe	100.0	33.3	45.0	..	100.0	38.9	81.8
Senegal	51.7	43.2	70.8	7.7	80.9	67.3	84.9
Sierra Leone	100.0	59.3	61.2	..	100.0	31.6	93.6
Solomon Islands	100.0	58.1	51.4	..	100.0	90.5	100.0
Somalia	100.0	50.0	79.9	..	92.9	..	95.0
Sudan	100.0	32.9	45.6	11.9	92.5	68.1	76.9
Tanzania	97.6	45.8	95.4	..	99.0	84.9	93.8
Togo	100.0	60.6	70.6	..	100.0	37.7	88.4
Tuvalu	..	100.0	60.5	..	100.0	100.0	100.0
Uganda	98.8	63.9	95.8	3.8	96.3	44.2	85.7
Vanuatu	100.0	48.0	67.1	..	88.5	77.6	75.0
Yemen	100.0	28.9	63.4	..	85.5	74.5	57.1
Zambia	100.0	52.7	93.0	12.4	100.0	89.8	84.8
LDC Average	95.8	52.5	70.7	9.3	94.8	71.0	72.0

Source: Data extracted from WITS.

Note: India tariff year 2009, trade year 2008. Korea tariff year 2010, trade year 2009. . . Implies no lines with reported trade.

It is sometimes difficult to be precise about the interpretation of the data. Geography, re-source endowment and shifting patterns of demand are among the factors that affect the pattern and composition of trade.

There was a wide spread in the ratio of duty-free imports from individual LDCs into the selected markets relative to total trade lines(Tables 10 and 11, covering 2000 and 2010). Overall, coverage increased in all selected markets except the EU, which a small decline from 99.7 per cent to 96.3 per cent. Developing countries recorded greater overall average increases, from 0.5 to 96.9 per cent in China, 16.7 to 58.7 per cent in India and 2.2 to 79.8 per cent in Korea. Again, the data reflects several factors, including country and product coverage of the schemes and patterns of trade. For example, East Timor is included in the data for 2010 but not in 2000.

Table 10. Ratio of duty-free to total imports by partner, 2000 (%)

	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Afghanistan	94.3	0.0	100.0	0.0	100.0	0.0	84.1
Angola	100.0	0.0	100.0	0.0	95.5	0.0	100.0
Bangladesh	10.2	0.0	99.7	0.2	72.2	0.0	8.2
Benin	93.9	0.0	99.9	50.0	100.0	0.0	99.6
Bhutan	100.0	..	100.0	0.1	65.9	100.0	60.1
Burkina Faso	100.0	..	98.9	0.0	99.5	0.0	97.7
Burundi	100.0	98.7	100.0	..	99.5	..	99.9
Cambodia	2.0	0.0	100.0	0.0	89.1	57.7	0.5
Central African Rep.	99.5	0.0	100.0	..	100.0	0.0	32.1
Chad	75.2	0.0	100.0	..	100.0	..	100.0
Comoros	100.0	0.0	100.0	..	93.6	..	100.0
Congo, Dem. Rep.	..	21.5	99.9	0.0	99.6	0.0	100.0
Djibouti	100.0	0.0	99.8	79.2	15.0	..	100.0
Equatorial Guinea	0.0	0.0	100.0	..	..	0.0	100.0
Eritrea	..	..	99.4	..	100.0	0.0	46.5
Ethiopia(ex. Eritrea)	94.5	76.7	100.0	38.2	100.0	0.0	89.6
Gambia, The	94.0	..	99.3	49.6	20.0	0.0	70.9
Guinea	99.8	0.0	100.0	0.0	11.1	0.0	99.8
Guinea-Bissau	100.0	0.0	99.7	98.3	..	0.0	100.0
Haiti	21.6	0.0	98.9	..	95.1	0.0	16.6
Kiribati	100.0	0.0	100.0	..	0.2	..	100.0
Lao PDR	5.8	0.1	99.8	..	99.7	0.0	0.1
Lesotho	0.0	0.0	100.0	..	100.0	..	0.0
Liberia	100.0	0.0	100.0	0.0	57.3	99.1	97.8
Madagascar	70.5	0.1	99.8	29.0	35.8	0.0	27.4
Malawi	98.8	..	100.0	0.0	98.0	0.0	20.8
Mali	99.1	0.0	97.3	0.0	100.0	0.0	95.9
Mauritania	98.4	0.0	100.0	0.0	1.4	0.0	44.8
Mozambique	99.4	0.0	99.8	74.1	8.1	0.0	54.7
Myanmar	22.0	2.9	99.2	0.1	52.6	0.0	9.9
Nepal	39.0	0.0	100.0	0.5	99.5	0.4	4.5
Niger	83.2	..	98.9	0.0	95.3	0.0	96.9
Rwanda	100.0	93.9	100.0	..	70.6	0.0	99.6

Table 10. *Continued*

	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Samoa	4.0	0.0	98.1	0.0	89.7	0.0	91.1
Sao Tome & Principe	100.0	..	100.0	..	24.5	0.0	97.2
Senegal	5.4	0.0	98.5	10.4	8.1	0.0	90.8
Sierra Leone	95.6	0.0	99.9	0.0	22.7	0.0	88.7
Solomon Islands	100.0	0.0	100.0	0.0	58.3	0.0	99.6
Somalia	100.0	0.0	99.8	68.9	7.9	0.0	98.0
Sudan	100.0	0.0	97.1	10.0	7.8	0.0	95.9
Tanzania	94.5	0.6	100.0	78.8	82.6	0.0	91.2
Togo	94.4	0.0	98.6	0.0	100.0	0.0	99.1
Tuvalu	..	..	100.0	..	..	..	0.0
Uganda	99.7	0.0	99.1	6.1	46.4	0.0	99.9
Vanuatu	100.0	0.0	99.9	0.0	43.9	0.0	100.0
Yemen	100.0	0.0	100.0	0.4	5.8	0.0	100.0
Zambia	99.6	17.0	98.8	0.0	100.0	0.0	96.8
LDC average	37.9	0.5	99.7	16.7	47.6	2.2	52.9

Source: Data extracted from WITS.

Note: India and Korea - tariff year 1999, trade year 1999. Implies no duty-free lines.

Table 11. Ratio of duty-free to total imports by partner, 2010 (%)

	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Afghanistan	100.0	11.0	27.4	..	96.5	44.8	75.7
Angola	100.0	99.8	96.7	..	100.0	13.2	100.0
Bangladesh	100.0	30.3	99.3	..	100.0	32.9	3.7
Benin	100.0	56.4	97.4	..	100.0	100.0	98.2
Bhutan	100.0	100.0	70.4	100.0	100.0	3.2	99.7
Burkina Faso	100.0	3.6	96.3	..	100.0	48.4	85.3
Burundi	100.0	100.0	100.0	..	100.0	100.0	100.0
Cambodia	100.0	59.4	98.6	..	99.3	85.8	1.1
Central African Rep.	100.0	100.0	94.0	..	100.0	100.0	100.0
Chad	100.0	99.5	99.8	..	100.0	100.0	100.0
Comoros	100.0	4.7	100.0	..	0.0	88.3	100.0
Congo, Dem. Rep.	100.0	81.3	86.9	..	100.0	100.0	99.9
Djibouti	100.0	95.0	94.0	..	..	100.0	100.0
East Timor	99.6	66.4	99.7	..	100.0	0.6	
Equatorial Guinea	100.0	100.0	99.2	..	100.0	100.0	100.0
Eritrea	72.2	81.0	78.3	..	100.0	100.0	95.5
Ethiopia(exc. Eritrea)	99.7	95.9	92.1	28.3	92.6	35.8	99.9
Gambia, The	100.0	99.9	91.6	..	100.0	100.0	98.8
Guinea	100.0	98.8	99.6	..	11.5	0.9	100.0
Guinea-Bissau	100.0	99.7	97.1	..	..	5.8	100.0
Haiti	100.0	28.8	100.0	..	100.0	70.2	6.1
Kiribati	100.0	99.6	42.6	..	100.0	96.0	100.0

Table 11. *Continued*

	Canada	China	European Union	India	Japan	Korea, Rep.	United States
Lao PDR	100.0	92.4	99.4	..	90.1	99.5	7.3
Lesotho	100.0	21.2	100.0	..	100.0	94.2	100.0
Liberia	100.0	80.1	51.0	..	8.4	91.5	97.1
Madagascar	100.0	90.9	100.0	2.0	99.9	65.0	99.7
Malawi	99.9	2.2	97.9	0.1	100.0	100.0	27.1
Mali	100.0	37.9	89.8	95.3	100.0	0.2	97.2
Mauritania	99.9	100.0	99.6	..	100.0	1.3	100.0
Mozambique	100.0	98.0	100.0	..	100.0	97.7	97.7
Myanmar	100.0	92.1	6.8	..	97.0	50.0	0.0
Nepal	100.0	4.2	87.1	..	99.8	92.6	27.0
Niger	100.0	93.8	98.9	0.0	100.0	85.5	100.0
Rwanda	100.0	98.4	100.0	2.2	100.0	95.4	98.4
Samoa	100.0	26.3	13.4	..	81.5	73.8	83.5
Sao Tome & Principe	100.0	62.3	93.2	..	100.0	90.4	86.4
Senegal	90.8	15.8	86.8	0.9	49.0	2.9	92.5
Sierra Leone	100.0	98.8	95.7	..	100.0	35.0	99.4
Solomon Islands	100.0	98.6	36.2	..	100.0	99.8	100.0
Somalia	100.0	99.8	99.4	..	50.1		98.6
Sudan	100.0	99.6	94.2	36.5	100.0	34.4	99.9
Tanzania	100.0	94.8	100.0	..	94.8	99.8	99.6
Togo	100.0	87.2	98.2	..	100.0	90.7	99.9
Tuvalu		100.0	32.0	..	100.0	100.0	100.0
Uganda	100.0	75.1	100.0	17.2	69.1	92.6	99.5
Vanuatu	100.0	33.5	91.4	..	95.6	0.1	93.4
Yemen	100.0	98.9	91.9	..	98.3	99.4	99.7
Zambia	100.0	98.5	100.0	0.2	100.0	100.0	99.5
LDC Average	100.0	96.9	96.3	58.7	98.9	79.8	71.6

Source: Data extracted from WITS.

Note: India tariff year 2009, trade year 2008. Korea tariff year 2010, trade year 2009. . . Implies no duty-free lines.

3. RULES OF ORIGIN

Rules of origin (ROOs) can determine whether an exporter will benefit from preferential treatment in foreign markets.[37] These rules vary widely among WTO members, sometimes from one tariff line to the next. ROOs are important because many goods now pass through several stages of processing in different countries, not all of which benefit from the same treatment in the final importing country. The purpose of the rules is to prevent "trade deflection" or simply transhipment, where products from non-beneficiary countries are re-directed through a preference beneficiary, perhaps with minimal re-labelling, to avoid payment of customs or anti-dumping duties.

The principal rules used to determine origin are: (i) the percentage of value added in the countries where processing takes place; (ii) whether the transformation of the product in the processing is "substantial", not simply transhipped or re-labelled in the last country of shipment; or (iii) whether the transformation of the product through processing leads to a change in its tariff heading. Some countries, including the Association of Southeast Asian Nations, use a simple, generalised rule across all products and no one rule dominates. In this case, importing countries may use any or all of these rules. In the case of the value-added rule (ad valorem), the percentage may vary by tariff line. However, in the Pan-European System of Rules of Origin there are some 200 pages of rules – varying almost line-by-line.

Three main features of rules of origin influence the origin that is conferred on a product: cumulation, tolerance and absorption.

Cumulation allows producers to import materials from a specific country or region with-out affecting the origin. The most basic form occurs when the materials come from the country for which the final goods are destined. For example, under AGOA an African garment manufac-turer/exporter imports fabric from the United States, produces garments with the fabric, and exports the garment to the United States. Diagonal cumulation occurs where inputs come from an approved third country or region. Full cumulation allows qualifying origin to be conferred even if the transformation is not sufficient to meet the normal rule of origin, in effect simply treating a good as if it were entirely produced in the last country of export.

Tolerance (or *de minimis*) rules – which relate only to substantial transformation or change of tariff heading, but not to the value-added rule – allow a certain percentage of non-originating material to be used without affecting the preference.

The absorption principle provides that parts of materials that have acquired originating status by satisfying the rules of origin for that product can be treated as being of domestic origin in any further processing or transformation.

Rules of origin are particularly complex in the case of textiles and clothing, which are of critical export interest to many developing countries and LDCs. For example, the EU's rules of origin for cotton clothing require that the yarn and fabric used in the manufacturing process be produced locally in order to qualify for preferential access. The United States applies the change of tariff heading rule, which precludes the use of imported cotton fabric, yarn and cotton thread, as well as visible lining.

Rules of origin can protect domestic producers in the importing country. They may also raise the costs of supplying the markets of the preference-granting importer by requiring changes in production that use more expensive inputs in order to comply with the rules. Rules of origin may be an important factor in investment decisions if they create uncertainty as to the degree of preferential access that will be available for the finished goods. While they may determine the economic effects of preference systems, in general rules of origin are irrelevant to a very large number of items that are duty-free in major markets.

