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The Costs and Benefits of Duty-Free, Quota-Free Market Access for Poor Countries: Who and What Matters

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Abstract

This paper examines the potential benefits and costs of providing duty-free-quota-free market access to the least developed countries (LDCs), and the effects of extending eligibility to other small and poor countries. Using the MIRAGE computable general equilibrium model, it assesses the impact of scenarios involving different levels of coverage for products, recipient countries, and preference-giving countries on participating countries, as well as competing developing countries that are excluded. The main goal of this paper is to highlight the role that rich and emerging countries could play in helping poor countries to improve their trade performance and to assess the distribution of costs and benefits for developing countries and whether the potential costs for domestic producers are in line with political feasibility in preference-giving countries.

KEYWORDS: CGE modeling, trade policy, duty-free market access, technical barriers to trade, preference erosion

1. Introduction

The globalization surge of the past three decades mostly missed the poorest countries in the world. While other developing countries were able to ride the wave, the share of today's least developed countries (LDCs) in global exports fell by two-thirds from 1970 to 2000, twice as much as the fall in their share of global income.¹ In broad terms, there are two principal sources of the LDCs' poor export performance: severe supply-side challenges, resulting from a lack of sound institutions and policies, inadequate infrastructure, and a paucity of physical and human capital; and implicit discrimination against their exports in rich-country trade policies. Progress is being made in a number of countries in addressing the supply-side challenges, but these problems will not be solved easily or quickly. The second source of poor export performance in poor countries should be more amenable to reform, as it requires only that richer countries open their markets to countries accounting for a tiny share of global trade. Opening markets for LDC exports is now even more important and more urgent as a result of the global financial crisis and the increased demand for trade protection around the world.

The high-income members of the Organization for Economic Cooperation and Development (OECD), and increasingly advanced developing countries as well, provide preferential market access for developing countries. But even the more generous programs for LDCs often contain exceptions, which are usually concentrated in a narrow range of products where LDCs have comparative advantage, especially agricultural commodities (often sugar, rice, meat, and dairy) and labor-intensive manufactures, such as textiles, apparel, and footwear.

The effects of these politically-driven exclusions are further magnified by the structural weaknesses in the economies of LDCs, which are generally not very diversified. Thus, even a small number of product exclusions can rob preference programs of much of the potential benefit. In addition to the remaining formal barriers, preferential arrangements have rules of origin that restrict international sourcing of inputs and that is an acute concern in poorer countries with a high degree of specialization in the manufacturing sector, and limited ability to create the backward and forward linkages required by many origin regimes.²

¹ Data is for today's list of LDCs (because the list changed over time) and is from the United Nations Comtrade database and the International Monetary Fund's *International Financial Statistics*.

² In assessing the potential to expand poor-country exports, it is important to keep in mind that administrative and regulatory barriers also arise outside the preference programs themselves. Most notably for some LDCs in Africa, sanitary and phytosanitary standards to protect human, plant, and animal safety frequently block agricultural exports because many poor countries lack the capacity to certify compliance.

To boost LDC engagement in global markets as a tool of poverty reduction, UN members agreed in the 2000 Millennium Declaration that developed countries should provide duty-free, quota-free (DFQF) market access for LDCs. That Millennium Development Goal (MDG) was reaffirmed at the World Trade Organization (WTO) ministerial in Hong Kong in 2005, except that U.S. negotiators insisted on limiting it to 97 percent of tariff lines. At the same time, the communiqué also called on developing countries “in a position to do so” to provide expanded preferential access for LDCs.

This study assesses four broad questions around improved market access for poor countries: How much would LDCs gain from 100 percent versus 97 percent DFQF market access in OECD markets? How would the distribution of gains and losses change if eligibility for DFQF access were extended to additional small and poor countries? How much would LDC gains rise if Brazil, China, and India also provide full market access? What would be the effect of improved access on producers in preference-giving countries?

Previous analyses have assessed the impact of such preferential agreements granted to LDCs. Ianchovichina et al. (2001) use the GTAP model (Hertel, 1997) and the fourth version of the GTAP database (1995) to measure the gains and losses for a Sub-Saharan Africa countries' group (the 37 poorest countries aggregated together) if they receive DFQF market access from the Quad countries (Canada, European Union, the United States and Japan). Bora et al. (2002) worked on simulating the elimination of all tariff and non tariff barriers imposed against LDCs in order to confirm the benefits for LDCs of the EBA initiative and underline the potential impact of a coordinated action of Quad countries. They showed that this larger preferential initiative provides ten times the welfare gains of the EBA alone. They conduct their analysis on the basis of a newer GTAP database than Ianchovichina et al. (2001). Thanks to a higher level of disaggregation in the more recent database, authors are able to highlight the importance of sensitive sectors such as rice, sugar or wearing apparel in the improvement of LDCs' market access, including both African and Asian countries. All those studies show the potential benefits for preference-receiving LDCs, and insignificant losses for preference-giving countries imports from LDCs are such a small share of imports and consumption. Finally, Vanzetti and Peters (2009) focus on the role of sensitive products and the gains from an extension of product coverage of preferential arrangements. All these studies emphasize the role of rich countries, especially the European Union in granting better market access for poorer countries at little or no cost to their own producers.

Four key things distinguish our work from these earlier studies. First, we go beyond the Quad countries and examine the potential impact when the large and fast-growing emerging markets also provide improved market access to the

LDCs. Second, we pay close attention to the potential for preference erosion when existing preference arrangements are changed. Third, we use the MIRAGE model and the carefully compiled and detailed MacMAPs-HS6 database. Finally, unlike previous analyses, we use an explicit political-economy welfare function to identify the sensitive products that are likely to be excluded if DFQF access is provided for only 97 percent of tariff lines, as proposed in Hong Kong. More ad hoc methods may underestimate the negative impact of such exclusions, as explained by Jean et al. (2010). The political economy model developed by Jean et al. (2010) assumes that governments optimize their objective function by choosing sensitive sectors that minimize the social cost. We employ this methodology to treat the small number of tariffs lines that are defined as sensitive in our scenarios with 97 percent tariff line coverage³. To preview the results, the analysis confirms the conclusion from previous research that a DFQF initiative limiting product coverage to 97 percent of tariff lines provides very few benefits for LDCs. And, the gains from full access are multiplied if the large emerging markets join the initiative. But the evidence does not support two of the chief concerns about expanded preferential access for those countries. First, sub-Saharan Africa generally stands to gain, not lose, if OECD countries, including the United States, provide 100 percent DFQF market access for all LDCs; and other developing countries, such as Pakistan, do not suffer from preference erosion. Second, preference-giving countries do not suffer market disruption from removing exclusions for sensitive products, such as sugar or dairy. The adjustments are greater, however, if DFQF market access is extended to a broader group of small and poor countries.

