

Could unrestricted market access to the QUAD Markets make the Doha Round useful for sub-Saharan Africa after taking Account of AGOA and EBA¹?

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Abstract

A great deal of attention has been given to the integration of sub-Saharan African countries into the international trading system over the past five years. The QUAD countries (United States, Canada, the European Union, and Japan) have strongly reinforced their preferential trade agreements in favour of least developed countries (LDCs) from Africa and elsewhere, with specific initiatives from the EU and the US, and large extensions of the existing preference schemes by Japan and Canada. Yet, despite sharp reductions in the tariffs on African exports towards these markets, African exporters still face tariff barriers that are significant for key products. This study estimates the gains that sub-Saharan African countries could draw from genuine unrestricted market access (UMA) and also discusses the institutional framework in which UMA should be implemented. The analysis shows that, despite recent improvements in the preferences granted to African states, welfare gains associated to UMA would amount to USD 1.2 billion in sub-Saharan Africa, favouring primarily unskilled workers. This paper highlights the limited costs that UMA would imply for the QUAD countries, as well as the indirect benefits developing countries would realize due to the trade shifting induced by UMA and the economic gains in sub-Saharan Africa. The analysis is extended to investigate the potential impacts of a Most Favoured Nations liberalisation likely to result from the current Doha Round. The results show that the current Doha Round could erode the benefits of UMA, as the MFN tariffs are likely to decrease substantially after its implementation. But on the other hand, the analysis in this paper also quantifies the potential impact of reciprocity in a multilateral framework. The results show that asymmetrical reciprocity could leave the UMA benefits nearly unchanged but this asymmetry would have to leave at least 40 percent of sub-Saharan Africa trade for QUAD imports free of tariff reduction.

¹ The authors acknowledge useful comments received during the TRID Seminar Series at the UNECA when an earlier version of this study was presented and published as Hammouda et al. 2005, "Unrestricted Market Access for sub-Saharan Africa: Important Benefits with Little Cost to the QUAD", *Africa Trade Policy Centre Work in Progress Paper Series No. 11*, Economic Commission for Africa, Addis Ababa, Ethiopia. The comments received led to the revision and expansion of scope of the unrestricted market access question. A more updated data has also been employed in this paper compared to the earlier version.

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1. Introduction

In less than a quarter of a century, Africa's share in the international merchandise trade has decreased from 6% to 2%. In 1980, the African continent exported US\$120 billion worth of merchandise, for a world total of US\$2,031 billion. In 2003, African exports amounted to US\$174 billion for a total of US\$7,443 billion (UNCTAD 2004). Since the year 2000, the international community has tried to address this deterioration of Africa's position by improving market access for the African exporters. In 2001, the WTO launched in Doha a new Round of trade negotiations dedicated to the integration of developing countries in international trade³. In the meantime, the countries of the QUAD, namely Japan, Canada, European Union and the United States, reinforced their bilateral preferential agreements with developing countries. In 2000, the US Congress adopted the African Growth Act, which aims at offering tangible preferences to African countries to "continue their efforts to open their economies and build free markets". In 2001, the European Union launched the "Everything But Arms" (EBA) initiative, which was to add to other preferential agreements such as the ACP Lomé Convention, such that all LDCs could enjoy quasi-UMA to European markets. Japan and Canada have also significantly improved their preferential agreements with Africa.

However, despite the attention given by the QUAD to African countries, African exports to these markets still face obstacles to trade. Non-tariffs barriers, such as technical and sanitary regulations, are major *de facto* constraints to Africa, as they tend to disadvantage producers and exporters from the African countries. The non-tariff barriers are a growing problem as they erode any competitive gains that might have been achieved through reductions in tariffs barriers. Baldwin (2000) deals extensively with this "magnification effect" that prevent developing countries from making gains as tariff barriers fall. Furthermore, tariff peaks⁴ continue to dramatically affect some African exports. On transformed food products for instance—extremely sensitive products for agricultural economies such as the African economies—African exporters face tariffs as high as 23.2% into the EU⁵. Tariff escalation⁶ also erodes the competitiveness of African exporters for transformed goods. Despite the reinforcement of the preferential agreements dedicated to Africa, African exporters still face average tariffs of 2% towards the QUAD with this low average hiding the real problems of tariff peaks and escalation. In this respect, UMA for African exports to QUAD markets remains as an option for consideration, especially as a way to make the Doha Round useful for Africa.