Under Canada's rules of origin, to qualify for LDC treatment, at least 40 per cent of the ex-factory price of the goods must originate in one or more

LDC beneficiary countries or Canada.[38] The rules allow for cumulation across LDC beneficiaries. In addition, up to 20 per cent of the ex-factory price of the goods from GSP beneficiaries, other than LDCs, may also be in-cluded. However, any parts, materials or inputs used in the production of the goods that have entered the commerce of any country other than an LDC beneficiary or Canada lose their Least-developed Country Tariff (LDCT) status.

Canada's rules of origin for textiles and clothing are more complex. They include accumulation rules; the yarn and thread rule (allowing the process of spinning cotton into yarn to confer originating status) provided that further processing takes place in an LDC; fabric rules(allowing yarn from a GSP country to be processed in an LDC); two distinct apparel rules (allowing fabric cut in an LDC or Canada to use yarn produced in an LDC, a GSP country or Canada; or allowing fabric from a GSP country using yarns from an LDC, a GSP country or Canada); the other made-up textile articles rule (allowing "other made-up" textiles to be cut, knit to shape and sewn or otherwise assembled in an LDC from fabric produced in any LDC or Canada from yarns originating in an LDC, a GSP country or Canada); and the wholly produced rule (covering production of yarn or thread and manufacture of a final goods in an LDC).

Canadian documentation provides examples of the application of each of these rules.[39] However, as an example of the accumulation rule – one of the more complex– apparel products produced in an LDC can use textile inputs from any developing country and still be ac-corded duty-free access to Canada. Canadian documentation states:"Wool of Yemen is combined with spandex of Hong Kong and sewing thread of India to manufacture wool socks in Yemen. Under this subsection, a textile or apparel good must contain parts and materials of LDC origin that represent no less than 40 per cent of the ex-factory price of the good as packed for shipment to Canada. The wool of Yemen origin represents 35 per cent of the ex-factory price. The sewing thread of India and spandex of Hong Kong represents an additional 7 per cent. This subsection permits inputs from GSP beneficiaries, in this case Hong Kong and India, to be included in the 40 per cent parts and materials requirement. The 35 per cent input of wool from Yemen combined with the 7 per cent of sewing thread and spandex inputs from GSP countries exceed the 40 per cent minimum input requirement under the relevant subsection of the Canadian legal provision. The socks therefore qualify for the LDC tariff." In other words, the inclusion of inputs from GSP countries allows socks from Yemen to be considered to exceed the 40 per cent minimum qualifying requirement.

The WTO reports that Chinese rules of origin require products to originate entirely in the country that exports them or, if external inputs are used, they must have undergone substantial transformation.[30] "Substantial transformation" means either change of tariff heading or that the value of non-originating parts used in the manufacture of the good does not exceed 60 per cent of the value of the product. The final stage of processing must be in the country of origin, and the finished goods must enter China directly.[41]

As of 2011, the EU has applied new rules of origin as part of its 2002 commitment "to pay particular attention to LDCs and other low-income countries." The changes aim to address criti-cisms of the previous rules, which were argued to be too stringent to allow developing countries to really benefit from the preferential market access offered by the EU. According to a European Commission paper, "a correlation was indeed proven between the stringency of the rules of origin and the utilisation rates of the tariff preferences. In addition, product-specific rules were considered too complicated. Lastly, compliance was considered too costly and burdensome, both for exporters and administrations."[42]

The Commission considers that the new rules are simpler and easier to comply with (*op.cit.*). They offer extended possibilities of sourcing through flexible product-specific rules and new opportunities of cumulation. Regional cumulation is maintained and enhanced. In addition, derogations from the rules have been made easier to apply for. And finally, a procedure is introduced allowing the EU to rapidly grant derogations on its own initiative so as to respond more quickly to any special situation which may occur, such as a natural disaster.

The EU has made considerable efforts to offer further flexibilities to LDCs. For the first time, it has introduced differentiation for the benefit of LDCs at the level of applicable GSP rules of origin. For example, for most industrial products, the threshold of valued-added required from LDCs is only 30 per cent (against 50 per cent for non-LDCs). For textiles and clothing, single transformation has been granted without quotas.

In order to benefit from India's LDC preferences, imports need to meet the relevant rules of origin. Apart from goods wholly produced or obtained in the exporting LDC (e.g. raw material, minerals, etc.), foreign content should not exceed 70 per cent of the value and change in tariff classification.[43] The minimum cumulative local content requirement is 30 per cent of the value and change in tariff classification for the not wholly produced or obtained category. Any Indian content would be considered to meet the local content requirement.[44]

The rules of origin for products covered by the Japanese DFQF scheme are set out on the Japanese MOFA web-site.[45] The criteria cover goods that are wholly produced in the exporting country, or undergo substantial transformation there, as well as certain provisions for transportation to ensure that the goods retain their identity and are not manipulated or further processed in the course of shipment. Japanese inputs – with some specified exceptions – are treated as originating in the exporting country ("donor-country content rule"), and cumulation of origin is permitted for goods that use inputs from ASEAN countries.

Goods produced totally or partly from materials or parts imported from countries other than the exporter (or of unknown origin), are considered as originating in a preference-receiving country if those materials/parts have undergone sufficient working or processing in that country. As a general rule, working or processing operations will be considered sufficient when the resulting goods are classified under an HS tariff heading (4 digits) other than that covering each of the non-originating materials or parts used in the production. However, some minimal processes are not considered sufficient, even if there is a change in the HS heading.[46] In addition, some processed food products must satisfy specific conditions in order to obtain originating status (this may explain the low trade and tariff line coverage already remarked in relation to the table in the annex). On the other hand, non-originating materials used in the production of a good classified under Chapter 50 through 63 (textiles and clothing articles) of the Harmonised System that do not satisfy an applicable rule for the good shall be disregarded, provided that the totality of such materials does not exceed 10 per cent in weight of the good (*de minimis* rule).

Korea's rules of origin require a number of products to be produced wholly in the exporting LDC. The following goods meet that criterion: raw materials or mineral products extracted from the soil, waters or seabed of the exporting country; agricultural and forestry products harvested in the exporting country; animals born and raised in the exporting country and products obtained from such animals; products obtained by hunting or fishing conducted in the exporting country; marine products caught in high seas by vessels of the exporting country and goods manufactured or processed from such products; used articles collected in the exporting country, fit only for the recovery of raw materials; waste and scrap resulting from manufacturing operations conducted in the exporting country; and goods produced in the exporting country exclusively from the products mentioned above.

Korea's rules of origin also allow LDC preferences for products finally manufactured or processed in the exporting country even if they contain inputs originating in other countries (or the origin of which is not determined). Such products are eligible for preferential tariffs if the value of the inputs does not exceed 60 per cent of the price of the final products.[47] If the final products include the products originating from the Republic of Korea as input, the value of these products shall be excluded from the calculation of the total value of inputs. The Presidential Decree of 2000 describes how the value of such inputs is to be calculated.

The main rule of origin in the United States, which applies to LDCs in general, is that the sum of the cost or value of materials produced in the beneficiary country plus the direct costs of processing must equal at least 35 per cent of the appraised value of the article at the time of its entry into the United States.[48] Imported materials can be included only if they undergo a double substantial transformation in the beneficiary developing country, which means that (a) the imported material is transformed into a new and different constituent material with a new name, character and use, and (b) the constituent material is transformed in the beneficiary country into a new and different finished article with a new name, character and use.

Cumulation is allowed within GSP-eligible regional associations up to the 35 per cent appraised value.[49]

A number of studies have pointed out that the scope for further widening the export base could be enhanced by increased flexibility in rules of origin that limit the possibilities for exploitation of preference schemes.[50] For example, one area where LDCs have developed their exports is textiles and clothing, but rules of origin are particularly complex in this field. The United States applies the change-of-tariff-heading rule that precludes the use of imported cotton fabric, yarn and cotton thread, as well as visible lining. At present, the US applies liberal rules of origin to textiles and clothing products from African countries covered by AGOA, but there is no certainty that this will be continued indefinitely.

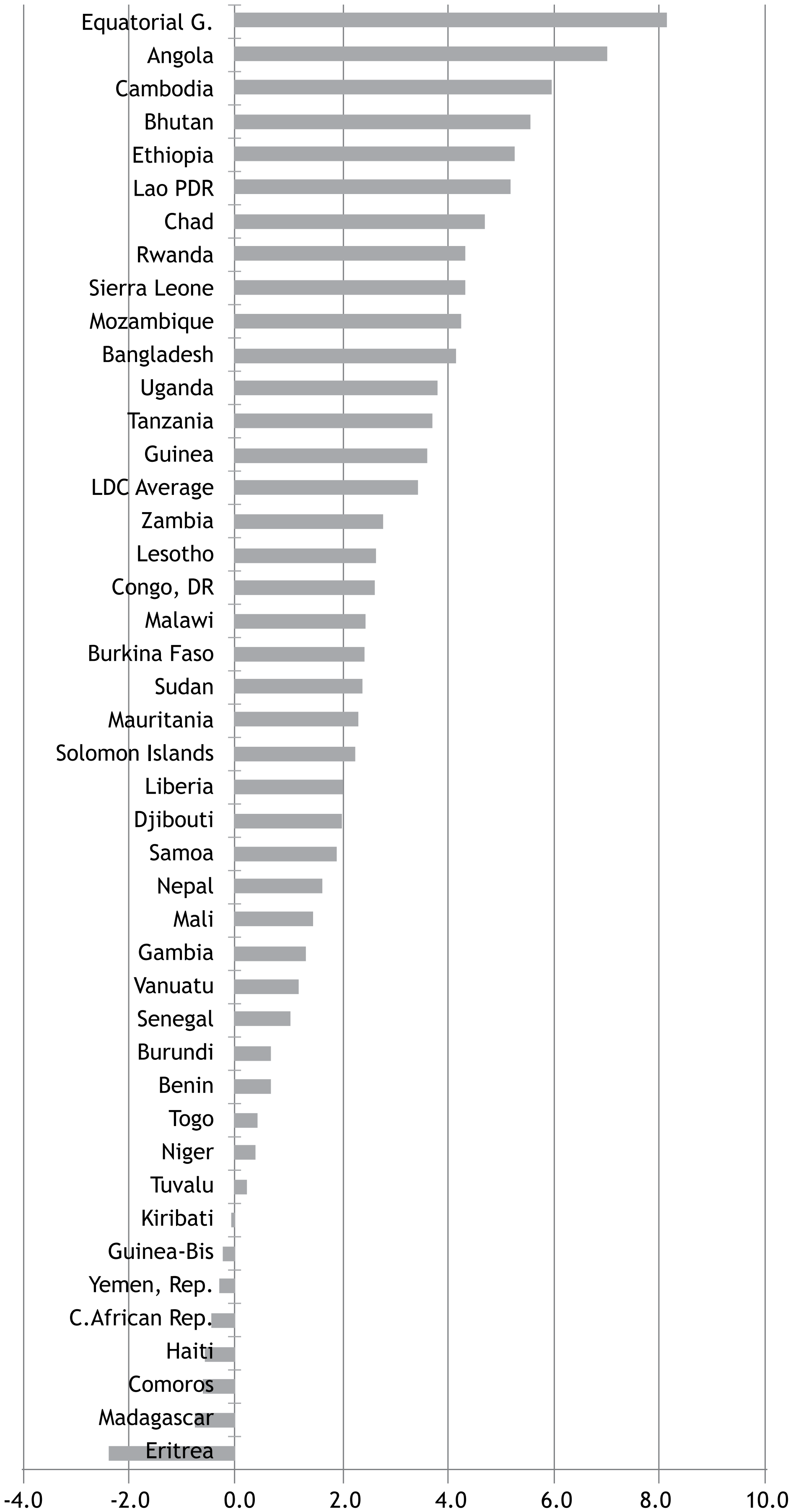
4. EFFECTS OF THE SCHEMES

4.1 LDCs' Trade and Production

The last ten years have witnessed an important improvement in LDCs' trade and production. Overall, LDCs' real GDP per capita increased by an annual average of just 3.4 per cent in the period 2000-2010. This is nevertheless a real improvement compared to the 1.3 per cent average annual growth they achieved between 1991 and 2001.[51]

The real income per capita of individual LDCs varies considerably (Chart 1).[52] Among the fastest-growing LDCs were Equatorial Guinea, Angola, Bhutan, the Central African Republic, Si-erra Leone, Ethiopia, Laos and Chad. Many of these countries are also in the group with the fastest-growing exports – again linked to oil, minerals and gas. On the other hand, a number of LDCs experienced negative growth: Eritrea (-2.4 percent), Madagascar (-0.8 percent), Comoros (-0.7 percent), Haïti (-0.6 percent), Central African Republic (-0.5 percent) Yemen (-0.3 percent), Guinea- Bissau (-0.2 percent), and Kiribati (-0.1 per cent). Civil unrest, wars and natural disasters have had an important negative impact on the performance of these countries.