Before explaining the methodology used in the paper, Box 1 presents key trade characteristics of LDCs⁴ that are useful in interpreting the results of our analysis.

³ To see the detailed tariffs lines obtained by this procedure, please refer to the Annex Table 2

⁴ As will be explained in more detail, the reliability of the data regarding some of the LDCs means that some countries are included in more aggregated regions. Our aggregation choices are explained in the main text.

Box 1: Key factors in LDC trade performance

More detailed statistics can be found in the working paper version at: http://catt.univ-pau.fr/live/digitalAssets/114/114530_11DocWcattCostsBenefitsDutyFreeABouetEDieneschDLaborde.pdf and on ideas.repec.org

Country or region	Specialization index (IIS) ¹	Sectors ²	Share in total exports (%)	Relative comparative advantage ³	Average protection faced ⁴ (%)
Bangladesh	0.693	Textiles	35.7	12.6	13.8
		Wearing –Apparel	30.3	12.2	12.9
		Leather	4.6	4.6	13.8
Madagascar	0.727	Foods products	10.6	6.6	5.2
		Textiles	8.9	3.1	1.5
Malawi	0.846	Other crops	24.9	64.9	52.3
		Coal, oil, gas	16.8	2.1	3.9
Rest of Africa	0.470	Oth. mfd.Products	21.8	0.5	1.2
		Chemical prod	7.6	0.7	1.3
Rest of South East Asia	0.620	Coal, oil, gas	41.4	5.3	0.6
		Wearing apparel	15.9	6.4	5.9
		Textiles	11.3	4.0	7.8
Senegal	0.479	Chemical products	21.1	2.0	1.2
		Foods products	14.7	9.1	24.9
		Oth mfd. Products	12.2	0.3	6.1

$$IIS_r = \frac{1}{2} \cdot \sum_i \left| \frac{x_{ri}}{\sum x_{ri}} - \frac{m_{ri}}{\sum m_{ri}} \right|$$

Where r denotes the region and i denotes sectors. With this formula, we obtain the inter-industry specialization indicator that the higher it is, the more the trade balance is based on a small number of sectors, and the less the trade balance is equilibrate.

² GTAP sectors

³

$$RCA_{ri} = \frac{X_{ri}}{\sum_j X_{rj}} / \frac{\sum X_{si}}{\sum_j \sum_s X_{sj}}$$

with r the reporter and s its partners, i(j) the sectors.

³ OECD sectoral tariffs are weighted by the share of each partner in total exports.

The above table underscores that for many LDCs, comparative advantage and exports are relatively concentrated in a few sectors and in many cases (Bangladesh in textile and wearing apparel; Malawi in tobacco (other crops)) they face unusually high levels of protection.

The table below gives a further idea of the high degree of inter-industry specialization in many LDCs. The inter-industry specialization index (see footnote 4 for its construction) shows that all of them have high degrees of specialization in comparison with developed countries (around 0.20-0.25 for France, Germany, the US and even China 0.33). As reflected in Note 4, a high level of this index means that LDCs are dangerously specializing in few products, so their trade is dramatically affected by changing conditions in their export markets.

2. Methodology

The MIRAGE (Modeling International Relationships in Applied General Equilibrium) model is a multi-sector, dynamic, multi-region computable general equilibrium (CGE) model devoted to trade policy analysis. The model is extensively described in Decreux and Valin (2007) and the implications of its features compared with other CGE models are analyzed in Bouët (2008).

Why choose a general equilibrium model? The partial equilibrium methodology has advantages in terms of being more transparent in its assumptions and easier for non-experts to understand. But both have a role and we incorporate both here, comparing the CGE results to those from Laborde (2008) using detailed data and a partial equilibrium approach.

The advantage of general over partial equilibrium models is that they take into account the economy-wide effects of trade liberalization, not just the sectoral changes induced by tariff changes. Specifically, when tariffs are lowered, the sector production contracts, decreasing demand for factors of production used extensively in that sector, as well as the remuneration of those factors. This, in turn, affects production in other sectors, which cannot be observed in the partial equilibrium framework. Trade liberalization also implies a decrease in tariff revenues for importing countries, which can involve contraction in services or public transfers.⁵ All these economic-wide effects need to be evaluated to appreciate the full impact of trade liberalization. In addition, the MIRAGE model incorporates recursive dynamics (Bouët, 2008), which involves simulating the trade shock over a period of 10 years (considered as a benchmark) to reflect global economic changes resulting from changes to capital stocks or land supply due to changes in remuneration.

Here, simulations are run until 2020 to measure the long-term impact of the policy scenarios. The model is applied using data on the economic structure and trade of 113 countries in 57 sectors from the Global Trade Analysis Project (GTAP) database version 7 (Narayanan and Walmsley, 2008), and data on trade policies, including preferential tariff levels, from the MAcMapHS6 version 2 database (Boumellassa et al., 2009).⁶

While these tools have been widely used in numerous assessments of global or regional trade agreements, specific modifications have been done for this study. First, the tariff data set has been updated so that the baseline reflects important

⁵It is important to underline that in most cases the main resource for LDC governments is tariff revenues.

⁶ The MAcMapHS6 database has the most detailed information available on market access barriers and preferential trading arrangements, including bound and applied tariffs under World Trade Organization rules, and preferential tariffs arising from reciprocal regional trade agreements or unilateral preference programs, such as those studied here.

trade policy changes since MAcMapHS6 was last updated in 2004 (see next section). Second, the trade matrix was adjusted to discriminate between "real" trade and virtual (or potential) trade. Our focus on LDCs requires particular care in the use of the data because of weaknesses and gaps in reporting by those countries and the problems are compounded in the case of potential exports that are blocked by prohibitive tariffs in importing countries.