This paper assesses empirically the impact of a genuine UMA for sub-Saharan African exporters to the QUAD. The paper also evaluates the cost of these measures for the developed and non-African developing countries, and discusses the way to articulate the UMA proposal to the WTO and the rest of the Doha negotiations.

³ The July Package that was agreed on 1st August 2004 in the WTO General Council marks the progress achieved so far in the Doha Development Round. This July framework agreed on principles and the modalities that would deliver the improvement in the market access for African producers and exporters are yet to be defined by June 2005.

⁴ A tariff peak in international terms is an ad valorem duty greater than 15 percent. Sometimes, tariff peaks are defined at the domestic level in which case they are any ad valorem duties representing three times the national average.

⁵ Source: Global Trade Analysis Project (GTAP) version 6.0 database

⁶ Trade policy aimed at limiting importation of transformed goods. Tariff escalation is the situation where the ad valorem duty charged on a good increases significantly when some value is added to that good. An example is when raw coffee is charged zero duty but once it is processed, the duty rate increases significantly.

The paper is organized as follows. Section 2 provides the context justifying the case for evaluating the unrestricted market access question afresh. This is followed in Section 3 by an exhaustive discussion of the methodologies that have been employed to investigate the unrestricted market access issue. In this exposition the existing empirical studies on this matter are reviewed. The section concludes by highlighting the justification for general equilibrium analysis but also notes the limitations in this methodology. In Section 4, the empirical results of this study are presented with discussions on the various simulations. Three simulations are presented, but in simulations 2 and 3, several scenarios are presented, tackling the questions of preference erosion and reciprocity, key points in a multilateral system. In Section 5 the non-tariff barriers that could limit the possibility of sub-Saharan Africa exploiting fully gains from unrestricted market access are enumerated, pointing out what would need to be done to obtain optimal results from such a measure by the QUAD countries. The paper concludes with Section 6.

2. Why Revisit the UMA Question?

In recent years, the issue of UMA for African and LDC countries has been studied using various angles and methodologies. An illuminating study in this debate by Ianchovichina et al. (2002) tested five liberalisation scenarios of African exports to the QUAD, using the GTAP model and version 4 of the GTAP database. Four of these scenarios represent partial liberalisation by a QUAD country, while the fifth scenario corresponds to genuine UMA to all QUAD markets. The analysis considered that the UMA measures would be available to 37 Sub-Saharan African states, each being either an LDC or a country eligible for the HIPC initiative.

The results of the simulations in Ianchovichina et al. (2002) revealed that, given the level of protection applied by the QUAD to sub-Saharan exports in 1997, sub-Saharan African states would gain little from better access to the markets of the USA and the industrial Japanese markets. However, unrestricted access to the European Union and to the agricultural Japanese market could bring significant gains of welfare. The cumulated gains of duty free access to all QUAD markets would imply an improvement of welfare for the African countries equivalent to US\$1.8 billion, boosted by a growth in non-oil exports of US\$2.5 billion.

Ianchovichina et al. (2002) UMA scenario further indicated that the exports of the 37 sub-Saharan African countries would switch from trading with all QUAD export markets to focus exclusively on the agricultural Japanese markets, which would result in a growth in sub-Saharan exports towards these markets of US\$5 billion. Japan would be the main loser in this scenario, as its welfare would decrease by US\$5.2 billion and its tariff revenues drop by 22%. Furthermore, the whole world would lose US\$3.5 billion worth of welfare, since the welfare gains of sub-Saharan Africa would not cover the welfare losses in the rest of the world.

Ianchovichina et al. (2002) study also analysed the consequences of a 25% linear cut on world tariffs once UMA is granted to sub-Saharan Africa. This scenario aimed at representing the impact of new tariff liberalisation round at WTO, after UMA. They showed that this drop in tariffs would lead to a drop of welfare by US\$525 millions in the 37 Sub-Saharan African countries, representing roughly 29% of the gains associated with UMA itself. This served to highlight the preference erosion concerns that continued MFN and bilateral trade liberalisation involving the QUAD countries would pose for the preferences receiving countries.