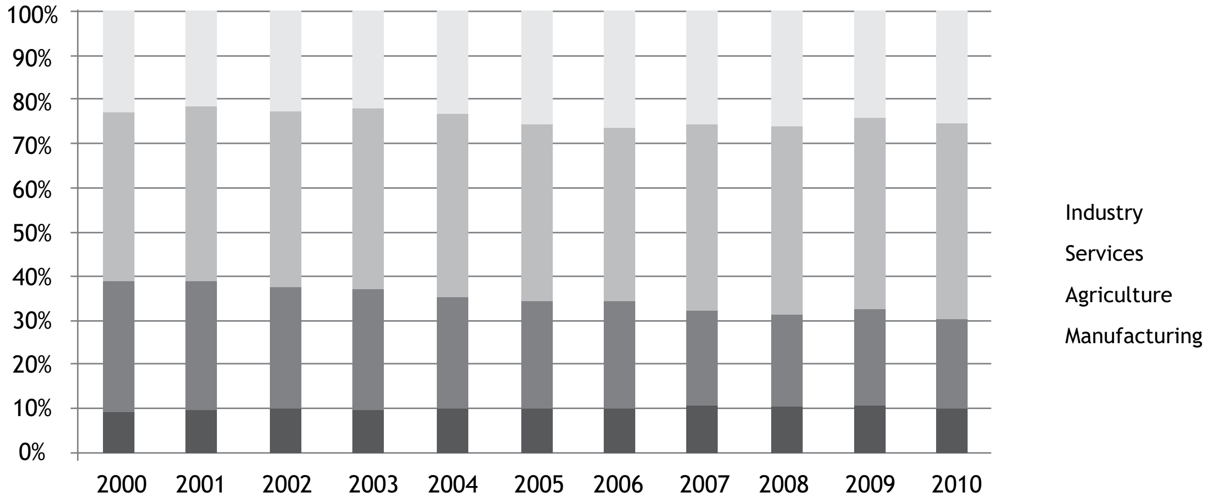
Chart 1: LDCs GDP per capita growth 2000-10, Constant 2000 USD (%)



Source: World Development Indicators online.
Note: Data not available for Afghanistan, Myanmar, Sao Tome & Princ. and Somalia. Djibouti data 2000-09.

The share of agriculture in LDC's GDP declined from 32.2 percent in 2000 to 22.7 percent in 2010 (Chart 2). The largest sector, services, grew slightly, from 43.8 percent to 48.9 percent. Manufacturing – the sector with the smallest share in GDP – also increased, from 10.5 to 11.9 percent of the total. The share of "other industry", which includes energy, mining and construction, expanded from 24.0 percent to 28.3 percent.

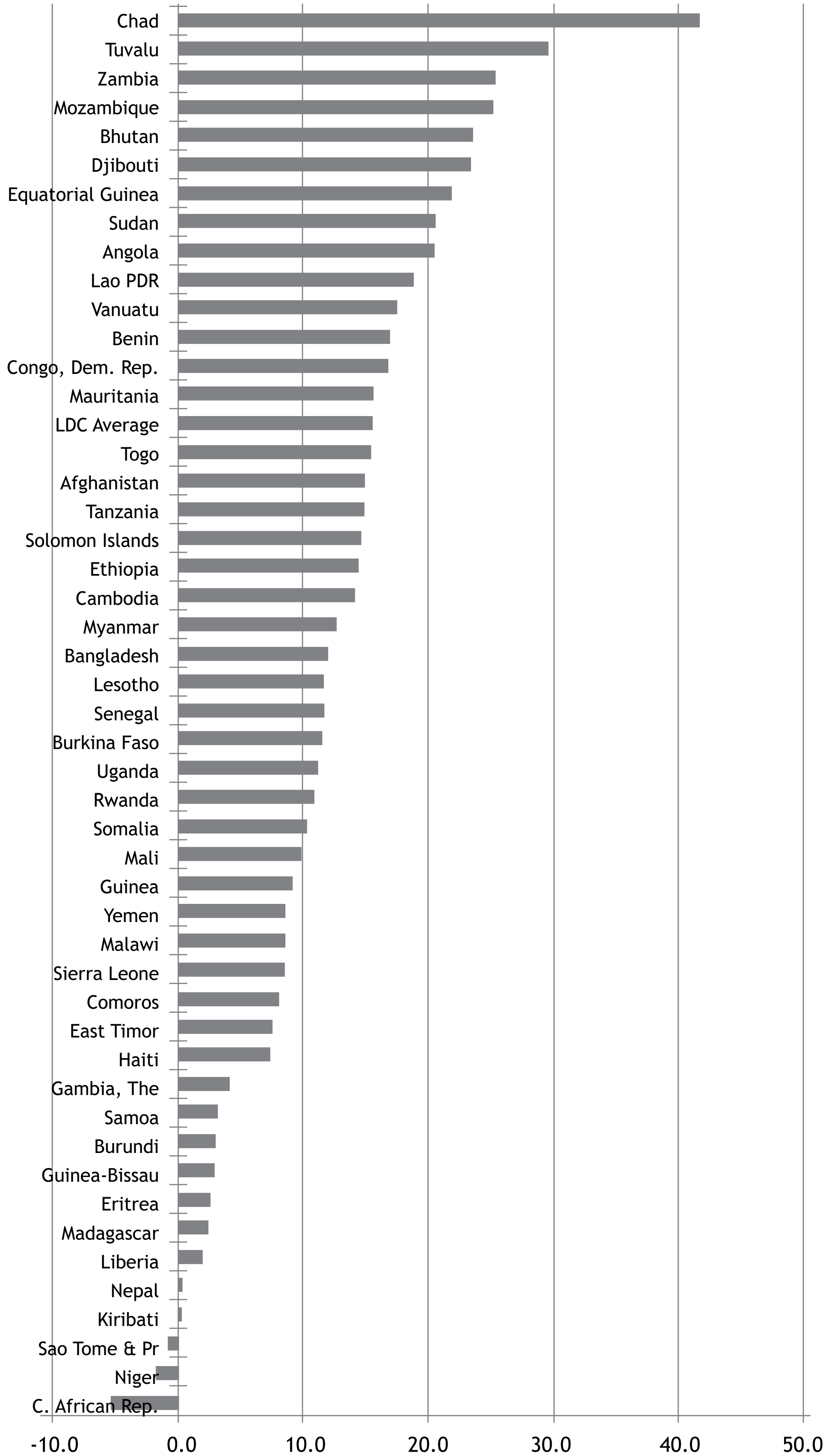
Chart 2: LDCs Value added/GDP by major sectors, 2000-2010



Source: World Development Indicators online

There has been a substantial increase in imports from LDCs in most of the selected markets over the last 10-20 years (right-hand side of Table 5). World imports from LDCs also show solid growth to 15. 5 per cent in 2000-10 (Chart 3). These improvements occurred despite the de-cline in 2008-2009 of some 26 per cent at the height of the economic and financial crisis. Increased importsoccurred in India and China, whose LDC schemes are more recent. Nonetheless, China's imports from LDCs grew less strongly in the last decade than during the previous ten years, while India's LDC imports declined slightly.

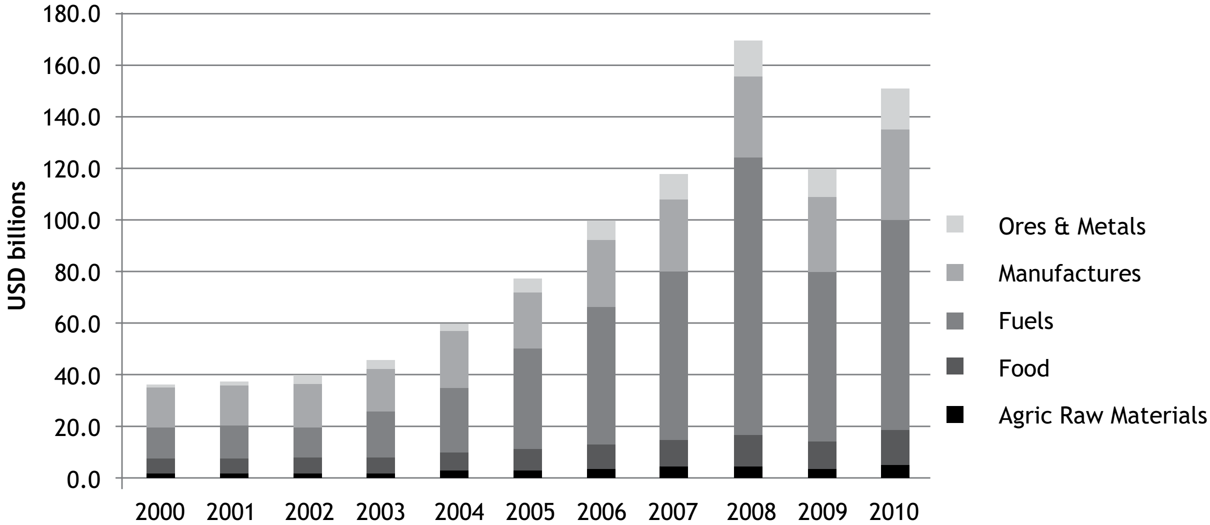
Chart 3: LDCs' Exports of Goods (2000-2010 Annual average rate of growth (%))



Source: UN STAT Comtrade database
Note: Based on World Imports from LDCs "mirror" data

While the most significant shift in LDC exports generally is the growing importance of fuels and, less dramatically, ores and metals, trade in manufactures, agricultural raw materials and food has also increased (Chart 4). The role of specific products becomes clearer when one looks at the more detailed data for high-value, fast-growing products at the 3-digit SITC level (Table 12). The fastest-growing exports include electric current (mostly cross border trade) non-monetary gold (i. e. other than gold in official reserves), natural and liquid gas, copper, copper ores and concentrates, natural gas, base metal ores and concentrates, and petroleum. However, fast-growing items – whose growth is comparable to that of total exports including fuels – also include a wide range of agricultural and manufactured products, such as various apparel items, fruits and vegetables, nuts, coffee and fish and crustaceans. The growth of these exports illustrates a process of diversification in the broader sectors that is crucial to those LDCs that are not well endowed with high-value base commodities.

Chart 4: LDC Exports by major category, 2000-2010



Source: UN STAT Comtrade database

Table 12. LDC exports, 2000-10 (3-digit SITC rev. 3) with value exceeding $500,000 in 2010, in descending order of growth rate, 2000-10

Product 3-digit SITC R. 3	2000	2010	Growth 2000-10 (%)
Total	**36,632,837**	**155,141,346**	**15.5**
Electric current	2,628	699,836	74.8
Gold non-monetary ex ore	26,873	4,048,339	65.1
Copper ores/concentrates	23,018	1,560,686	52.4
Natural gas	108,633	5,687,037	48.6
Liquid propane/butane	15,002	712,361	47.1
Aluminium	38,452	1,761,259	46.6
Copper	392,749	6,858,171	33.1
Base metal ore/concnes	148,310	1,498,917	26.0
Vegetables,frsh/chld/frz	241,332	1,602,917	20.8
Misc non-ferr base metal	122,391	729,305	19.5
Petrol. /bitum. oil,crude	12,708,239	73,332,320	19.2
Iron ore/concentrates	245,005	1,322,020	18.4
Women/girl wear knit/cro	443,727	2,391,990	18.3
Natural rubber/latex/etc	136,254	724,075	18.2
Footwear	203,535	926,501	16.4
Oil seeds etc - soft oil	255,462	932,627	13.8
Crude veg materials nes	168,040	583,963	13.3
Heavy petrol/bitum oils	775,704	2,669,193	13.2
Men/boy wear knit/croch	434,675	1,476,439	13.0
Tobacco, raw and wastes	427,868	1,433,471	12.9
Made-up textile articles	260,285	858,298	12.7
Ships/boats/etc	503,235	1,635,860	12.5
Articles of apparel nes	3,204,313	10,385,461	12.5
Wood simply worked	180,925	524,834	11.2
Textile yarn	183,479	527,449	11.1
Live animals except fish	187,312	536,678	11.1
Mens/boys wear, woven	2,342,029	5,563,755	9.0
Fruit/nuts, fresh/dried	366,969	842,050	8.7
Fish,live/frsh/chld/froz	693,097	1,551,117	8.4
Wood in rough/squared	779,282	1,625,496	7.6
Women/girl clothing wven	1,568,251	3,056,454	6.9
Coffee/coffee substitute	782,206	1,431,809	6.2
Aluminium ores/concs/etc	555,199	888,575	4.8
Cotton	797,618	1,085,999	3.1
Crustaceans molluscs etc	1,098,847	1,167,564	0.6
Pearls/precious stones	1,972,359	1,367,366	-3.6

Source: UN Comtrade database, using World imports from LDCs ("mirror" data).