To make the modeling and analysis tractable, the data have been aggregated into 36 countries or regions and 28 sectors, with a focus on LDCs and the products they export. The geographic and sectoral compositions are shown in Annex Table 1 (available in the working paper version).⁷ Our aggregation program is based on four criteria of selection to justify why some countries of interest are included in larger regions: the availability of the data, the reliability of the data, export and country specialization similarities, and consideration of existing preferential programs. First, the geographic coverage is constrained in the sense that it depends on the availability of good quality, recent input-output tables. The GTAP database does not supply consistent information for all countries but presents data for regional aggregates.⁸ The second issue is the reliability of existing data and some obvious inconsistencies can be identified that should be corrected. For example, in the case of potential exports that are currently blocked by prohibitive tariffs, the trade matrix in the GTAP database allows for the possibility of trade creation by using constructed trade values instead of zeroes. To illustrate, the trade matrix of the GTAP database includes "virtual" merchandise trade flows related to travel expenditures: rather than treating them as an export of services, so that the expenses of a Japanese tourist in Cambodia are translated in the database as a dutiable export of the consumed goods from Cambodia to Japan. But these "virtual" trade flows can be problematic in our assessment when it creates non-negligible exports from a LDC to an OECD country after removal of a high tariff on a specific commodity. For instance, the GTAP database displays a virtual export of processed rice of about \$100,000 by Senegal to Japan to avoid a zero and allow for the possibility of exports if Japan's 340 percent tariff on rice were removed. Based on the model parameters (Armington elasticities for imperfect substitutes), however, the elimination of the duty can lead to a 15-fold increase in Senegalese exports of rice

⁷ All Annex Tables are available in the working paper version on the CATT web site :

http://catt.univ-pau.fr/live/digitalAssets/114/114530_11DocWcattCostsBenefitsDutyFreeABouetEDieneschDLaborde.pdf and on ideas.repec.org

⁸ The list of GTAP aggregates is following: Rest of Oceania, Rest of East Asia, Rest of Southeast Asia, Rest of South Asia, Rest of North America, Rest of South America, Rest of EFTA, Rest of Former Soviet countries, Rest of Europe, Rest of Western Asia, Rest of Western Africa, Rest of Central Africa, Rest of Eastern Africa, Rest of North Africa, Rest of South African Customs Unions. These regions include some of the least developed countries.

to Japan. Unfortunately, this flow is purely artificial and there is no way of knowing whether trade liberalization would boost Senegalese exports or by how much, given high transportation costs and other constraints. Due to the magnitude of the shock, this sort of problem could lead to significant bias in our results.

To address the problems created by constructed trade values, we split the GTAP trade matrix into two categories: real trade flows, based on the trade data inputs to the GTAP database by Mark Gehlhar, and virtual ones.⁹ Tariffs, and their elimination, will affect only the former category and since the liberalization is by more developed and advanced developing countries that have good data, this is not a problem for our analysis. In addition, we have checked the quality of the input-output tables for key products in the LDC countries we focus on to avoid important mistakes due to data quality problems. For instance, the GTAP7 database shows that 15 percent of the production cost of processed rice in Senegal is due to imported wheat and 0 percent to the local paddy rice. This mistake in the construction of the IO table will also lead to serious problems in the CGE assessment since it implies that Senegal can export rice without producing it and simply by importing wheat. We fix such issues by reallocating the intermediate consumption to the appropriate sector in the IO table.

Unfortunately, since the poorest countries have the least-available and lowest-quality data, many of the LDCs that we are interested in examining are either missing or have only partial data and can be included only on a weighted basis in larger regional aggregates. To illustrate, consider the aggregated region of “rest of Africa”. This region is composed of heterogeneous states, including LDCs such as Benin, Guinea, Mali, Liberia, Sierra Leone, Burundi or Rwanda but also some vulnerable economies that are not eligible for DFQF programs, such as Cameroon, Kenya, Namibia or Swaziland. But, all these countries are already included in sub regional zones in the GTAP database. There are only two LDCs that could be isolated: Uganda and Tanzania but they suffer from severe unreliability of the data, since the latest IO tables date back to 1992. With those caveats, we tried to select for special analysis a range of LDCs from Africa (Ethiopia, Madagascar, Malawi, Senegal) and Asia (Bangladesh, Laos/Cambodia¹⁰) that produce a range of products, both clothing and agricultural products. Similar factors around regional and export diversity drove the decision on which other small and vulnerable economies, and which preference-giving countries to isolate in the analysis. For preference-giving countries, the aggregation program is clearly conducted by the similarity of trade policies and by the perspective given for any preferential agreement. For instance, Australia

⁹ See the description of the database at https://www.gtap.agecon.purdue.edu/databases/trade_data.asp.

¹⁰ Laos and Cambodia are two Asian LDCs with similar export profiles that have been grouped into one region because of data issues.

and New Zealand belong to the same free trade zone and apply the same preferential agreements. Furthermore, one of our main objective is to accentuate the role of emerging markets in helping the LDCs, thus Brazil, China, India, Korea, Mexico and Turkey are treated separately.

2.1. The Baseline

The first issue is to identify where we are now with respect to LDC market access. The Millennium Declaration approved by UN members in 2000 called for developed countries to provide DFQF market access for LDCs on essentially all products. The ministerial communiqué released by the WTO in Hong Kong in 2005 reaffirmed this commitment, but, at the insistence of U.S. negotiators, defined “essentially all products” as 97 percent of tariff lines.¹¹

Most of Europe has already opened markets for 100 percent of exports from LDCs, as have Australia and New Zealand.¹² Japan and Canada provide access for over 98 percent of products for LDCs, while the United States provides duty-free access for only around 80 percent of products for LDCs outside sub-Saharan Africa and Haiti, and South Korea’s preference program for LDCs covered only 75 percent of tariff lines at the time the analysis was done.¹³ Among other OECD countries, Turkey provides DFQF access for most products outside agriculture and Mexico does not yet have a preference program. India and China also adopted preference programs for LDCs in recent years. These programs are described in more detail in Elliott (2009). Finally, at the WTO ministers’ meeting in Geneva in December 2009, Brazil announced that it would introduce a program in 2010, rather than waiting for the conclusion of the Doha Round, as it had earlier insisted.

Since the MAcMapHS6 version 2 database is based on 2004 data, we needed to update the database to reflect relevant trade policy changes occurring since then, including:

- expanded duty-free access for LDCs in Japan, South Korea, India, China, Switzerland, Turkey
- the phasing out of the implementation period for the protocol products in the EU27 for the EBA (rice, sugar, bananas)
- implementation of free trade agreements between the United States and Central America and the Dominican Republic (CAFTA-DR), India and

¹¹ See, for example, the analysis in Oxfam International (2005).

¹² We ignore the fact that the EU program excludes armaments as they are commercially insignificant.