There have been other studies that focused on the issue of cutting tariffs on exports from the poorest countries in the QUAD. Hoekman et al. (2002) focused their attention on the various scenarios of reduction of tariff peaks on the exports of the LDCs to the QUAD markets. The simulations were executed with a partial equilibrium model using Harmonised System (HS) HS-6 level protection data. The supply rigidity of the LDCs was taken into account through a supply elasticity of 0.5. The results of this detailed study showed that eliminating tariffs peaks on the LDC exports to the QUAD would induce a boom in exports of these countries by US\$2.5 billion, mainly in favour of Asian LDCs. Bangladesh for instance would capture 80% of this trade growth. Some African LDCs would also draw some benefits from the measure—for example, Liberia and Madagascar would draw significant benefits from eliminated tariff peaks in the Canadian market—but on average these benefits would be limited. In the same vein, the extension of the measure to all developing countries would reduce the trade benefits of the LDCs by 36%, confirming that preferences bring less gains to the poorest when they are granted to countries with unequal development levels, making credible the fears of preference erosion.

Why is the UMA evaluation still necessary today? The main justification is that there is a marked difference in the geographical aggregation used by Ianchovichina et al. (2002) and the aggregation used in this study results. In particular, there has been significant improvements to the disaggregation level of the GTAP database since the fourth version⁷ employed in the World Bank study by Ianchovichina et al.. Moreover, version 6.0 of the GTAP database used in this paper also includes the preferences granted by the QUAD into the protection database taking into account the preferential agreements such as AGOA, EBA or extension of the preferences by Japan or Canada, as well as preferences granted by developing countries themselves under regional trading arrangements. It therefore tackles the question whether there are still gains to be made post-AGO and post-EBA and what developments at the multilateral level imply for any expected gains. In particular, the preference erosion question and hence by extension the less-than-full reciprocity issue is addressed. By looking at the UMA today, the minimum reciprocity feasible by the African countries that would not make them worse off from a concomitant liberalisation on an MFN scale is addressed.

3. Methodologies for Assessing Unrestricted Market Access

As clearly indicated, the aim of this paper is to estimate the potential impact of unrestricted access for sub-Saharan African exporters to QUAD markets, on African economies and the rest of the world. In the past, the evaluation of preferences has been undertaken using various methodological approaches. Mold (2004) distinguishes five basic approaches, three of which use empirical evidence, and two that use trade modelling. The analysis is based on a comparison of import share of preference-receiving countries compared with total preference-granting country imports, before and after the granting of preference. Another approach consists of studying the products granted large preference margins, and comparing them with the effective comparative advantages of the preference-receiving country. The utilization and utility⁸ rates also give relevant indication of the usefulness of

⁷ The base year of the GTAP database version 4 is 1995, while the base year of GTAP database version 6.0 is 2001.

⁸ The utilization rate is the value of imports effectively receiving preference out of the value of the imports eligible for preferences, while the utility rate defines the same imports receiving preference divided by total imports from the preference-receiving country.

preference. However, these tools can only be used in an ex-post evaluation of the preferences, as they are based on effective change in trade induced by preferences.

Among the modelling tools that can be used for ex-ante policy analysis, Mold (2004) underlines the use of “gravity” models, which explain trade between countries as a function of the distance between them, their joint income and a dummy variable to account for membership to the preferential scheme, as well as the current development of the CGE analysis. Review of the existing literature further shows that partial equilibrium models have been used to estimate the impact of preferences. Both the partial and general equilibrium models have their advantages and limits, and it is essential to precisely define the objectives of the study in order to choose the relevant modelling methodology.

Gravity and partial equilibrium models have proven to be powerful tools in trade analysis. Simplified partial equilibrium analysis can give a useful theoretical framework to clarify trade policy concepts. Bora et al. (2002) presents a comprehensive analysis of the preferences through this kind of simplified modelling, comparing their effects in perfect and imperfect competition frameworks, and differentiating their analysis depending on the relative size of the preference-receiving country. Partial equilibrium models can also be used to analyse the effects of trade policy measures by sector. In the case of UMA, a partial equilibrium analysis was developed by Hoekman et al. (2002) to assess the impact of tariff-peaks elimination on the imports from the LDCs and other developing countries to the QUAD economies. This methodology allows for detailed analysis, in this case at the HS-6 product level, and shows the impact of preferences on trade on a product-by-product basis. As Hoekman et al. (2002) noted, by limiting their focus to tariff peaks, which represent a small share of total trade, this approach is “unlikely to lead to misleading conclusions”.