While LDCs' export base has remained narrow, they have succeeded in diversifying mar-ket destinations for their products. Developing countries now take some 49 per cent of their ex-ports, with China accounting for more than 20 per cent of the total. According to WTO (2011c), "The LDC products that feature prominently in the imports of developing countries include min-eral fuels, wood products, cotton, copper, as well as some food products such as vegetables and oil seeds. The categories for which developed country markets remain a dominant export destination are textiles and clothing, food and beverage products." (*op. cit*, page 45)

While there have been several factors at play, the broadening of LDCs' export base can be attributed in some measure to improvements in market access. For example, the WTO (*op. cit.*) notes that the last decade saw significant improvements in market access opportunities, with almost all developed WTO members – of which those selected for this study are the most important – providing duty- and quota-free market access to the great majority of products originating in LDCs. In addition to non-reciprocal preferences conferred through LDC-specific GSP schemes, some developed WTO members have provided market access improvements to selected groups of coun-tries including LDCs (e.g., the United States' Africa Growth and Opportunity Act and the EU's Economic Partnerships Agreements). Developing countries have also taken concrete steps to provide improved market access to LDCs through multilateral, regional and bilateral initiatives. As discussed earlier, emerging countries such as Korea, China and India (as well as Brazil) now grant valuable preferences for LDC products.

Of course, not all improvements in LDCs' trade and production performance can be at-tributed to trade preferences. On the export side, demand conditions for LDC exports have been very important, especially including rising export prices. There have also been significant developments on the supply side, which has seen improvements in LDCs' productive capacities and trade-related physical infrastructure, in part due to aid for trade.[53] It is also important to note that developments on the demand and supply sides are not entirely independent: there is a link between the increased demand for imports from LDCs and their ability to meet that demand through improved supply capabilities. For example, the rapid growth of exports of clothing from Lesotho is linked to investment intended to take advantage of preferential access under AGOA.

4.2 Estimates of Effects From Modelling Studies

Several studies exist on the effects of DFQF schemes, particularly the EU's Everything But Arms(EBA) initiative, which was the first to be implemented. While some of these studies are now slightly dated, they give a generally positive picture of the schemes.

Results from these modelling exercises showed that the EBA would have a positive, if modest, impact on LDCs exports and welfare, coupled with losses for the EU and third countries of a smaller magnitude. LDC exports were predicted to increase by almost US$300m per year (relative to the base year for the studies in the early 2000s).[55] The EBA's impact appeared to be concentrated in just a few sectors, in particular sugar and rice.

Overall, estimates by UNCTAD (2001a) showed significant potential welfare and trade gains from the EBA initiative, with the largest gains going to sub-Saharan Africa. Export gains could be as much as 5-10 percent from DFQF treatment and 50 percent tariff cuts by key developing countries. Just 0.5per cent would derive from preferences granted by other developing countries (due to similarities in their production and trade profiles). LDC growth rates could be lifted by as much as 2-4 percent a year, from an annual average of less than 5per cent in 2000-02. This would contribute greatly to meeting the 7 percent target set by the 2001-2010 Plan of Action for LDCs. The analysis indicated that gains were likely to occur in relatively few sectors, with sugar as the single most important product, followed by bananas and rice (these sectors were not yet fully liberalised when the UNCTAD report was published). While the effects on the EU itself were found to be minimal, LDCs' increased market access would come at the expense of other preference-receiving countries (the ACP group in particular), although again the changes are not enormous.

However, UNCTAD's analysis did not fully account for non-tariff barriers affecting trade flows (such as sanitary and phytosanitary measures, technical barriers to trade, rules of origin, safeguards, etc.) that could preclude LDCs from increasing their exports to the extent pre-dicted. Importantly, the report pointed out that in the longer term, for many items supply-side factors rather than limitations on market access might be the most important constraints and needed the urgent attention of the international community. "Even the most generous market access enhancements alone may not be sufficient to strengthen the links between trade and development in the poorest countries in the world."

Other studies carried out in the early 2000s also suggested that concerns about the possible impact of the EBA on the EU's Common Agricultural Policy (CAP) were ill-founded. Many domestic producer groups had argued that the initiative, by eliminating tariffs and quotas on products subject to CAP provisions, would increase imports to an extent that would render CAP support measures ineffective (Agra Europe, 2001). An impact study conducted by the European Commission on the effects of the EBA on several agricultural markets showed that the extra-budgetary costs were expected to be between €1.5 and €2.6 billion (EC, 2000a), or a 3 to 7 per cent increase to the 1999 CAP budget. With the benefit of hindsight, this estimate looks rather large.

Brenton (2003) also looked at the effects of EU preferences on LDCs. He showed that potential impact varied considerably across countries due to their different export structures. For some LDCs, EU trade preferences on existing exports were not significant since those exports consisted mainly of products that already had duty-free access. Export diversification would be the key issue for these countries. For other LDCs, EU preferences had the potential to provide a more substantial impact on trade. Brenton showed that only 50 per cent of EU imports from EBA-eligible non-ACP LDCs had actually requested preferential access to the EU. The prime suspects for this low level of use are rules of origin, including the restrictiveness of the requirements on sufficient processing and the costs and difficulties of providing the necessary documentation. In Brenton's view, more simple rules of origin would enhance the impact of EU trade preferences in terms of improving market access and in stimulating diversification toward a broader range of exports.

5. THE FUTURE OF DFQF SCHEMES

5.1 Is There a Future for DFQF Schemes for LDCs?

It has been accepted from the beginning that GSP are of a temporary nature. They were de-signed to give a boost to developing country exports as long as MFN tariffs were significant, but the importance of preferences has diminished as MFN tariffs have fallen over the years under successive multilateral negotiations, regional trade agreements and unilateral reforms.

Several questions then arise about the future of LDC preference schemes. Will their importance diminish progressively in the future, or do they still serve a purpose? Is there scope for further improvements in the developed countries and the larger developing countries that have begun to implement such schemes? What is the likely impact on such schemes of further liberalisation, for example, in the context of the current Doha negotiations?

5.2 Can DFQF Schemes for LDCs be Improved?

First, what is the scope for assisting LDCs through improvements in the current preference schemes? There are several options, which are difficult to quantify, such as improvements in rules of origin, helping LDCs meet standards, trade facilitation, and so on. However, it is possible to estimate potential gains from expanded country and product coverage, as well as deepening the preferences (where the preferential rate is non-zero). There are several techniques for carrying out an *ex ante* assessment of the impacts of extending fully duty-free market access under such schemes (i. e. thetotal elimination of tariffs for all LDC products). One such approach uses a basic trade model embedded in the WITS system, which is now a co-operative effort of the ITC, UNCTAD, the World Bank and the WTO.[54] A set of estimates of the impacts on individual LDCs is provided in Table 13.

Table 13. Effects of full duty-free treatment for LDCs by selected Donors (est.)

LDC	Canada			China			EU		
	Imports 2010 $'000	Change		Imports 2010 $'000	Change		Imports 2010 $'000	Change	
		$'000	%		$'000	%		$'000	%
Afghanistan	1,640	-0	-0.0	3,683	2,511.4	68.2	51,013	0.0	0.0
Angola	1,576,378	5	0.0	22,810,098	5,015	0.0	5,101,955	-2.4	0.0
Bangladesh	811,301	-0	-0.0	268,157	170,173	63.5	8,721,575	-2,171.7	0.0
Benin	12	-	-	70,894	36	0.1	34,668	-0.0	0.0
Bhutan	44	-	-	13	-	0.0	1,209	-0.0	0.0
Burkina Faso	22,154	-0	-0.0	4,384	0	0.0	112,758	-0.0	0.0
Burundi	50	-	-	3,458	1	0.0	38,524	-	0.0
Cambodia	346,788	-0	-0.0	94,343	18,250	19.3	1,158,301	-193.3	0.0
Central African Republic	108	-	-	25,123	1	0.0	55,444	-0.0	0.0
Chad	1,053	-	-	493,374	9	0.0	285,669	-0.0	0.0
Comoros	140	-	-	24	9	38.9	10,343	-0.0	0.0
Congo, Dem. Rep.	733	-	-	2,472,319	16,549	0.7	586,729	-0.0	0.0
Djibouti	10	-	-	691	8	1.2	11,619	0.6	0.0
East Timor	1,989	-		250	-		10,478	-	
Equatorial Guinea	652,036	-	-	598,657	35	0.0	3,028,720	-0.0	0.0
Eritrea	251	19	7.4	1,054	21	2.0	4,808	-2.0	0.0
Ethiopia(excludes Eritrea)	14,665	-	-	273,513	2,010	0.7	645,620	-0.8	0.0
Gambia, The	224	-	-	14,862	8	0.1	23,172	-0.1	0.0
Guinea	46,909	-0	-0.0	54,997	96	0.2	625,153	-6.5	0.0
Guinea-Bissau	14	-	-	3,869	3	0.1	7,465	-0.0	0.0
Haiti	25,331	-0	-0.0	5,950	568	9.5	33,825	-0.2	0.0
Kiribati	28	-	-	5	0	0.1	162	-	0.0
Lao PDR	7,851	-0	-0.0	564,747	47,026	8.3	225,107	-132.8	-0.1
Lesotho	16,359	-0	-0.0	4,313	614	14.2	184,504	-0.5	0.0
Liberia	36,937	-	-	22,617	2,575	11.4	452,155	-0.0	0.0
Madagascar	49,036	-0	-0.0	105,283	5,848	5.6	636,179	-86.9	0.0

Table 13. *Continued*

LDC	Canada			China			EU		
	Imports 2010 $'000	Change		Imports 2010 $'000	Change		Imports 2010 $'000	Change	
		$'000	%		$'000	%		$'000	%
Malawi	71,022	-	-	21,074	12,372	58.7	309,428	6.7	0.0
Mali	585	-		26,678	-29	-0.1	35,479	-0.0	0.0
Mauritania	185	-	-	966,979	13	0.0	701,420	-28.8	0.0
Mozambique	1,372	-0	-0.0	198,072	311	0.2	1,809,822	-8.9	0.0
Myanmar	14	-	-	961,741	44,741	4.7	212,112	52,482.1	24.7
Nepal	14,929	-0	-0.0	11,415	7,542	66.1	111,654	-2.2	0.0
Niger	837	-	-	171	12	7.2	259,735	-0.0	0.0
Rwanda	443	-	-	38,674	81	0.2	49,230	-0.0	0.0
Samoa	260	-	-	23	7	31.2	1,555	-	0.0
Sao Tome and Principe	231	-	-	10	1	5.3	8,704	-	0.0
Senegal	1,100	13	1.2	41,349	4,948	12.0	391,677	-25.6	0.0
Sierra Leone	1,740	-	-	10,764	56	0.5	209,298	-0.1	0.0
Solomon Islands	161	-	-	287,027	52,932	18.4	34,516	-	0.0
Somalia	30	-	-	1,697	-3	-0.2	1,834	-	0.0
Sudan	80,620	-	-	6,664,306	1,419	0.0	118,723	-0.0	0.0
Tanzania	2,917	-	-	389,582	5,031	1.3	476,108	-19.5	0.0
Togo	3,084	-0	-0.0	54,090	136	0.3	293,446	-0.1	0.0
Tuvalu	-	-	na	0	-	0.0	122	-	0.0
Uganda	3,717	-	-	26,143	617	2.4	513,889	-38.0	0.0
Vanuatu	832	-	-	660	165	25.1	259,368	-	0.0
Yemen	107	-	-	2,778,084	-		233,093	-38.6	0.0
Zambia	1,307	-		2,538,971	19,634	0.8	28,078,369	-0.2	0.0
LDC total	3,797,536	42	0.0	42,914,193	742,839	1.7	56,156,738	134,045.3	0.2
ROW	376,932,532	-18	-0.0	1,325,884,791	-89,095	0.0	1,836,928,135	-42,532.1	0.0
Total	380,727,636	20	0.0	1,368,798,984	407,763	0.0	1,893,084,873	31,869.1	0.0

Source: Data from WITS TRAINS.
Notes: Estimates using Smart Model in WITS, based on Laird and Yeats (1990).