¹³ In January 2010, South Korea raised the product coverage of its program to 85 percent tariff lines and announced that it will further raise the coverage to 95 percent by 2012.

South Asian neighbors (SAFTA) and finally, the Economic Partnership Agreements between the EU27 and ACP countries that have signed an agreement or at least an interim agreements.

2.2. The Scenario

In order to explore a range of possible outcomes, we analyzed 4 different scenarios:

- A. 97% of tariff lines liberalized by OECD countries for LDCs.
- B. 100% DFQF given by OECD countries to LDCs.
- C. 100% DFQF given by OECD countries to LDCs. and other designated countries (small and vulnerable economies - SVEs -).
- D. 100% DFQF given by OECD countries plus Brazil, China, and India to LDCs.

All scenarios are implemented in 2010.

In the first scenario, liberalization only applies to 97% of tariff lines and preference-giving countries are free to select the products excluded. In this case, we use the political economy criterion developed by Jean et al., (2010) to select the tariff lines excluded from liberalization. This approach is central to this study in the sense that it is more realistic to assume that giving-countries optimize their trade policies, taking into account politically-sensitive products.¹⁴ It is based on a political economy approach where the government (common agent) gives protection to economic sectors (multi-principals) against financial transfers and maximizes a function which includes national welfare and these financial transfers. As a result of this model, the government is supposed to select lines which maximize a political economy indicator depending positively on the height of the tariff and the magnitude of imports.¹⁵

¹⁴ The initial model of Jean et al (2010) concerns only agricultural products. Actually, one important assumption of their modeling is that the share of agricultural dutiable imports in total expenditure of importers is small. In our context, some manufactured products are included in the list of potential sensitive products, but obviously this assumption is also respected: in implementing the simplified version of the Jean et al. (2010) criteria, we just assume that for each product imported from LDCs, the share in total expenditures is small to have the parameter “1-s” in Jean et al. (2010) article close to 1, the import demand elasticity becoming the same for all goods under the CES assumption.

¹⁵ It is noteworthy that the pre-DFQF protection structure needs to be a political optimum in order to calibrate the model and choosing sensitive products is done in a way that minimizes political welfare losses. We model here a process under which governments maximize their objective function under the constraint that DFQF is given to some partners with only 3% of tariff lines still taxed. Consequently the post-DFQF equilibrium is suboptimal compared to the initial case, but it is a new optimum under this new constraint.

Here, it is important to point out that if the method of Jean et al (2010) is a rigorous approach, two conceptual limits have to be remembered.

First, governments maximize a welfare objective function without taking into account changes in foreign trade policies. Thus the Jean et al. (2010) approach considers that each country makes its choices independently from the rest of the world. This can be interpreted as each country being small and a price taker on its imports. Second, in the model of Jean et al. (2010) the prediction is that a single tariff applies to each product from all trade partners. But in reality, the pre-DFQF regime embodies a host of bilateral and regional trade agreements that stipulate different levels of bilateral tariffs. The interpretation of the Jean et al. (2010) model used here is adjusted to accommodate this dimension. In the present approach, we consider that each pair product-exporter is a differentiated product in the CES function.

With the Mirage model simulations, it is possible to underline some interesting results that would be generated by these different scenarios, and in particular the distribution of potential gains and losses in terms of exports, production variation and social welfare. Welfare variation in this model is estimated on the basis of the Hicksian concepts of equivalent variation.¹⁶ In addition to the impact on different groups of preference beneficiaries, we are also interested in the impact on production in the preference-giving countries. The remaining tariff peaks in developed countries are the result of lobbying by powerful political constituencies, so, in order to assess the political feasibility of various scenarios, it is important to analyze the impact in those countries as well.

Before exploring and analyzing the results, it is important to emphasize the implications of using Armington elasticities, which assume that imported and domestic products are heterogeneous and, therefore, that substitution between them is more limited than with homogeneous products. That, in turn, means that the predicted values of the trade changes (in response to prices variation) are smaller than those implied by models with homogeneous products. Moreover the levels of these elasticities are equal to those used by the GTAP model, but are less than those used by the LINKAGE model at the World Bank. Thus, the Mirage model is quite conservative.

¹⁶The Hicksian equivalent variation is defined as the monetary amount that would need to be given to the representative agent in order to reach the same level of welfare in the free trade case as under initial prices.

3. The Impact of 100 percent Market Access in OECD Countries for LDCs

Previous studies by Berisha-Krasniqi et al. (2008), among others, demonstrated that tariff peaks in rich countries are concentrated in a few tariff lines and, therefore, 97 percent duty-free access provides very little benefit.¹⁷ That result was confirmed by this analysis, which shows no LDC gaining even as much as one-tenth of one percent in additional exports from 97 percent product coverage. For similar reasons, including that LDC exports are relatively concentrated, 97 percent coverage by more advanced developing countries also results in relatively small export gains. For that reason, in the discussion that follows, we focus on the scenarios involving 100 percent DFQF market access. The results in terms of overall export changes for all scenarios are presented in Annex Table 3 (available in the working paper version).

In this section, we will focus on the results when OECD countries provide 100 percent DFQF market access, and we examine the effects both for those benefiting from DFQF market access and others that might suffer preference erosion (Annex Table 3). Table 1 shows the change in exports and overall welfare for one Asian and four African LDCs, as well as two aggregates containing LDCs—Rest of Southeast Asia, which includes Cambodia and Laos (as well as oil exporter Brunei), and Rest of Africa, which contains a mix of LDCs, as well as other low- and middle-income countries, making it particularly difficult to interpret.

These figures illustrate how DFQF can generate relatively large reductions in average tariff for some LDCs. Average tariffs are weighted by the share of each sector in the national production (and not exports to avoid bias due to tariffs) and that means that countries that are most dependent on one or two sectors where they have a strong comparative advantage and face relatively high tariffs will experience sharper declines in the average protection rate that they face and that will allow them to boost their exports relatively more (Bangladesh, Malawi).