Partial equilibrium methodology would enable the capturing in detail the impact of UMA on trade creation and trade diversion between two countries. However, the assessment in this paper is not focused solely on the trade impact of UMA. The objective is to provide a global perspective of UMA, integrating all the regions of the world as well as all products, in order to give a clear view of the costs and benefits of the measures on most significant WTO members.

Hence, partial equilibrium methodology would only partially meet the desired goals. In particular, partial equilibrium is not able to take into consideration the changes in the terms of trade and the changes in global prices. Only a general equilibrium framework can tell how relative prices will change after UMA, by combining and balancing all economies and markets. The issue becomes all the more important since the impact of preferences on prices will determine the way in which the rents from the preferences are captured⁹ and, to a large extent, the changes in welfare that UMA will induce. In the same vein, the inter-sectoral effects are sensitive to the effects of preferences on outputs, prices and re-allocation of trade. In constrained economies, a surge in the demand from the rest of the world will likely lead to transfer of production factors from one sector to another.

⁹ If the prices of imports in preference-granting countries remain unchanged after the implementation of the preference, the preference beneficiary captures the rent through an increase of its retail price. On the contrary, if these prices go down due to the increase in the volume of exports from the preference beneficiary country, the consumers of the preference-granting country, who enjoy a drop in prices, capture the rent.

In this perspective, using partial or gravity modelling would be less relevant than CGE analysis. However, CGE tools also have their weaknesses. In particular, they tend to bias results due to the high level of data aggregation. For instance, a tariff shock at the most disaggregated level is based on a maximum of 57 tariff categories¹⁰, representing all products, in the case of the GTAP CGE model. It implies that tariff cut simulations on tariff categories comprising highly dispersed tariffs may not lead to very accurate results. Martin et al. (2003) provides a concise discussion of the aggregation bias problem when it comes to tariff changes simulations using general equilibrium models. However, CGE modelling is able to capture inter-sectoral effects, giving a global perspective on trade policy impacts in different regions and sectors and shedding some light on the “second-round” effects of trade changes, such as their implications on GDP, welfare or public resources, which in return may have implications on trade. Given the comprehensive goals assigned to this study on UMA, it appears to be the most relevant tool for analysis.

Progress and limits of CGE models in the assessment of trade policies

Suffice at this point to highlight some of the limitations of CGE models in analysing trade policies. This will help to put in context the interpretation of the results to be derived through the GTAP application to analyse the unrestricted market access question. The use of the general equilibrium models to assess the impact of multilateral trade negotiations began during the Tokyo Round (1973-1979). Considerable improvements have been achieved since then, regarding not only the data but also the hypothesis of the model, as non-Walrassian models have been developed and tested. In the nineties, CGE analyses were used more frequently in trade policy analysis. They played a significant role in the debates leading up to the NAFTA agreement, for instance, especially in the simulations conducted by the US International Trade Commission (ITC). Francois et al. (1994) observes that these results were used by the then US Administration in its opposition to the findings of labour unions on the wage effects of NAFTA, as the study of the ITC showed that NAFTA would have non-significant effects on the wages of unskilled workers. In the same way, the estimations drawn from the CGE simulations led to important political moves during the WTO Uruguay Round, as they revealed to member States how much they would lose in not concluding the negotiations. Francois et al. (1993) estimated that global gains from the Uruguay Round could reach US\$510 billion. Three years later, were re-assessed to be below US\$200 billion by Harrison et al. (1996).

The Doha Round has also been assessed through different CGE simulations. The development of the GTAP model and database, as well as its simplified interface “runGTAP”, has contributed largely to these works by enriching the results and simplifying the modelling itself. Large numbers of scenarios have been tested as the Doha Round negotiations continue. Clear trends appear from the results of various studies conducted by the IMF, World Bank, UNCTAD (see UNCTAD 2003a) and CEPII (see Fontagne et al. 2003) and the UNECA (see Economic Commission for Africa 2004). The most important trend being that further tariff liberalisation would deliver uneven and significant gains of welfare to the world. The full liberalisation scenarios, leading to generalised duty free access, could bring gains of welfare ranging from US\$253 billion (see Anderson et al. 2000) to US\$1857 billion (see Brown et al. 2001), depending on the closure and the data used in the studies.