Table 13. *Continued*

LDC	India			Japan			Korea		
	Imports 2010 $'000	Change $'000	Change %	Imports 2010 $'000	Change $'000	Change %	Imports 2010 $'000	Change $'000	Change %
Afghanistan				913	6	0.7	111	13.3	12.0
Angola				48,206	-	0.0	118,155	4,257.9	3.6
Bangladesh				524,598	54	0.0	121,944	90,028.0	73.8
Benin				11	-	0.0	1,653	0.1	0.0
Bhutan	495,781	-571.5	-0.1	719	-	0.0	13	38.8	288.8
Burkina Faso		-		38,642	-	0.0	1	0.2	20.8
Burundi		-		165	-	0.0	2	-	0.0
Cambodia		-		283,385	307	0.1	18,202	743.8	4.1
Central African Republic		-		2,908	-1	0.0	567	-	0.0
Chad		-		977	-	0.0	5	-	0.0
Comoros		-		34	1	4.1	0	0.0	5.5
Congo, Dem. Rep.		-		11,216	-	0.0	22,848	0.1	0.0
Djibouti		-		-	-	-	0.652	-	0.0
East Timor		-		100,737	-	0.0	34,414	-	
Equatorial Guinea		-		1,562,425	-	0.0	700,627	-	0.0
Eritrea		-		634	-	0.0	12	-	0.0
Ethiopia(excludes Eritrea)	15,371	9,865.2	64.2	21,060	147	0.7	14,796	20,559.2	139.0
Gambia, The		-		6	-	0.0	2	-	0.0
Guinea		-		-	-	-	37,097	2,609.6	7.0
Guinea-Bissau		-		2,978	159	5.3	314	60.7	19.3
Haiti		-		2,133	-	0.0	414	56.8	13.7
Kiribati		-		14,000	-	0.0	5,210	24.6	0.5
Lao PDR		-		53,262	1,303	2.4	17,529	25.5	0.1
Lesotho		-		2,524	-	0.0	72	0.7	1.0
Liberia		-		-	-	-	719	19.1	2.7
Madagascar	10,494	4,114.1	39.2	40,181	1	0.0	1,767	185.5	10.5

Table 13. *Continued*

LDC	India			Japan			Korea		
	Imports 2010	Change		Imports 2010	Change		Imports 2010	Change	
	$'000	$'000	%	$'000	$'000	%	$'000	$'000	%
Malawi	2,845	2,229.5	78.4	76,665	-	0.0	31,259	14.7	0.0
Mali	9,899	87.6	0.9	2,034	-	0.0	10,022	1,753.5	17.5
Mauritania		-		284,541	2	0.0	5,734	222.6	3.9
Mozambique		-		58,610	-	0.0	4,518	53.2	1.2
Myanmar		-		681,846	3,067	0.4	78,350	15,018.7	19.2
Nepal		-		22,149	16	0.1	1,063	34.5	3.2
Niger	405	218.8	54.1	395	-	0.0	130	3.5	2.7
Rwanda	13,006	6,280.3	48.3	1,052	-	0.0	34	0.0	0.1
Samoa		-		1,832	5	0.3	981	221.2	22.5
Sao Tome and Principe		-		55	-	0.0	13	1.4	10.3
Senegal	251,981	37,596.4	14.9	19,765	1,081	5.5	6,589	1,781.9	27.0
Sierra Leone		-		8,630	-	0.0	658	8.6	1.3
Solomon Islands		-		13,414	-	0.0	12,696	4.8	0.0
Somalia		-		162	3	1.8	-	-	0.0
Sudan	72,587	6,587.5	9.1	2,153,008	9	0.0	14,638	22,756.8	155.5
Tanzania		-		279,802	502	0.2	10,838	8.0	0.1
Togo		-		1,287	-	0.0	18,083	1.9	0.0
Tuvalu		-		228	-	0.0	1	-	0.0
Uganda	18,735	100,267.9	535.2	11,640	128	1.1	4,428	112.9	2.5
Vanuatu		-		50,888	126	0.2	1,595	929.4	58.3
Yemen		-		644,369	1,196	0.2	52,734	41.0	0.1
Zambia	32,425	10,730.6	33.1	46,744	-	0.0	359,399	4.0	0.0
LDC total	923,529	200,304.4	21.7	7,070,827.0	8,114.0	0.1	1,710,239	221,080.0	12.9
ROW	187,115,500	-42,644.4	0.0	1,074,405,091.7	-3,766.9	-0.0	321,302,688	132,813.7	0.0
Total	188,039,030	155,136.0	0.1	1,081,475,918.6	4,347.1	0.0	323,012,927	133,523.0	0.0

Table 13. *Continued*

LDC	USA			Total		
	Imports 2010 $'000	Change		Imports 2010 $'000	Change	
		$'000	%		$'000	%
Afghanistan	13,312	109.5	0.8	70,672	2,640	3.7
Angola	9,702,112	1.0	0.0	39,356,905	9,277	0.0
Bangladesh	3,878,684	860,956.8	22.2	14,326,260	1,119,040	7.8
Benin	448	1.7	0.4	107,685	38	0.0
Bhutan	204	0.2	0.1	497,982	-532	-0.1
Burkina Faso	1,105	308.4	27.9	179,043	309	0.2
Burundi	4,220	1.0	0.0	46,420	2	0.0
Cambodia	2,001,392	556,716.2	27.8	3,902,412	575,823	14.8
Central African Republic	3,406	0.2	0.0	87,557	-0	0.0
Chad	2,051,983	-0.1	0.0	2,833,061	9	0.0
Comoros	1,141	-	0.0	11,683	11	0.1
Congo, Dem. Rep.	338,420	5.8	0.0	3,432,266	16,555	0.5
Djibouti	1,455	-	0.0	13,775	9	0.1
East Timor	-	-		147,869	-	0.0
Equatorial Guinea	2,574,534	-	0.0	9,116,998	35	0.0
Eritrea	522	8.1	1.6	7,281	45	0.6
Ethiopia(excludes Eritrea)	101,312	-89.6	-0.1	1,086,336	32,492	3.0
Gambia, The	1,361	31.4	2.3	39,627	39	0.1
Guinea	93,011	42.4	0.0	857,166	2,741	0.3
Guinea-Bissau	44	-	0.0	14,685	223	1.5
Haiti	552,815	118,375.7	21.4	620,468	119,000	19.2
Kiribati	1,290	-	0.0	20,696	25	0.1
Lao PDR	45,419	7,062.5	15.5	913,915	55,284	6.0
Lesotho	312,515	-5,739.6	-1.8	520,286	-5,125	-1.0
Liberia	83,925	27.9	0.0	596,354	2,622	0.4
Madagascar	265,226	-3,738.5	-1.4	1,108,165	6,323	0.6

Table 13. *Continued*

LDC	USA			Total		
	Imports 2010 $'000	Change		Imports 2010 $'000	Change	
		$'000	%		$'000	%
Malawi	69,426	75,867.2	109.3	581,719	90,490	15.6
Mali	3,215	42.9	1.3	87,912	1,855	2.1
Mauritania	36,365	2.6	0.0	1,995,223	212	0.0
Mozambique	39,154	2,044.3	5.2	2,111,548	2,400	0.1
Myanmar	91	4.6	5.1	1,934,155	115,314	6.0
Nepal	57,474	4,355.9	7.6	218,683	11,947	5.5
Niger	102,490	2.3	0.0	364,162	237	0.1
Rwanda	19,653	46.0	0.2	122,091	6,408	5.2
Samoa	3,324	79.2	2.4	7,975	313	3.9
Sao Tome and Principe	184	-	0.0	9,198	2	0.0
Senegal	5,243	80.3	1.5	717,704	45,476	6.3
Sierra Leone	28,449	1.0	0.0	259,540	66	0.0
Solomon Islands	971	-	0.0	348,784	52,937	15.2
Somalia	196	2.1	1.0	3,919	2	0.0
Sudan	10,732	2.7	0.0	9,114,615	30,775	0.3
Tanzania	48,922	6.1	0.0	1,208,170	5,528	0.5
Togo	6,827	2.0	0.0	376,818	140	0.0
Tuvalu	93	-	0.0	443	-	0.0
Uganda	32,041	68.3	0.2	610,593	101,156	16.6
Vanuatu	1,833	2.6	0.1	315,176	1,223	0.4
Yemen	4,521	26.8	0.6	3,712,909	1,225	0.0
Zambia	8,454	65.0	0.8	31,065,670	30,434	0.1
LDC total	22,509,511	2,658,889.3	11.8	135,082,573	3,965,313	2.9
ROW	1,418,383,124	-1,285,258.3	-0.1	6,540,951,861	-1,330,501	-0.0
Total	1,440,892,634	1,066,566.9	0.1	6,676,032,002	1,799,224.8	0.0

The estimated overall increase in LDC exports to the selected markets is 2. 9 per cent, with important variations across these selected markets. For example, in the Canadian and EU markets the increase is very small but positive. This is also the case for China, where the rates facing LDCs are very low on average.[56] However, LDCs could make important increases in exports to the Indian, Korean and US markets – 21.7 percent, 12.9 per cent and 11.8 percent, respectively – a combined increase of over US$5 billion. With regard to the US market, Bangladesh, Cambodia and Haiti stand to gain the most as they currently face MFN tariffs on a substantial proportion of their textiles and clothing exports. Malawi would also benefit (mainly tobacco). There are few losses (less than 2 percent), notably for Lesotho and Madagascar, most likely linked to trade diversion in textiles and clothing to Asian LDCs. In short, there is still much to be gained by improving existing market access by eliminating tariffs for LDCs products. The impact would be even great if non-tariff measures affecting access were also addressed.

These results are similar to those of other recent studies, summarised by Elliot (2010), based on calculations by Bouetet al. (2010) and Laborde (2008). Elliot compares the results from general and partial equilibrium models based on extending DFQF treatment to 97 per cent and 100 per cent in OECD markets (including Korea),and introducing full market access for LDCs in Brazil, India and China. Elliot states that the results confirm previous research showing essentially no gains for LDCs from 97 per cent coverage, and significant gains for several countries from full coverage. She notes that "while the magnitude of the gains […]may seem small, they are large relative to similarly estimated gainsfrom either the Doha Round or even from moving to global free trade."She also notes that the general equilibrium approach tends to produce conservative estimates. A less conservative approach, however, shows that for WTO-member LDCs overall export gains could be as high as US$2 billion. Potential gains would be much larger if Brazil, India and China were to provide full market access for LDCs as well.

Laborde (2008) provides detailed estimates of the impact of extending DFQF schemes to 97 per cent and to 100 per cent. He finds that even extending preferences to 97 per cent of tariff lines would deliver real market gains, mainly in the US market. On the basis of 97 per cent coverage, "in the US market access gains prevail: Bangladesh (US$369 million), Nepal (23. 4 million), Cambodia (288 million), the Maldives (10 million), Mali (11 million). Burkina Faso (24 million), Niger (6 million), Senegal (1 million) and Haiti (75 million) would increase their exports by US$806 million (6 per cent). However, Lesotho and Mozambique face a difficult destiny, with exports to the US projected to fall by nearly 25 per cent. For Madagascar, [the decline in exports to the US] would amount to 14 per-cent; for Malawi, 10 percent." Laborde also estimates that moving to 100 per cent coverage "has positive or null impacts in nearly all the cases. The only real negative effects appear in the US for exports from Lesotho and Madagascar, which would suffer from increased competition from Asian LDCs."

Elliot (*op. cit.*) states that results from modelling full DFQF treatment tend to show relatively smaller gains for African LDCs, but that is not surprising since they generally have good access to their major markets.[57] Elliot considers that the gains for Africa, and others, are likely to be understated because they do not incorporate the potential impact of loosening rules of origin in the EU and other markets where LDCs supposedly enjoy free market access. In Elliot's reported results the only negative effect among LDCs is for Madagascar, where it is extremely small (-0.03 per cent of exports), somewhat less than the results in Table 13. Elliot considers that there is no evidence to suggest that Africa will lose out overall if the United States extends DFQF market access to other LDCs as long as it is part of a wider set of global reforms. Expanding US preferences to Asian LDCs would, however, have substantial positive effects on their exports, again consistent with the estimates in Table 13.

Elliot also notes that the possible impact of 100 per cent DFQF on preference-giving countries is basically nil, even in sensitive sectors. She does not find this surprising as LDCs account for less than 1 per cent of non-oil imports in rich countries. Even in the United States, which would have to make the greatest changes to introduce a 100-per cent DFQF policy, textile production is estimated to fall by 0.45 per cent and apparel production by less.

5.3 What is the Likely Impact of Doha?

Turning to the Doha negotiations, it is difficult to assess the impact of the implementation of the kind of packages that are on the table, since they contain a large number of options and flexibilities, both in agriculture and an non-agricultural market access NAMA. However, several studies have looked at possible Doha scenarios. These shed some light on the potential impact.[58] The compilation by Hoekman *et al.* (2009) contains a number of studies that examine possible preference losses under various Doha scenarios. For example, one of them by Low et al. (2009a) concludes that, while developing countries as a whole would gain from NAMA liberalisation along the lines of a Swiss formula, LDCs would suffer a net loss of US$170 million due to their dependence on preferences. In this study, the losers include Bangladesh, Cambodia, Haiti, Lesotho and Madagascar. The explanation given is that "much of the preference erosion problem appears to arise from preferences on clothing."[59] In their study on agriculture, Low *et al.* (2009b) find that while developing country gains from multilateral liberalisation could amount to US$267 million, just US$10.4 million would accrue to LDCs. The authors note that "the risk of preference erosion is much more concentrated in terms of countries and products than it is for non-agricultural products, with bananas, sugar and beverages and spirits accounting for more share of the potential losses."Van der Mensbrugghe (2009), in the same compilation, however, finds that the "lowest income countries as a group would benefit from high-income countries setting all tariffs to zero."

One study (Viborny, 2007) that focuses on the impact of Doha on Africa suggests welfare losses for Sub-Saharan Africa (other than South Africa) unless 100 per cent duty- and quota-free access for LDCs is allowed. After examining estimates of the possible effects of a range of proposals by various international organisations and research institutes, Viborny states: "a range of possible cuts in trade barriers that could be achieved in a realistic Doha Round, while allowing some African countries and sectors to gain, will likely cause many African countries to experience net losses."These estimates are provided in Table 14.