¹⁷See, for example, Hoeckman et al., 2002, *Eliminating Excessive Tariffs on exports of Least Developed Countries*

Table 1: World Average protection rates on LDCs exports, before and after DFQF

DFQF recipients (LDCs)	Initial protection on exports ¹¹	Average protection on LDC's exports	Average protection on LDC exports after 100% DFQF	Variation (%)
Bangladesh	5.5%		3.3%	-39.848
Ethiopia	9.7%		9.7%	-0.009
Madagascar	1.7%		1.7%	-0.326
Malawi	18.3%		6.3%	-65.508
Mozambique	4.8%		4.8%	-0.010
Rest of Africa	5.4%		5.1%	-3.976
Rest of South East Asia	1.9%		1.2%	-34.788
Senegal	5.8%		5.8%	-0.01

Conversely, when the countries are relatively more diversified, or they concentrated in sectors with relatively low tariffs, such as some minerals, the impact will be less. For instance, if Mozambique should not expect a large decrease in the average tariff because more than half its exports are metals, which face low tariffs already. The same can be said for Senegal, which is specialized in manufactured goods (chemical or food products) that generally face low tariffs. Conversely, Malawi is strongly specialized in non-manufactured tobacco (other crops), imports of which are highly taxed by the United States. It is important to underline that if emerging markets are included in the analysis, the case of Senegal, for instance, will be improved by the removal of Indian tariffs on chemical products that will boost Senegalese exports.

Turning to changes in exports and welfare, the model suggests that Madagascar might suffer very small losses, but all other LDCs for which we have data show gains from 100 percent DFQF access in OECD markets. It is also notable, given the concerns about the extension of U.S. preferences to Asian apparel exporters that the export losses in Madagascar in this scenario come in agriculture, not the apparel sector. Additional details on the potential implications of these changes for sub-Saharan African LDCs are discussed in Box 2, in the working paper version, available online. Moreover, these small losses are reversed if the major emerging markets also provide duty-free, quota-free market access (see discussion below and Annex Table 4, available in the working paper version).

Table 2: Percentage change in Key Variables in 2020 from OECD implantation of 100% DFQF for LDCs (sorted by change in welfare).

DFQF Recipients	Exports	Welfare	Other developing countries	Exports	Welfare
Malawi	12.97	2.65	Mauritius	0.03	0.02
Rest of SE Asia	2.52	0.95	Central America	0.14	0.01
Ethiopia	1.35	0.29	South Africa	0.02	0.00
Bangladesh	4.16	0.29	Rest of Asia Oceania	0.00	0.00
Mozambique	0.39	0.17	Mdle East & Nth Africa	0.01	0.00
Senegal	1.16	0.15	Nigeria	0.01	0.00
Rest of Africa	0.08	0.03	Rest of East Europe	0.00	0.00
Madagascar	-0.03	-0.02	Sri Lanka	-0.01	0.00

Overall, Malawi is the biggest gainer by far because of an unusual set of circumstances—a relatively high dependence on tobacco exports facing an unusually high, 350 percent, tariff in the U.S. market, which leads to a sharp increase in exports of that product. Thus, this case also underscores the need for complementary government policies to guard against increased export concentration and commodity dependence when trade barriers are lifted.

The reported gains for the rest of Africa region are noticeably smaller than for the individual African LDCs and this could be due to the fact that only a subset of countries in the aggregation are LDCs that receive expanded access. As expected, an examination of more detailed results for Southeast Asia shows that the gains are mostly due to increased exports of apparel to the U.S. market, as are the gains for Bangladesh. The sectoral change in exports, by country or region, for this scenario is shown in Annex Table 5 (available in the working paper version). The increased export of apparel from Southeast Asia probably represents mostly exports from Cambodia, since Laos is small and has very little export capacity and Brunei, the third country in that aggregate, exports mostly oil and faces low tariffs. What is also notable in Table 2 is that other competing countries that might be expected to suffer from preference erosion—Mauritius, South Africa, and Central America—instead show gains, albeit very small. And for other developing countries, if they suffer losses at all, estimated losses fall well below one-tenth of one percent of total exports or national income.

To put the potential gains in some perspective, we can compare them to two other sets of results—general equilibrium estimates of the welfare gains from global free trade, and partial equilibrium estimates of the export gains of moving from 97 percent to 100 percent product coverage in the context of a feasible Doha

Round outcome (based on what was on the table in the summer of 2008 when the talks collapsed).

With respect to the gains from global free trade, Bouët (2008) uses the same MIRAGE model and estimates that global free trade would produce average welfare gains of around 0.8% of national income for low-income countries. In contrast to unilateral trade preferences in OECD markets, global free trade would bring additional gains from access to other developing-country markets, as well as from these countries' liberalization of their own markets. Thus, it is notable that the estimated benefits from 100 percent market access for LDCs show welfare gains well above the level estimated for global free trade for Malawi and Southeast Asia, and of more than a third of that level for Bangladesh and Ethiopia. While they are the only technique for showing the global distribution of gains and losses from changes in trade policy, computable general equilibrium models have features that make the size of the estimates quite conservative. To suggest the range of possible benefits, Table 3 contrasts the CGE results for LDCs with estimates from Laborde (2008), which uses a less conservative, partial equilibrium, approach that takes into account only potential changes in demand in the liberalizing countries, and not potential supply constraints in the exporting countries.¹⁸ In addition to using a different estimation method, the Laborde results are in the context of the WTO's Doha Round and thus cover only the 32 WTO members.

The partial equilibrium analysis suggests that total LDC exports could increase as much as \$2 billion, or 17 percent. The largest relative gains in both sets of estimates go to Malawi, as well as the Asian LDCs that face tariff peaks on their exports of apparel to the U.S. market. Other African LDCs see smaller gains, but that is not surprising since they generally have good access in their major markets. The partial equilibrium estimates of gross gains are also available for other LDCs that are members of the WTO and those show large gains for Benin and Sierra Leone, and gains of a quarter or more, relative to base-year exports, for Maldives, Nepal, and Niger (Laborde 2008, p. 22). Finally, it should be noted that neither the general nor the partial equilibrium estimates account for rules of origin or other administrative obstacles that can block access, even when traditional trade barriers are eliminated. Thus, the benefits are likely underestimated because they assume full access in the EU market, despite restrictive rules of origin in the EBA program that are known to inhibit exports.¹⁹ But the benefits of moving to 100 percent DFQF access in other markets would also be less than estimated here if programs for LDCs create or retain similar obstacles. That underscores the

¹⁸ In this model, LDCs have no supply constraints and react perfectly to the increased demand for their products when barriers are removed. See Fontagne et al. (2008) for details.