¹⁰ The HS-6 classification, which is generally used to calculate tariff cuts at the WTO, represents around 5,000 tariff lines by country.

Strong tariffs cut scenarios, through which a Swiss formula is applied¹¹, would also lead to growth in world trade and output. These studies equally underline the asymmetry in the distribution of these gains between regions and between liberalised sectors. Agricultural liberalisation tends to deliver more or less homogeneous gains for developed and developing countries, while industrial liberalisation serves more the interests of the developed and emerging economies.

These works also shed some light on the potential consequences of Doha Round on African economies. In the best-case scenario, they would get limited welfare gains. These optimal scenarios are based on strong agricultural tariff liberalisation, and limited cuts in domestic support, export subsidies and industrial tariffs. African states clearly diverge from the emerging economies in the area of agricultural domestic support. As Africa is now net food-importer, cuts in agricultural domestic support induces a rise in agricultural prices, which is not favourable to the African consumers. Besides, results converge on the implication of the tariffs liberalisation on the specialisation and the external balance of sub-Saharan Africa. Indeed, multilateral tariff reductions lead to a systematic deterioration of African trade balances as well as a reinforcement of the agricultural specialisation of the continent (see Economic Commission for Africa 2004).

However, these results must be interpreted with caution, as they are very sensitive to the nature of the scenarios on the one hand, and to the closure, base year and baseline of the model on the other hand. The nature of returns to scale and the type of competition sharply influence the magnitude of the results. The difference between the results from Brown et al. (2001) and Anderson et al. (2000) on a similar full liberalisation scenario represent a ratio of seven times. It underlines the impact in the change between a standard closure, used by Anderson, and a non-Walrassian closure, such as used by Brown, with growing returns to scale and imperfect competition. In the same vein, previous versions of the GTAP database did not include the preferential tariffs granted to developing countries like in the current version. They also ignored the preference schemes within regional trading agreements. Many authors such as Ianchovichina et al. (2002) used other tariff databases to adjust the GTAP tariff database, although the difference between those who have integrated the preferences, and between the different methods used to integrate them, have induced differences in the results that are sometimes difficult to identify. The study by Ianchovichina et al. (2002) which uses GTAP version 4, added preferential tariffs to the database by extracting them from the data communicated by the QUAD members to the Integrated Database of the WTO and the Trade Policy Review, and then transformed them from the HS-6 digit to the 15 products categories used in the study's aggregation. Thus, CGE modelling gives vital information on the trends seen in the economies induced by trade policy shocks on the distribution of the gains and losses, as well as the induced differences of the liberalisation scenarios, but the magnitudes of the results of the CGE simulations are more indicative than being precise or accurate.

The GTAP model: A brief description

The model used in this study, GTAP, is a multi-region computable general equilibrium (CGE) model designed for comparative static analysis of trade policy issues (see Hertel 1997). It can be used to capture effects on output mix, factor usage, trade effects and resulting welfare distribution between countries due to

¹¹ The Swiss formula is a harmonizing formula that leads to major cuts on high tariffs. After the implementation of a B coefficient Swiss formula, all the tariffs will be capped at maximum B%.

changing trade policies at the national, bilateral, regional and multilateral levels. It allows international mobility of capital, multiple trading regions, multiple goods and primary factors, empirically based differences in production technology, consumer preferences across regions and explicit recognition of a global transport sector.

The underlying theory of GTAP is captured in two types of equations. The key drivers of the model are behavioural equations, based on microeconomic theory, which capture the behaviour of agents in the economy including consumers and international trade (exports and imports). These equations also capture the behaviour of the optimising agents, such as consumers, that allow the derivation of the demand functions. The second types of equations are accounting relationships. These are essential in order to ensure that the behavioural equation solutions occur within a consistent macroeconomic framework. Thus, the accounting relationships ensure that the receipts and expenditures of all agents (consumers, producers, government, rest-of-the-world) are balanced.