Table 14. Welfare gains and losses for African Countries from Doha Scenarios

Model	Country/Region	Gains or Losses from Plausible Doha Round	
		Millions of Dollars	Per cent of GDP
Carnegie	South Africa	284	0.00
	East Africa (Tanzania, Uganda, Malawi)	-134	-0.01
	Rest of Sub-Saharan Africa	-197	0.00
Composite World Bank	South Africa	600	0.01
	Selected Sub- Sahara Africa	0	0.00
	Rest of Sub-Saharan Africa	-400	0.00
CEPII	South Africa	360	0.00
	Rest of Sub-Saharan Africa	-370	0.00
IFPRI scenario with basic duty-free, quota-free for LDCs	Madagascar	10	0.00
	Malawi	70	0.04
	Mozambique	0	0.00
	Tanzania	20	0.00
	Uganda	20	0.00
	Zambia	0	0.00
	Rest of Sub-Saharan Africa	-140	0.00
IFPRI scenario with full duty-free quota-free for LDCs	Madagascar	40	0.01
	Malawi	170	6.67
	Mozambique	10	0.00
	Tanzania	100	0.00
	Uganda	30	0.00
	Zambia	40	0.01
	Rest of Sub-Saharan Africa	1,210	0.01

Source: Viborny (2007).

In Viborny's survey, one set of results stands out as it provides positive results for Sub-Saharan Africa. IFPRI has also modelled the application of DFQF treatment to LDCs in accordance with the WTO Hong Kong Ministerial Declaration. "Basic" treatment involves 97 per cent free access, while "full" access has 100-per cent coverage. Both options are markedly better for Sub-Saharan Africa, which would suffer smaller losses than under other scenarios, and actually make small positive gains when duty-free access is extended to 100 per cent.

Viborny (*op. cit.*) also notes that even a 100-per cent duty- and quota-free deal would come at little cost for the US and other developed countries: "in the US even the most sensitive industries, textiles and apparel, experience negligible impact on production from increasing the development package to 100 per cent (0.01 per cent and 0.02 per cent decrease, respectively, over the more limited Doha scenario)."

Cernat *et al.* (2003) note that increased market access for LDCs comes mostly at the expense of other preference-receiving countries, including in Africa, although the changes are modest. In the longer term, supply-side factors constraints rather than market access limitations may be the more important factors and need the urgent attention of the international community. The authors highlight the significance of rice, sugar and bananas as the most important products to be covered in the scheme (these were liberalised later). However, Cernat *et al.* (*op. cit.*) also considered that some scenarios could have an important impact in the US textiles market, especially for Bangladesh. The impact on Africa depends on the widening of benefits:

for example, the extension of DFQF treatment for Bangladesh could erode the value of the preferences that African countries now enjoy under AGOA. However, this would be more than offset by the extension of duty- and quota-free access to other products and more accommodating rules of origin.

Focusing on the EU, Wusheng and Jensen (2005) show a negative impact on LDCs resulting from the erosion of EBA preferences. Under a multilateral trade liberalisation scenario, LDCs may well lose due to preference erosion and higher world market prices. They also argue that “other development assistance measures from developed countries should be made available to LDCs to ease their dependency on trade preferences and to foster their supply capacities.”While suggesting that LDCs need to reform their own trade policies, they also note that “LDCs themselves should attempt to integrate the duty- and quota-free market access status contained in the EBA into a binding WTO agreement to secure a stable trading environment.”

Carrière and de Melo (2009) look at the effects of Doha scenarios on LDCs in the EU and US markets. They find that under various Swiss formulae the impact on the EU market is negligible and negative in the US. However, if the US were to apply a 97 per cent DFQF coverage, then LDCs could expand their exports by about 10 per cent or come US$1 billion annually. (Details are not provided for individual LDCs). They also note that effective market access is reduced by complicated rules of origin.

Most of the studies find overall welfare gains for developing countries from different Doha scenarios, although some countries and products would be negatively affected by preference losses. For example, Alexandraki and Lankes (2004) argue that the impact of preference erosion would be small overall (between 0.5 and 1.2 per cent of total exports of the middle-income countries that they examine), but they note that it could be significant for a subset of “vulnerable” countries, including a number of African countries. They also note that vulnerability to preference erosion is determined overwhelmingly by a country’s export dependence on three products, namely sugar, bananas, and—to a far lesser extent—textiles, as well as on access to Quad[60] preference regimes for these products.

Estimates of the potential impact of Doha have also been carried out for the present report, using a similar approach to estimate the impact of extending DFQF schemes in the selected markets, with results that are comparable to a number of other studies.[61] The estimates are obtained by applying a “policy shock” (i. e. , a simulated change in policy) to LDCs exports to those markets by making some assumptions about the liberalisation scenarios under Doha. Given that industrial products make up over 90 per cent of world trade, a simplifying assumption to get an overall sense of the likely impact of Doha would be to apply the NAMA formula currently on the table for the developed countries, i. e. the so-called Swiss formula[62] with a coefficient of 8. There are several options for developing countries, but again a simplifying assumption might be to apply the Swiss formula with a coefficient of 25 (which under the NAMA text does not allow for exclusions). Under these assumptions and the standard setting of the SMART model within WITS, the estimated impact of Doha on LDC exports is shown in Table 15.[63]

Table 15. Effects of possible DDA scenarios on LDCs by selected Donors (est.)

LDC	Canada			China		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Change under Swiss 25	
		$'000	%		$'000	%
Afghanistan	1,640	-9	-0.6	3,683	1,995	54.2
Angola	1,576,378	1	0.0	22,810,098	1,124	0.0
Bangladesh	811,301	-82,970	-10.2	268,157	194,686	72.6
Benin	12	-0	-0.2	70,894	-127	-0.2
Bhutan	44	-1	-2.7	13	-	0.0
Burkina Faso	22,154	-4	0.0	4,384	0	0.0
Burundi	50	-0	0.0	3,458	-20	-0.6
Cambodia	346,788	-39,046	-11.3	94,343	5,190	5.5
Central African Republic	108	-0	-0.3	25,123	0	0.0
Chad	1,053	-0	0.0	493,374	-2	0.0
Comoros	140	-0	-0.1	24	5	21.3
Congo, Dem. Rep.	733	-0	-0.1	2,472,319	12,824	0.5
Djibouti	10	-0	-0.1	691	-21	-3.0
East Timor	1,989	1,989	0.1	250	48	19.3
Equatorial Guinea	652,036	-0	0.0	598,657	7	0.0
Eritrea	251	5	1.8	1,054	-65	-6.1
Ethiopia (excludes Eritrea)	14,665	-14	-0.1	273,513	-1,814	-0.7
Gambia, The	224	-0	0.0	14,862	7	0.0
Guinea	46,909	-2	0.0	54,997	44	0.1
Guinea-Bissau	14	-0	-0.1	3,869	2	0.1
Haiti	25,331	-1,877	-7.4	5,950	268	4.5
Kiribati	28	-1	-3.2	5	0	0.0
Lao PDR	7,851	-810	-10.3	564,747	20,098	3.6
Lesotho	16,359	-1,713	-10.5	4,313	271	6.3
Liberia	36,937	-0	0.0	22,617	1,011	4.5
Madagascar	49,036	-795	-1.6	105,283	2,802	2.7

Table 15. *Continued*

LDC	Canada			China		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Change under Swiss 25	
		$'000	%		$'000	%
Malawi	71,022	-24	0.0	21,074	9,714	46.1
Mali	585	-2	-0.3	26,678	-734	-2.7
Mauritania	185	-1	-0.6	966,979	-265	0.0
Mozambique	1,372	-3	-0.2	198,072	19	0.0
Myanmar	14	-1	-7.3	961,741	3,856	0.4
Nepal	14,929	-663	-4.4	11,415	6,595	57.8
Niger	837	-3	-0.4	171	9	5.1
Rwanda	443	442	-0.4	38,674	-98	-0.3
Samoa	260	-0	0.0	23	4	18.5
Sao Tome and Principe	231	-0	0.0	10	0	1.9
Senegal	1,100	2	0.2	41,349	1,457	3.5
Sierra Leone	1,740	-11	-0.6	10,764	-15	-0.1
Solomon Islands	161	-0	-0.1	287,027	39,429	13.7
Somalia	30	-0	-0.2	1,697	-160	-9.4
Sudan	80,620	-2	0.0	6,664,306	-425	0.0
Tanzania	2,917	-15	-0.5	389,582	2,118	0.5
Togo	3,084	-6	-0.2	54,090	-70	-0.1
Tuvalu	-	-	na	0	-	0.0
Uganda	3,717	-1	0.0	26,143	-534	-2.0
Vanuatu	832	-10	-1.2	660	115	17.4
Yemen	107	-0	-0.2	2,778,084	22,656	0.8
Zambia	1,307	-1	-0.1	2,538,971	9,967	0.4
LDCs	3,797,536	-127,979	-3.4	42,914,193	331,974	0.8
ROW	376,932,532	1,635,452	0.4	1325884791	86,654,842	6.5
World	380,727,636	1,507,473	0.4	1368798984	86,986,816	6.4

Table 15. *Continued*

LDC	EU			India		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Change under Swiss 25	
		$'000	%		$'000	%
Afghanistan	51 013	-180	-0,4			
Angola	5 101 955	-449	0,0			
Bangladesh	8 721 575	-422 428	-4,8			
Benin	34 668	-33	-0,1			
Bhutan	1 209	-19	-1,6	495 781	-1 085	-0,2
Burkina Faso	112 758	-99	-0,1			
Burundi	38 524	-14	0,0			
Cambodia	1 158 301	-76 639	-6,6			
Central African Republic	55 444	-15	0,0			
Chad	285 669	-13	0,0			
Comoros	10 343	-37	-0,4			
Congo, Dem. Rep.	586 729	-362	-0,1			
Djibouti	11 619	-18	-0,2			
East Timor	10 478	-0	0,0			
Equatorial Guinea	3 028 720	-133	0,0			
Eritrea	4 808	-103	-2,1			
Ethiopia (excludes Eritrea)	645 620	-1 383	-0,2	15 371	1 148	7,5
Gambia, The	23 172	-86	-0,4			
Guinea	625 153	-94	0,0			
Guinea-Bissau	7 465	-5	-0,1			
Haiti	33 825	-337	-1,0			
Kiribati	162	-1	-0,5			
Lao PDR	225 107	-9 985	-4,4			
Lesotho	184 504	-111	-0,1			
Liberia	452 155	-326	-0,1			
Madagascar	636 179	-21 123	-3,3	10 494	1 030	9,8

Table 15. *Continued*

LDC	EU			India		
	Imports 2010 $’000	Change under Swiss 8		Imports 2010 $’000	Change under Swiss 25	
		$’000	%		$’000	%
Malawi	309 428	-64	0,0	2 845	552	19,4
Mali	35 479	-57	-0,2	9 899	11	0,1
Mauritania	701 420	-987	-0,1			
Mozambique	1 809 822	-1 257	-0,1			
Myanmar	212 112	18 255	8,6			
Nepal	111 654	-4 202	-3,8			
Niger	259 735	-22	0,0	405	60	14,8
Rwanda	49 230	-10	0,0	13 006	-	0,0
Samoa	1 555	-30	-1,9			
Sao Tome and Principe	8 704	-9	-0,1			
Senegal	391 677	-2 815	-0,7	251 981	569	0,2
Sierra Leone	209 298	-61	0,0			
Solomon Islands	34 516	-897	-2,6			
Somalia	1 834	-8	-0,4			
Sudan	118 723	-42	0,0	72 587	-10	0,0
Tanzania	476 108	-1 564	-0,3			
Togo	293 446	-81	0,0			
Tuvalu	122	-1	-1,2			
Uganda	513 889	-842	-0,2	18 735	69 180	369,3
Vanuatu	259 368	-65	0,0			
Yemen	233 093	-465	-0,2			
Zambia	28 078 369	-347	0,0	32 425	0	0,0
LDCs	56 156 738	-529 563	-0,9	923 529	71 455	7,7
ROW	1 836 928 135	18 478 943	1,0	187 115 500	1 890 283	1,0
World	1 893 084 873	17 949 381	0,9	188 039 030	1 961 738	1,0

Table 15. *Continued*

LDC	Japan			Korea		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Change under Swiss 25	
		$'000	%		$'000	%
Afghanistan	913	-4	-0,4	111	3	2,7
Angola	48 206	-1	0,0	118 155	1 945	1,6
Bangladesh	524 598	-37 342	-7,1	121 944	102 245	83,8
Benin	11	-0	-1,7	1 653	0	0,0
Bhutan	719	-0	-0,1	13	34	250,4
Burkina Faso	38 642	-1	0,0	1	0	5,4
Burundi	165	-3	-1,6	2	-0	-2,2
Cambodia	283 385	-40 268	-14,2	18 202	-1 099	-6,0
Central African Republic	2 908	-5	-0,2	567	-7	-1,3
Chad	977	-	0,0	5	-1	-10,2
Comoros	34	0	0,7	0	0	0,3
Congo, Dem. Rep.	11 216	-1	0,0	22 848	-844	-3,7
Djibouti	-	-	-	0,652	-0,053	-8,1
East Timor	100 737	-150	-0,1	34 414	658	1,9
Equatorial Guinea	1 562 425	-	0,0	700 627	-19 701	-2,8
Eritrea	634	-	0,0	12	-2	-16,7
Ethiopia (excludes Eritrea)	21 060	-209	-1,0	14 796	8 361	56,5
Gambia, The	6	-0	-2,5	2	-0	-11,2
Guinea	2 978	-73	-2,5	37 097	415	1,1
Guinea-Bissau	-	-	-	314	24	7,6
Haiti	2 133	-77	-3,6	414	14	3,3
Kiribati	14 000	-180	-1,3	5 210	18	0,3
Lao PDR	53 262	-1 711	-3,2	17 529	-151	-0,9
Lesotho	2 524	-175	-6,9	72	-7	-10,3
Liberia	1 798	-46	-2,5	719	3	0,4
Madagascar	40 181	-390	-1,0	1 767	-26	-1,5