¹⁹ Additional benefits might now be realized as a result of the EU's announcement of new, less restrictive rules of origin under the EBA program, especially with respect to fish and apparel.

importance of including changes to restrictive rules of origin, as recommended by the CGD Working Group on Global Trade Preference Reform.²⁰

Table 3: Percentage Variation in Exports for two scenarios in two models

	100 % OECD DFQF		100 % OECD + MICS ^b	
	General	Partial	General	Partial
Cambodia ^c	4.16	28.96	4.82	38.55
<i>Clothing</i>	2.52	31.27	2.55	32.96
Ethiopia	19.49	n.a.	19.51	n.a.
Madagascar	1.35	n.a.	2.24	n.a.
Malawi	-0.03	-0.74	0.57	20.61
Mozambique	12.97	215.08	13.91	240.41
Senegal	0.39	16.29	1.41	128.11
All WTO LDCs ^d (%)	1.16	8.46	9.38	64.83
All WTO LDCs ^b (million dollars)	n.a.	16.97	n.a.	44.36
		2 108		7 731

a. Canada, Japan, Norway, Switzerland, United States; the EU is excluded because it provides 100 percent DFQF.

b. The CGE model includes South Korea and Mexico in OECD, while the partial equilibrium includes them with Brazil, China, and India as middle-income countries.

c. In the CGE model, the results are for the regional aggregate, "rest of South East Asia," which includes Laos and Brunei, as well as Cambodia, which dominates exports.

d. The partial equilibrium estimates are in the context of a Doha Round agreement and thus only include WTO LDCs

4. What Happens if the OECD Extends 100 Percent Access to Other Small, Poor Countries?

We tested a different scenario for extending eligibility for DFQF market access in OECD countries beyond LDCs, where other small and vulnerable economies (SVEs) are included in the preferential program. More precisely, the additional small and vulnerable countries that fall below the World Bank's low middle-income (per capita) threshold with total national incomes below \$50 billion, which excludes Pakistan and Vietnam because they are large, become DFQF recipients. In addition, to test the sensitivity of the results to the country classification chosen, we implemented a fifth scenario that extends DFQF to all low-income-Countries (including Viet Nam and Pakistan in spite of their relatively large size). This scenario may also be of interest because both the EU

²⁰ Information on the working group, as well as the final report, may be found at http://www.cgdev.org/section/initiatives/active/reformingtradepreferences/global_trade_preference_reform.

and United States are considering extending some additional market access to Pakistan in the wake of last summer's floods.

Table 4: Percentage Change in Export Volume in 2020 in Scenarios Where OECD Grants 100% DFQF

	Region	B LDCsonly	C OtherSVEs	All LICs ⁽¹⁾
Least Developed Countries	Bangladesh	4.16	3.46	3.38
	Ethiopia	1.35	-0.49	0.90
	Madagascar	-0.03	-2.28	-0.70
	Malawi	12.97	4.71	11.15
	Mozambique	0.39	-0.48	0.21
	Senegal	1.16	0.80	1.12
	Rest of South East Asia	2.52	2.40	2.25
	Rest of Africa	0.08	0.49	0.29
Low-income Countries	Pakistan	-0.04	-0.05	11.90
	Vietnam	-0.01	-0.06	18.00
Additional SVEs	Bolivia	-0.03	3.46	-0.02
	Paraguay	-0.04	16.95	-0.03
	Sri Lanka	-0.01	20.94	-0.27

(1) Additional scenario included all the LICs. All other developing countries are not reported here, but do not present significant variations.

Table 4 shows the estimated change in exports for potential beneficiaries, as well as those left out, under each scenario and compares them to the LDC-only scenario. In general, extending DFQF market access to other low-income countries, even when Pakistan and Vietnam are included, entails generally small losses for both LDC beneficiaries and excluded countries, and, when they are included, large gains for Pakistan and Vietnam. There are losses for Sri Lanka, the Philippines, and Central America, but they remain well under one-half of one percent in those cases. Unfortunately, the benefits for the smaller low-income countries are harder to assess because of data limitations, with only Pakistan and Vietnam having sufficient information available to assess the impact in detail. The increase in exports for the rest of Africa region could be due to increased benefits for low-income countries in that region.

Extending DFQF market access to other small and low middle-income countries creates large export gains for those countries for which we have data, especially Paraguay (17%) and Sri Lanka (21%). The African, Central American, and Latin American residual regional aggregates also gain, presumably because they include small, low middle-income countries that would gain from additional access. But this scenario leads to modest reductions in the gains for Asian LDCs and either larger declines in gains or outright losses for African LDCs, including of more than 1 percent of exports for Ethiopia and Madagascar. The inclusion of low income countries, especially from Latin America and Asia, will expand the scope of products on which African LDCs will face increased competition,

particularly in agriculture. Preference erosion losses also increase for other developing countries, though they are relatively small except for Mauritius.

5. How Important is Improved Access in Large, Emerging Markets?

For some countries, particularly in Africa, extension of full market access by large emerging markets would significantly expand the potential gains from unilateral preference programs. In these scenarios, we include as emerging markets China and India, which have implemented partial duty-free preferences for LDCs, and Brazil, which commit itself to grant the same agreement.²¹

China announced a few years ago that it would provide duty-free, quota-free access on 440 tariff lines for 30 sub-Saharan African with which it has diplomatic relations and then announced an expansion of that in late 2009 to 95 percent of tariff lines. It also offers DFQF on a smaller number of tariff lines to Asian LDCs with whom it has relations. India's programs provide DFQF market access on 85 percent of tariff lines and partial duty reductions on another 9 percent, phased in over several years. The announcement by Foreign Minister Celso Amorim in Geneva last year said that Brazil would begin providing duty-free access for LDCs on 80 percent of items then increase coverage to "all tariff lines" over four years.²² Today, this Brazilian commitment is still under development and not yet implemented in 2012.

Unfortunately, we do not have full information on these programs and we have to make some assumptions to identify the products likely to be excluded in the partial product coverage scenario, which could skew the results somewhat. From what we do know about these programs, the political economy and the range of import-sensitive products appear to be similar to what we find in OECD countries. Thus, China's original list of covered products excluded cotton, sugar, most fruits and vegetables, and a number of textile and apparel products. India includes sugar and cotton, but excludes a number of other agricultural products and offers no or only partial preferences on many textile and apparel products. Textiles and apparel were also raised as sensitive by industry groups in Brazil.²³

The analysis suggests that meaningful impact on LDC exports and welfare (Table 5 and Annex Table 4) will result only if emerging markets also provide

²¹ Turkey is included as a member of the OECD in those simulations.

²² Because Minister Amorim's statement also refers to the Hong Kong communiqué, it is not entirely clear whether the commitment is to eventually cover 100 percent or 97 percent of tariff lines. See his statement on the WTO website at http://www.wto.org/english/thewto_e/minist_e/min09_e/min09_statements_e.htm.