The standard closure of the model assumes constant returns to scale, perfect competition and full utilization of production factors. This paper uses the static version of GTAP, which may lead to an under-estimation of the results by not integrating the effects of investments on the supply side and other long-term dynamic effects.

The only change in this paper effected in the standard closure concerns the utilisation of endowments, as full utilisation seems to be a restrictive hypothesis for most developing countries. In fact, in countries such as those in sub-Saharan Africa, the unemployment of unskilled workers reaches levels that are very high compared to the rest of the world¹². Furthermore, the share of workers living on less than US\$1 per day reached 44.8% in 2003, which is far above the figures for the rest of the world¹³. Based on this twin problem of “high level of unemployment – high level of extreme poverty” criterion, this paper assumed in the simulations that the adjustment of the unskilled labour market occurs through the volume of workers rather than the nominal wages that they earn. In the sub-Saharan context, the number of unskilled workers ready to work at current market wages is high enough to assume unskilled workers are not a constraining factor in the region. This modification in the standard GTAP closure to allow for quantity rather than nominal wage adjustment is underpinned by the discussion in Dixon et al. (1980: pp. 340-341) where the implications for constrained and unconstrained factor markets for modelling closures are presented.

The GTAP database

The GTAP model is used together with the GTAP database. Not all countries are individually captured in GTAP, although each economy is part of the database as it could be part of a given composite region or included as part of the rest of the world. Thus, global macroeconomic consistency holds. Unfortunately, only a very small

¹² According to the ILO (2005), sub-Saharan Africa is the only region of the world, with North Africa and Middle East, where the unemployment rate is greater than 10%. This rate it needs to be noted does not take account of underemployment and assumes also that the problems associated with labour force surveys in developing countries do not exist. Unemployment rates as high as 40% have been considered as more realistic in some of the economies.

¹³ As World Bank (2004) shows, only the population of South Asia faces a comparable situation, with 28.4% of the population living on US\$1 per day or less in 2003. Yet, the overall level of unemployment is significantly less than in Sub-Saharan Africa.

proportion of African countries are individually disaggregated even in the latest version of the database used in this paper. The majority of African countries are captured in one regional composite. This was, however, not a limitation for this study, as the focus was on the regional sub-Saharan Africa grouping, excluding South Africa and other more advanced sub-Saharan African countries. The geographical aggregation used in the study is described in the following section.

In the database, bilateral trade data is a critical component, as bilateral trade flows transmit policy and growth shocks between countries. Bilateral trade is also important when it comes to looking at the implications of the terms of trade. Global bilateral data is sourced from the United Nations COMTRADE and supplemented with trade information from the IMF, FAO and World Bank.

Another important sub-component of the GTAP database is the protection data. These data are provided through the MacMaps database, which has been developed by the International Trade Centre (ITC) and the French *Centre d'études prospectives et d'informations internationales* (CEPII)¹⁴. The data is related to the year 2001 as the base year. The protection data includes preferences, with the exception of the enlargement of preference coverage decided by Japan and Canada in 2003. The results of the simulations reported here could be slightly overestimated, as part of the UMA effects will have been already captured through these GDP extensions. Besides, the database does not include the Multi Fibre Arrangement (MFA) phasing-out, as well as the extension of the European Union to 25 members. Therefore, the original protection figures have been modified to include these two events. A new baseline with the MFA and EU enlargement was developed in this paper to ensure improved accuracy of the results.

The phasing-out of the MFA was implemented by dismantling the quotas imposed by the QUAD on textile and clothing imported from developing countries. The extension of the EU was implemented in two steps: the cut of all tariff barriers inside the new common market; and, the adjustment of the tariff structure of Eastern Europe to the External Common Tariff of the EU15. Karingi et al. (2005) provides more detailed exposition of how these realities are built into a new baseline.

Due to a lack of statistical data, GTAP cannot be used to simulate the impact of the liberalisation of the services sector. Despite the potential gains associated with the liberalisation of the services sector, it was only possible to consider the impact of UMA on agricultural and industrial goods.