Table 15. *Continued*

LDC	Japan			Korea		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Change under Swiss 25	
		$'000	%		$'000	%
Malawi	76 665	-123	-0,2	31 259	-6 853	-21,9
Mali	2 034	-12	-0,6	10 022	869	8,7
Mauritania	284 541	-6 343	-2,2	5 734	-1 203	-21,0
Mozambique	58 610	-47	-0,1	4 518	-326	-7,2
Myanmar	681 846	-45 984	-6,7	78 350	3 932	5,0
Nepal	22 149	-403	-1,8	1 063	-74	-7,0
Niger	395	-3	-0,8	130	-11	-8,9
Rwanda	1 052	-6	-0,6	34	-3	-8,8
Samoa	1 832	-53	-2,9	981	66	6,7
Sao Tome and Principe	55	-	0,0	13	-0	-3,4
Senegal	19 765	-243	-1,2	6 589	555	8,4
Sierra Leone	8 630	-1	0,0	658	-57	-8,6
Solomon Islands	13 414	-31	-0,2	12 696	-6	-0,1
Somalia	162	-3	-1,5	-	-	0,0
Sudan	2 153 008	-34	0,0	14 638	8 617	58,9
Tanzania	279 802	-515	-0,2	10 838	-284	-2,6
Togo	1 287	-3	-0,2	18 083	-387	-2,1
Tuvalu	228	-3	-1,3	1	-	0,0
Uganda	11 640	-103	-0,9	4 428	-751	-17,0
Vanuatu	50 888	-1 356	-2,7	1 595	726	45,5
Yemen				52 734	-1 404	-2,7
Zambia	46 744	-24	-0	359 399	-12 715	-3,5
LDCs	6 428 256	-135 928	-2	1 710 239	82 568	4,8
ROW	1 075 047 662	12 414 377	1	321 302 688	41 976 152	13,1
World	1 081 475 919	12 278 449	1	323 012 927	42 058 720	13,0

Table 15. *Continued*

LDC	USA			Total		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Total estimated for selected markets	
		$'000	%		$'000	%
Afghanistan	13 312	-23	-0,2	70 672	1 783	2,5
Angola	9 702 112	-2 530	0,0	39 356 905	89	0,0
Bangladesh	3 878 684	288 567	7,4	14 326 260	42 756	0,3
Benin	448	-0	-0,1	107 685	-161	-0,1
Bhutan	204	-2	-0,8	497 982	-1 073	-0,2
Burkina Faso	1 105	140	12,7	179 043	37	0,0
Burundi	4 220	0	0,0	46 420	-37	-0,1
Cambodia	2 001 392	200 749	10,0	3 902 412	48 887	1,3
Central African Republic	3 406	-1	0,0	87 557	-29	0,0
Chad	2 051 983	-1 133	-0,1	2 833 061	-1 149	0,0
Comoros	1 141	-0	0,0	11 683	-32	-0,3
Congo, Dem. Rep.	338 420	-6	0,0	3 432 266	11 611	0,3
Djibouti	1 455	-0	0,0	13 775	-39	-0,3
East Timor	-	-	0,0	147 869	2 545	1,7
Equatorial Guinea	2 574 534	-119	0,0	9 116 998	-19 945	-0,2
Eritrea	522	2	0,4	7 281	-164	-2,2
Ethiopia (excludes Eritrea)	101 312	-905	-0,9	1 086 336	5 185	0,5
Gambia, The	1 361	11	0,8	39 627	-68	-0,2
Guinea	93 011	9	0,0	860 144	300	0,0
Guinea-Bissau	44	-	0,0	11 707	21	0,2
Haiti	552 815	42 439	7,7	620 468	40 429	6,5
Kiribati	1 290	-6	-0,5	20 696	-170	-0,8
Lao PDR	45 419	2 118	4,7	913 915	9 559	1,0
Lesotho	312 515	-22 963	-7,3	520 286	-24 698	-4,7
Liberia	83 925	-17	0,0	598 152	625	0,1
Madagascar	265 226	-18 156	-6,8	1 108 165	-36 657	-3,3

Table 15. *Continued*

LDC	USA			Total		
	Imports 2010 $'000	Change under Swiss 8		Imports 2010 $'000	Total estimated for selected markets	
		$'000	%		$'000	%
Malawi	69 426	42 375	61,0	581 719	45 576	7,8
Mali	3 215	3	0,1	87 912	79	0,1
Mauritania	36 365	-0	0,0	1 995 223	-8 799	-0,4
Mozambique	39 154	881	2,2	2 111 548	-733	0,0
Myanmar	91	-	0,0	1 934 155	-19 942	-1,0
Nepal	57 474	849	1,5	218 683	2 102	1,0
Niger	102 490	-3 509	-3,4	364 162	-3 479	-1,0
Rwanda	19 653	-26	-0,1	122 091	299	0,2
Samoa	3 324	-5	-0,1	7 975	-18	-0,2
Sao Tome and Principe	184	-1	-0,5	9 198	-10	-0,1
Senegal	5 243	-33	-0,6	717 704	-509	-0,1
Sierra Leone	28 449	-27	-0,1	259 540	-172	-0,1
Solomon Islands	971	-0	0,0	348 784	38 495	11,0
Somalia	196	1	0,4	3 919	-170	-4,3
Sudan	10 732	1	0,0	9 114 615	8 105	0,1
Tanzania	48 922	-152	-0,3	1 208 170	-412	0,0
Togo	6 827	-3	0,0	376 818	-550	-0,1
Tuvalu	93	-0	-0,4	443	-5	-1,1
Uganda	32 041	-4	0,0	610 593	66 945	11,0
Vanuatu	1 833	-6	-0,3	315 176	-595	-0,2
Yemen	4 521	9	0,2	3 068 540	20 796	0,7
Zambia	8 454	10	0,1	31 065 670	-3 111	0,0
LDCs	22 509 511	528 538	0,1	134 440 002	221 065	0,2
ROW	1 418 383 124	22 095 919	0,1	6 541 594 432	185 145 968	2,8
World	1 440 892 634	22 624 457	1,6	6 676 032 002	185 367 033	2,8

Source: Data from WITS TRAINS.

Notes: Estimates using Smart Model in WITS, based on Laird and Yeats (1990).

Overall, there is a very small increase of 0.2 per cent in LDC exports, with important variations between markets. As might be expected, there is a net, albeit very small, decline in estimated LDC exports to the Canadian and EU markets as a result of preference erosion, although Bangladesh is a major loser. In the US, there is almost no change in the aggregate, but Bangladesh and Cambodia gain significantly, while significant losses are estimated for Lesotho and Madagascar, which have been important beneficiaries under AGOA. The estimates also show modest but useful gains for LDC exports in the Chinese, Indian and Korean markets.

LDCs would gain in all but two of the selected markets if full tariff liberalisation were to be extended under Doha. The EU and Canada are exceptions as losses under Doha would only be partially covered by the gains from full tariff liberalisation. However, some important resourcing occurs under both scenarios, notably in favour of Bangladesh and Cambodia, while AGOA beneficiaries would experience some losses.

6. CONCLUSIONS

The idea of trade preferences for LDCs is to contribute to development through the expansion of exports from beneficiary countries by generating increased investment, growth and employment, and the diversifying the production base away from a heavy reliance on the production of primary commodities. Trade preferences help stimulate demand from LDCs and complement efforts to lift their trade and production capabilities through aid for trade and direct technical advice.

Preference schemes offered by large developed countries have evolved into duty- and quota-free systems covering most LDC imports, with some notable exceptions. These have now been supplemented by similar schemes established by the larger developing countries, which have substantially expanded them in recent years.

LDCs' improved trade and economic performance over the last ten years is testimony to the efforts made to address both supply-side and market access issues. While it is very difficult to be precise about the impact of these measures, it is not unreasonable to conclude that preferences and better-targeted aid for trade have contributed to this result. Of course, there has been considerable variation in the performance of individual LDCs, mainly because of fluctuating prices of oil, ores and metals, as well as gold, which have become important for some LDCs. However, a number of countries that do not export oil or other commodities have also seen rapid expansion of exports, including Asian producers of textiles and clothing

Can more be done? Various studies, including the analysis in this report, show that there is scope for further improvements (not to mention more and better-focused aid for trade). In the longer term, progressive MFN liberalisation is inevitable, but the temporary competitive 'edge' provided by preferences can boost LDCs' exports.

Some improvements could be made to the various preferential schemes, as the preference-granting countries themselves have recognised. Greater simplicity and stability of coverage would help, as would improved rules of origin, more transparent "graduation" or competitive needs exclusions, and so on. The fact that the schemes are unilaterally granted and can be withdrawn without any justification in the WTO causes some uncertainty that may deter investors. This has led to some proposals that the schemes should somehow be "bound," although it is not clear how this could be done under existing WTO rules. To some degree, the idea of laying out the scope of the schemes for an extended period, say ten years – as is the case for Japan and the planned revision of the EU scheme – could help give some assurances of stability, as well as send a signal to investors that would benefit efforts to build LDCs' supply capacity

Similarly, it would be helpful to the perceived transparency and stability of LDC DFQF programmes if objective rules were used to cover graduation, or the exclusion of specific products from particular LDCs.

The UN classification of LDCs would probably be the best criterion for country graduation. Although it seems slow to adjust to the recent growth of incomes in some resource-rich LDCs, the classification is designed to take account of wider development factors than income alone. It would also be helpful if, like the broader GSPs, the schemes were generalised and non-discriminatory between LDCs. It should also be clarified that graduation from LDC status should only imply movement to the wider GSP scheme, and not complete exclusion from preferences. It would also be helpful to have some transition period to assist graduating LDCs in adjusting to less advantageous treatment.

Should a country providing DFQF treatment for LDCs decide that domestic industries are facing pressure from imports from LDCs, criteria similar to other WTO contingency measures might be used, including, safeguards, anti-dumping, countervailing measures. Transparency could be improved by requiring notification to the WTO, as well as some kind of consultative or even appellate mechanism to take account of

LDC's concerns. If it were nonetheless decided that some form of country/product exclusions were essential, it should be possible to develop an objective criterion, such as the measure of Revealed Comparative Advantage (RCA), perhaps measured across three years. Of course, in sensitive sectors, there is always heavy resistance to further liberalisation, e. g. textiles and clothing in the US market, but this is a case for phasing in the DFQF provisions and/or providing some form of adjustment assistance to domestic industries whose comparative advantage may be on the wane.

In the design of any preference scheme intended to benefit LDCs it may be useful to take account of concerns that have been previously highlighted by the WTO with respect to GSP.[64] For example, to the degree possible, the exclusion of products of particular export interest for LDCs should be avoided, including agricultural goods, and textiles and clothing items, particularly in light of the availability of WTO contingency measures.

Within the WTO, developing countries have also argued that the withdrawal, or the threat of withdrawal, of preferences should not be used as leverage to obtain non-trade objectives (*op. cit.*). Examples include linking benefits to the application of environmental and social (labour) standards, protection of intellectual property rights and efforts to fight drug trafficking

Looking to the future, the current WTO negotiations are likely to have positive and negative effects on the LDCs. The erosion of preferences is inevitable in the major developed markets, al-though in some cases the application of the proposed formula without exceptions will improve ac-cess for countries such as Bangladesh, which faces high MFN rates on its exports to the US and Canadian markets. In the major developing countries, MFN tariffs will remain substantial, with some variation associated with the application of the formulae and the various flexibilities in agriculture and NAMA. This leaves scope for the exploitation of preferences by LDCs through DFQF schemes in those countries.

While LDCs are not obliged to undertake any commitments under the DDA, they will be affected by the loss of preferences (except in cases where they face MFN rates, as noted above). They will also face a decline in their terms of trade (for example as food prices rise when export subsidies are removed). This will cause LDCs some adjustment problems, which will exacerbate those that some currently face under EPAs, which require them to provide reciprocal tariff reductions to their developed country partners. Extended implementation periods for MFN tariff cuts and EPA commitments will help adjustment to the new trading realities.

There is a continued need to build LDCs' supply capacity so they can meet the challenges of adjustment and take advantage of the opportunities that are opening up. For this, national action will not suffice, particularly in the case of countries that face severe structural, human and institutional handicaps. Recalibrating and strengthening of development co-operation is called for in order to provide a sharper and sustained focus to the removal of these constraints, complemented by substantially improved market access and market entry conditions. As Pascal Lamy acknowledged when he announced the EU's EBA initiative, "duty-free access alone is not enough to enable the poorest countries to benefit from liberalised trade. We need to help them build their capacity to supply goods of export quality and we reaffirm the Commission's commitment to continued technical and financial assistance to this end" (European Commission, 2000).