²³ On China, see Minson (2007); for a comparison of China and India, drawing on the political economy literature, see Engel (processed); and on Brazil, see *Bridges Weekly Trade News Digest*, Vol. 10, Number 41, December 6, 2006.

100 percent product coverage. Focusing on the 100 percent product coverage scenario where emerging markets join OECD countries, this is the only scenario examined where Madagascar shifts from small losses to small gains. This scenario also results in more marked increased gains for several other LDCs in Africa, particularly Ethiopia, Mozambique, and Senegal, with more modest additional benefits for the Asian LDCs. The African regional aggregate also sees a large relative gain, though it remains small in absolute terms.

The partial equilibrium estimates in Table 2 show a similar distribution of gains, but of a much larger magnitude. In this scenario, exports from Madagascar, Mozambique, and Senegal could increase by as much as 21 percent, 128 percent, 65 percent, respectively, compared to increases of 10 percent or less in the general equilibrium modeling. Overall, the partial equilibrium estimates for all WTO LDCs suggest an average increase in exports of up to 44 percent, worth an additional \$8 billion for these countries.

Table 5: Comparing the Percentage Change in Export Volume in 2020 when Brazil, China, and India also grant 100% DFQF to LDCs

LDCs	OECD only	OECD + EMs
Malawi	12.97	13.91
Senegal	1.16	9.38
Bangladesh	4.16	4.82
Rest of SE Asia	2.52	5
Ethiopia	1.35	2.24
Mozambique	0.39	1.41
Madagascar	-0.03	0.57
Rest of Africa	0.08	0.22

EMs	OECD only	OECD + EMs
Brazil	-0.03	0.00
China	-0.03	-0.02
India	-0.01	0.64

Perhaps the most interesting result in the general equilibrium analysis is that all three emerging markets granting 100 percent DFQF market access improve their position relative to the scenario where only the OECD grants DFQF market access to LDCs. Other developing countries see little or no preference erosion as a result of the expanded access for LDCs (Table 4).

6. What is the Impact of 100 percent DFQF Market Access for OECD Countries?

The overall conclusion regarding the impact on preference-giving countries—both developed and developing—is that it is small. Annex Table 3 (in the working paper version) shows the results from the CGE model for changes in exports, GDP, and welfare, among other indicators, and they are indistinguishable from zero for all preference-giving countries when 100 percent DFQF for LDCs is given, either by the OECD only, or OECD plus Brazil, China, and India. Table 5 shows the sector-specific variation in production for preference-giving countries and, while the impact often exceeds the average, economy-wide impact (not surprisingly), there is only a handful of cases where production declines rise to even as much as 0.5 percent.

For the OECD countries not already granting 100 percent product coverage, the most sensitive products are often agricultural products subject to tariff-rate quotas to help control supply and prop up prices. The expressed concern, whether in Japan for rice and dairy, Canada for dairy and poultry, or sugar in the United States, is that expanded market access for LDCs will destabilize the price support programs. It is true, that the estimated reductions for agricultural products that are commonly controlled through quantitative restrictions could be suppressed because the model cannot completely address the prospects for trade creation in cases where little or no trade currently exists. Still, one would not expect large gains for potential LDC exporters of commodities such as meat and dairy products because it would be difficult for poor countries to meet rich-country food safety standards for these products

To explore one example in more detail, are the CGE results in Table 6 and Annex Table 5 (in the working paper version), which show very little change in either exports or U.S. production of sugar from providing 100 percent DFQF for LDCs, plausible? While the estimate of no change in production is influenced by the restrictions imposed on trade creation in cases of zero trade, a brief survey of LDC exporters and markets also suggests there is little reason to expect a large surge in U.S. imports if sugar is included in DFQF for LDCs. Currently, only two African LDCs—Malawi and Mozambique—have access to the U.S. market under the historical quota allocation system and their quotas are small. Only two other African LDCs—Ethiopia and Zambia—have had exportable sugar surpluses in recent years. But African sugar producers tend to be relatively high-cost and transportation costs are also high.²⁴ The European Union is also the traditional

²⁴ The exception to this is Sudan, which is planning large investments in sugar production with the aim of boosting output ten-fold. But Sudan is currently excluded from U.S. preference programs and the U.S. market by comprehensive foreign policy sanctions over human rights and democracy issues.

market for African exporters, though some of those exports could shift to the American market since the reform of the EU sugar regime (forced by a WTO complaint by Brazil) reduced the internal price from 50 percent higher to roughly the same level as in the United States.

To explore further the potential for market disruption from increased African sugar exports, we applied a simple partial equilibrium analysis to this sector. The results are presented in Table 7, reported in the working paper version. These results show the impact on domestic production and prices from two scenarios, one where U.S. imports of sugar increase by 100,000 short tons, which would have almost no impact on U.S. prices and production, and a second with increased imports of 300,000 short tons, which would reduce production by 6 percent and average prices by 10 percent, to 20 cents per pound.²⁵

Table 6: Percentage Change in Production Volume from implementing 100% DFQF for LDCs*

Sector	ANZ	Canada	EFTA	EU	Japan	Mexico	Turkey	US	Brazil	China	India
Fish	-0,01	-0,01	0,00	0,00	-0,01	0,00	-0,00	0,00	0,00	-0,01	-0,10
Leather	0,02	-0,01	0,02	0,00	0,02	0,01	0,09	0,05	-0,08	-0,01	0,47
Milk	-0,05	-0,03	-0,01	-0,01	-0,01	0,01	0,02	-0,10	-0,00	0,01	-0,00
Oilseeds	-0,97	-0,57	0,48	-0,17	-0,38	-0,45	-1,56	-0,99	-0,41	-0,33	-0,07
Oth cereals	0,04	-0,06	-0,01	-0,00	-0,01	0,01	-0,12	0,04	0,17	0,01	0,05
Oth crops	0,02	-0,40	0,14	0,03	-0,03	-0,14	-0,66	-0,76	-0,05	-0,03	-0,14
Rice	0,03	0,09	0,29	0,13	-0,00	-0,00	-0,32	0,04	0,00	0,00	0,10
Sugar	-0,15	0,01	-0,54	0,21	-0,35	0,01	0,06	0,01	0,15	-0,17	0,03
Textile	-0,27	-0,57	0,05	0,07	-0,03	-0,22	0,08	-0,45	-0,09	-0,11	0,21
Veg & fruits	0,04	0,05	-0,00	0,00	0,01	0,00	0,06	0,03	0,01	0,00	-0,62
Vegetable oils	-0,51	-0,91	-1,36	-0,24	-0,27	-0,07	0,03	0,02	-0,50	-0,46	-0,20
Wearing	-0,10	-0,01	0,02	0,03	-0,00	-0,03	0,03	-0,13	-0,06	-0,21	0,41

*For OECD countries, when only they implement; for emerging markets, when they implement along with OECD

Though there is no economic justification for the U.S. price-support program for sugar, these estimates suggest that at least some expansion of access is possible, without major disruption of the market, as long as that remains the political goal of the minority that controls policy.