ENDNOTES

1 NAMA is a good approximation to the overall effects of a successful Doha Round since industrial products represent over 90 per cent of world trade.

2 As this report was going to print, the WTO published preliminary trade data for 2011, confirming the positive performance of LDCs as discussed in this paper. See also WTO (2012).

3 The trade development linkage is complex. It has been debated extensively in numerous articles. See, for ex-ample, Rodriguez, F. and D. Rodrik (2001) and Sachs, J. and W. Warner (1995).

4 The Singapore Ministerial Declaration, paragraph 14, states "We remain concerned by the problems of the least-developed countries and have agreed to: a Plan of Action, including provision for taking positive measures, for example duty-free access, on an autonomous basis, aimed at improving their overall capacity to respond to the opportunities offered by the trading system [...]."

5 UN Document A/CONF.191/11, paragraph 65.

6 Conference resolution 21 (II).

7 The EBA was later incorporated into the GSP Council Regulation (EC) No 2501/2001, which foresees that the special ar-rangements for LDCs should be maintained for an unlimited period of time and not be subject to the periodic renewal of the Community's scheme of generalised preferences.

8 (UN, 2011), "Outcome of the Fourth United Nations Conference on the Least Developed Countries," Report of the Secretary-General (UN document A/66/134 of 13 July 2011).

9 BISD 18S/24.

10 L/4903 (BISD 26S/203). The Enabling Clause does not provide legal cover for non-reciprocal, country-selective preference schemes, such as the EU's preferential treatment for ACP countries, or the US and Canada's schemes in favour of Caribbean countries. These are covered by time-limited waivers from GATT Article I, and require WTO approval for renewal.

11 On the other hand, the Enabling Clause does permit (asymmetrical) reciprocal preferences among developing countries, including LDCs with provisions for limited coverage and extended implementation periods.

12 These cases are discussed in Taslim (2006).

13 The summary record may be found at: http://www.unohrlls.org/UserFiles/File/LDC%20Documents/AHWG%20on%20smooth%20transition/SUMMARY%20RECORD%20AHWG%2016%20Feb%202012%20WEB(1).pdf

14 Canada, the EU and the US have made extensive notifications of their GSP schemes and periodic modifications. Although not obliged to do so, China. India and Korea have also notified their preference programmes to the WTO. The best source of detailed information on these schemes is the WTO Preferential Trade Arrangements database established in December 2010 (WT/L/806).

15 WTO documents G/C/W/656/Rev.1 and WT/COMTD/N/39/Add.1/Rev.1 of 1 December 2011. The WTO also reports that China had already unilaterally granted preferential treatment to some products from 41 least developed countries from 2009 (WTO/TPR/S/230/Rev.1 of 5 July 2010).

16 See also http://www.gov.cn/english/official/2011-12/07/content_2014019_4.htm.

17 Memo/11/284 of 10 May 2011.

18 An insight into the Commission's thinking can be obtained from the Commission Staff Working Document "Trade as a driver of development," Brussels, 27 January 2012. This is accompanies the "Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on trade, growth and development. Tailoring trade and investment policy for those countries most in need."

19 Further details on the GSP scheme of the European Union can be found in on the EU's website (http://ec.europa.eu/trade/wider-agenda/development/generalised-system-of-preferences/everything-but-arms/), as well as the UNCTAD Handbook on the EU GSP Scheme, available online at http://www. unctad. org/gsp/. The GSP scheme is implemented over ten-year cycles in order to take into account changing trade patterns. The present cycle began in 2006 and will expire in 2015.

20 Notification of preferential tariff treatment for LDCs (as per paragraph 2 of WT/L/304 AND WT/L/759) and transparency mechanism for preferential trade arrangements (as per WT/L/806 and WT/COMTD/73) and G/C/W/651WT/COMTD/N/38 of 12 September 2011.

21 Duty Free Tariff Preference (DFTPI-LDC) Scheme announced by India for Least Developed Countries (LDCs) , updated 01-01-2012, available at: http://commerce.gov.in/trade/international_tpp_DFTP.pdf

22 Japan's New Development Initiative for Trade. Viewed at http://www.mof.go.jp/english/tariff/wto/wto.htm

23 Details are available on the web-site of the Japanese Ministry of Foreign Affairs - http://www.mofa.go.jp/policy/economy/gsp/index.html

24 WT/COMTD/N/12/Rev.1/Add. 1 20 March 2012. The tariff list is updated in the version of HS2012, which is currently in force in Korea.

25 Presidential Decree on Preferential Tariff for Least-Developed Countries (Jan 10, 2000), Article 4. 1. This language is re-peated in Article 4. 1 of the revised Presidential Decree No 23428, as notified to the WTO in WT/COMTD/N/12/Rev.1/Add. 1 of 20 March 2012.

26 The specific reasons for excluding these countries is not mentioned in the Guidebook, but the general reasons for exclusion are set out in http://www.ustr.gov/webfm_send/1170. U. S. Code Title 19--Customs Duties Chapter 12—Trade Act of 1974 – Subchapter V – General System of Preferences, Section 2462, (b) (2).

27 The original authority for the US GSP scheme is Title V of the Trade Act of 1974 (19 USC 2461 et seq.).

28 U. S. Generalised System of Preferences (GSP) Guidebook, available at: http://www.ustr.gov/webfm_send/2880.

29 *Idem.*

30 There is some variation in the selected markets with regard to treatment of LDCs: for example, the LDC schemes of devel-oped markets and Korea do not included all 49 LDCs as defined by the United Nations. (The reasons for these exclusions are discussed in Chapter 4). Japanese data are from Table 1, as the WTO source on which Table 2 is based does not include Japan.

31 Korean Ministry of Strategy and Finance Press Release of 17 November 2010. The additional items include non-sensitive agricultural and fisheries products such as flowers, spice(peppers, etc.), oils and fats, as well as textiles, garments, instruments and other industrial products.

32 Changes in average rates facing LDCs (UN definition), as well as changes in the ratios of duty-free to total tariff lines where there is trade, and duty-free to total imports, are shown for 2000 and 2010 in Table 3. The key difference from Table 2 pre-pared by the WTO Secretariat is that Table 3, based on public information in the WITS system – a joint product of the ITC, UNCTAD, the World Bank and the WTO – is that WITS data are shown only for lines on which trade occurs (this may be less than the total number of lines on which the WTO Secretariat's data are based). It is also important to note that the changing composition of trade can affect these statistics; a decline does not necessarily imply worse treatment.

33 The WTO Secretariat suggests that preferences are sometimes not used because they may be "granted for a limited period of time and therefore may not justify the administrative costs of shifting from one scheme to another."(WTO, 2011d)

34 This indicator excludes duty exemption extended as part of the MFN treatment. The WTO notes that one problem in pre-paring an indicator on the utilisation of preferences poses several statistical difficulties is the availability of comprehensive and comparable official data on preferential schemes. In addition, a product exported by an LDC can be eligible to more than one preferential regime, a low rate of utilisation for one specific regime is not necessarily an indication of a low rate of preference utilisation for preferential schemes in general.

35 Komuro, N., "Japan's Generalised System of Preferences: An Oriental Pandora's Box" at http://www.worldtradelaw.net/articles/komuropreferences.pdf (undated, but data in the paper suggest it was written around 2005). However, the coverage of the scheme is lower than in more recent data extracted for this paper and it seems likely that utilisation has also increased.

36 As indicated in the notes to the tables, the WITS system provides no data where no trade is reported. For example, the absence of statistics on India reflects this absence of data rather than zero coverage in lines or trade.

37 There is considerable literature on rules of origin, particularly in relation to the use of the Generalized System of Preferences, both in explanatory material as well as economic analysis. See, for example, Inama, S., *Rules of Origin in International Trade*, Cambridge University Press, 2009.

38 Details on Canada's rules of origin for LDCs are included in the Rules of Origin respecting the General Preferential Tariff and Least Developed Country Tariff, Memorandum D11-4, Ottawa 27, May 2008.

39 *Idem*. See also"An Introductory Guide to the Market Access Initiative for the Least Developed Country and Least Developed Country Tariff," Ottawa, 2003.

40 WT/TPR/S/230/Rev.1 of 5 July 2010.

41 *Op. cit*.

42 Commission Staff Working Document "Trade as a driver of development," Brussels, 27 January 2012.

43 Government of India Ministry of Finance (Department of Revenue), Central Board of Excise and Customs Notification No. 100 /2008-CUSTOMS (N. T.) of 13 August 2008, to be found at http://cbec.gov.in./customs/cs-act/notifications/notfns-2k8/csnt100-2k8.htm.

44 *Op. cit.*

45 http://www.mofa.go.jp/policy/economy/gsp/index.html

46 The following minimal processes are not accepted as obtaining origin status: (i) operations to ensure the pres-ervation of products in good condition during transport and storage (drying, freezing, placing in salt water and other similar operations); (ii) simple cutting or screening; (iii) simple placing in bottles, boxes and other similar packing cases; (iv) repacking, sorting or classifying; (v) marking or affixing of marks, labels or other distinguishing signs on products or their packaging; (vi) simple mixing of non-originating products; (vii) simple assembly of parts of non-originating products; (viii) simple making-up of sets of articles of non-originating products; (ix) a combination of two or more operations specified in (i) through (viii).

47 Presidential Decree on Preferential Tariff for Least-Developed Countries (Presidential Decree No. 23428), as notified to the WTO in WT/COMTD/N/12/Rev.1/Add. 1 of 20 March 2012. This revised Presidential decree in-creased the rule of origin from 50 per cent to 60 percent.

48 This general rule of origin for GSP products seems to apply to AGOA as well. The scheme includes LDCs as well as some non-LDC African countries. In essence, AGOA authorises the president to extend duty-free treat-ment under GSP for any article imported from African countries (including eligible non-LDC African countries), after the US Trade Representative and the US International Trade Commission have determined that the article is not import-sensitive. http://www.agoa.gov/AGOAEligibility/agoa_main_002884.asp

49 http://www.ustr.gov/webfm_send/2880.

50 A detailed analysis of AGOA at the product level by Portugal (2008) revealed that less restrictive rules of origin are associated with an expansion of the range of exported apparel. Indeed, under preferential market access, more lenient rules of origin reduce costs for exporters and may encourage export diversification or export growth at the margin.

51 Constant 2000 prices, from World Development Indicators (World Databank online at the World Bank).

52 The LDCs listed in the Chart are those for which data were separately identifiable in the World Bank's World Development Indicators (online), and the average annual rate of growth from 2001 to 2009, 4. 7 percent, is for those countries only, while the average for the group listed as LDCs in World Development Indicators is 3. 8 percent.

53 Based on data in the OECD-DAC Aid activity database (CRS). See also, OECD, "Aid for Trade at a Glance 2011 – Showing Results," Paris 2011.

54 See, for example, Ianchovichina *et al.* (2001), UNCTAD (2001a), Trueblood and Somwaru (2002) and Wusheng and Jensen (2005).

55 In WITS, SMART (Software for Market Analysis and Restrictions on Trade) is based on Laird and Yeats (1990). For the simulations in this study, the standard elasticities provided in the WITS system were applied.

56 In common with most models, a weakness of the WITS/SMART system is that trade creation cannot occur where there is no trade in the base year.

57 The exception is Malawi, which currently faces a particularly high tariff on its tobacco exports to the U. S. market.

58 See, for example, Laird and Fernandez de Córdoba (2006).

59 This is a little surprising, since textiles and clothing are excluded from LDC preferences in the US.

60 "Quad" refers to the EU, US, Japan and Canada. This is perhaps unfortunate usage today, since it excludes China, but it is the usage in Alexandraki and Lankes (2004) on which the paragraph is based, and was very common until recently.

61 The underlying computations are carried out using the WITS/SMART partial equilibrium model, which allows detailed analysis at the HS 6-digit level, in line with Laborde (2008) who uses a similar approach.

62 Greatly narrowing the gap between high and low tariffs is called tariff harmonisation. The "Swiss formula" is a special kind of harmonising method. It uses a single mathematical formula to produce: a narrow range of final tariff rates from a wide set of initial tariffs; a maximum final rate, no matter how high the original tariff was. A key feature is a number, which is negotiated and plugged into the formula. It is known as a "coefficient" ("A" in the formula below). This also determines the maximum final tariff rate.

Formula:

$Z = AX/(A+X)$

where

X = initial tariff rate

A = coefficient and maximum tariff rate

Z = resulting lower tariff rate (end of period

63 The SMART model in the WITS system is a simple partial equilibrium model which works at the level of the tariff line for individual markets. It therefore has an advantage in being highly detailed with repsect to individual products and trading part-ners, e. g. individual LDCs. A weakness is that, unlike general equilibrium models, it does not take account of inter-industry relationships nor of the need for balance in the overall economy, e. g. trade balances. However, both types of model incorporate a number of assumptions about economic behaviour. SMART may be thought of as showing the initial impact of a tariff shock. Given the nature of the model some care should be exercised in interpreting results summed up over countries and products. This is why it is useful to look at these alongside other studies, as has been done in this paper, to get a sense of consistency about the results.

64 WTO (2001).

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