²⁵ The estimates were done using the partial equilibrium model in Hufbauer and Elliott (1994).

Another sensitive sector for the United States is apparel and, here, both the CGE and partial equilibrium (Table 2 and Annex Table 5) results do show relatively large increases in apparel exports by Bangladesh and Southeast Asia (mostly by Cambodia). But, again, the impact on U.S. production is small, -0.45 percent for textiles and -0.13 for clothing. If removal of tariffs led to increased imports that are two to three times higher than estimated in the CGE model, closer to what is suggested by the partial equilibrium model (Table 1), and if the impact on production is proportional, it would still be in a range of one to two percent.²⁶

There are two major reasons for the relatively limited impact on U.S. production. First, the increase in imports from the Asian LDCs is offset to some extent by small decreases in exports spread among a large number of other exporters. Secondly, LDCs tend not to compete in the same product lines as American producers, who are generally far more technology sophisticated and capital-intensive. This is illustrated by the fact that Bangladesh's apparel exports are equal to 12.4 percent of the volume of U.S. production, but only 2.75% of the value.

7. Conclusions

Unilateral trade preference programs were created four decades ago to stimulate exports and help developing countries diversify their economies as part of their development strategies. Through preferences, but also regional and multilateral negotiations, many developing countries succeeded spectacularly in using trade as a tool of development, but the least developed countries lagged for a variety of reasons. The duty-free, quota-free market access initiative was developed to give these countries a boost.

While significant progress has been made toward the goal of improved market access for LDCs since the Millennium Declaration embraced it in 2000, much also remains to be done. This analysis helps to identify the distribution of potential costs and benefits from further progress. Several key conclusions that should inform policies in G20 countries stand out: there are still significant benefits for LDCs from removing the remaining barriers they face in OECD countries, but only if all products are covered. Since both rich-country tariff peaks and LDC exports are relatively concentrated, excluding as few as three percent of tariff lines, as proposed by the United States at the WTO ministerial meeting in Hong Kong in 2005, reduces the benefits to basically zero. Although it

²⁶ The estimated 4 percent increase in Bangladeshi exports from the CGE model, shown in Table 1 is for all exports to all countries. As shown in Annex Table 4, the increase in exports of textiles and clothing, most of which would be to the United States, is nearly 13 percent. The partial equilibrium estimates of increased exports are a bit more than twice that figure for Bangladesh and roughly 50 percent higher for Cambodia.

has nearly full access in its main markets, including in the United States under AGOA, sub-Saharan Africa can still gain from 100 percent DFQF market access that eliminates remaining agricultural restrictions in the U.S. markets. The gains for LDCs, especially in Africa, are significantly enhanced if Brazil, China, and India also provide 100 percent DFQF market access.

There is little evidence of significant losses for other competing developing countries that are not LDCs, including Pakistan or Sri Lanka, nor is there evidence of net losses for Africa from the United States extending DFQF market access to Asian LDCs. The LDCs account for a trivial share of global exports, the reason for the initiative, and preference-giving countries thus have little to fear from extending full market access to them. The quantitative results show that the expected impact on welfare, exports, and domestic production are very small to zero, including for the quota-controlled agricultural products excluded by Canada, Japan, and the United States, as well as textiles and apparel in the latter case. Relative to the scenario where only the OECD does so, the large emerging markets do *better* if they also grant 100 percent DFQF market access to LDCs.

Extending DFQF access to other low-income countries (by the World Bank definition) has little impact on existing LDC beneficiaries or preference-giving countries, but big benefits for Pakistan and Vietnam if they are included.²⁷ Extending DFQF to other small and poor (lower middle-income) countries has large benefits in some cases for those countries, but at the expense of existing LDC beneficiaries, especially in Africa, and also entails higher costs for preference-giving countries.

The context around these potential gains is also important, however. In particular, they assume full utilization of available market access, but that does not happen for a number of reasons. It did not happen under the EU's Everything But Arms program in the past because of rules of origin that are highly restrictive in some sectors and prevent LDC exporters being able to take advantage. The value of U.S. and other reforms in the future will also depend on what kind of rules they choose to implement.

Whether African fish and clothing exports respond to the change in EU rules of origin will tell us something about the importance of complementary policies to support full utilization of preference programs. We know that policies outside preference programs themselves, such as sanitary and phyto-sanitary standards²⁸

²⁷ Note, however, that Pakistan recently moved into the World Bank's low-middle income category and Vietnam is expected to do so, possibly as soon as this year.

²⁸ Disdier, Fontagné and Mimouni (2004) analyze the impact of sanitary and phyto-sanitary (SPS) rules, as well as technical barriers to trade (TBT). They show that SPS and TBT have a significant impact on LDCs exports especially from the EU market. Actually they've shown that despite the fact that other OECD countries enforce more SPS rules, those imposed by the EU impede more LDCs exports on agricultural products. Obviously these SPS and TBT rules are often legitimate, but they can also be protectionist.

affect agricultural trade in importing countries, and that inadequate infrastructure and excessive red tape in LDCs, are often at least as important as traditional border measures in suppressing LDC exports. Aid for trade and reforms to improve investment climates in the exporting countries need to be addressed before preference programs can reach their full potential. But providing market access is a step that this analysis suggests would be both beneficial for LDCs, and low-cost for preference-giving countries. UN Secretary General Ban Ki Moon just designated 2010 as the “year of development” and called for accelerated efforts to achieve the Millennium Development Goals. The ongoing economic crisis in many rich countries contributed to rising protectionist pressures in those countries and could make this proposal seem less feasible. But the analysis here underscores the small effects on production in preference-giving countries and the crisis should not be an excuse for delaying achievement of the goal of providing duty-free, quota-free market access for LDCs by rich countries, as well as by Brazil, China, India, and other developing countries “in a position to do so.”

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