Study Aggregation

The present study aggregates the original GTAP database into 12 regions and 18 products. As the main scenario tested—the elimination of tariffs on imports from Sub-Saharan Africa towards the QUAD—is very simple, the “aggregation bias” earlier noted and well elaborated on in Martin et al. (2003) is not likely to affect the results. However, the results of the simulations on the reciprocity principle and the consequences of the Doha Round that are later reported might be slightly biased by this relatively broad level of aggregation.

The geographical aggregation considers only African countries that could really obtain UMA. This aggregation should thus distinguish between countries that are poor enough to be concerned by the UMA proposal, and more “developed”

¹⁴ Please refer to Bouët (2002) for a description of the MacMaps database.

developing African countries that if granted duty free privileges towards the QUAD would create political tensions with non-African developing countries. Two criterion were chosen, inspired by the work of Ianchovichina et al. (2002) on that issue. In these simulations, only sub-Saharan countries eligible for the Heavily Indebted Poor Countries (HIPC) initiative¹⁵ and African LDCs are granted UMA. This leads to the exclusion of South Africa, Zimbabwe, Botswana, Angola, Mauritius, Seychelles, Lesotho, Namibia and Swaziland. Lesotho is part of the LDC classification, but has been excluded since it is aggregated with Namibia and Swaziland in the GTAP database. Forty countries are thus concerned by UMA in these simulations, and the results will be slightly underestimated due to the exclusion of Lesotho on a methodological basis.

4. Empirical Results

Simulation 1: Eliminating all tariff barriers facing SSA in the QUAD markets

In this simulation, the existing tariff barriers facing sub-Saharan African producers and exporters in the QUAD markets are eliminated.

Everyone gains from unrestricted market access for Africa

The critical result from this scenario as indicated in the discussion of the results that follows is that the specificities of the African economies provide space for trade expansion in all the regions of the world. A preferential agreement usually induces trade creation for its beneficiaries in the markets in which the preference is granted, and trade diversion for the rest of the world. In the case of UMA, African countries enjoy a growth in exports towards the QUAD countries. In the meantime, other partners of the QUAD suffer from trade diversion, as the prices of African exports have become more attractive. As Table 1 indicates, in the case of UMA for sub-Saharan Africa, the volume of trade created towards the QUAD (US\$500 million) would roughly equal the trade diverted in the QUAD to the detriment of the non-African partners of this region (US\$442 million). Roughly two-thirds of the trade diversion would affect non-African developing countries.

However, the implications of preferences are more complex if the supply capacity of the beneficiaries is limited, as they have to give up opportunities to satisfy the surge in demand that can serve the interests of the rest of the world. The opportunities that arise for the non-preference receiving countries tend to be overlooked in most studies and also in the debate concerning whether preferences are good or they are just trade diverting instruments rather than development tools.

As the simulation in this paper shows in Table 1, due to a lack of skills, capital, and transport means, African exporters are constrained, and cannot satisfy a surge in demand. Hence, they would have to choose one market over another for strategic or financial reasons. In this simulation, it is clear that African exporters would shift their production from rest of the world with a reduction of US\$ 275 million for them to be able to increase their exports towards the QUAD, resulting in the net improvement of US\$229 million. The exports to the developing markets would decline by US\$ 196

¹⁵ Established in 1996 as a joint collaboration between the World Bank and the International Monetary Fund, The Heavily Indebted Poor Countries (HIPC) Initiative's aim is to reduce excessive debt burdens faced by the world's poorest nations. More information can be found on <http://www.imf.org/external/np/exr/facts/hipc.htm>

million and hence would be particularly affected by this re-allocation due to supply capacity constraints.

Table 1: Impact of unrestricted market access on bilateral trade flows (US\$ million)

	Canada	EU	USA	Japan	Other	SSA-40	Other	Total
	Developed				Developing			
Canada	0	0	-14	0	1	14	2	2
EU	0	-109	-14	0	13	356	46	291
USA	5	28	0	4	15	95	54	200
Japan	0	12	7	0	11	28	20	79
Other developed	-2	-13	-32	-7	-2	65	-10	-1
SSA-40	1	191	308	5	-50	-29	-196	229
Other Developing	-5	-67	-220	-14	2	280	14	-11
Total	-2	43	34	-13	-11	809	-71	790

Source: Author's simulations with GTAP 6.0

Additionally, preferences induce “second-round” effects, meaning that the trade effects of the preferences leads to macroeconomic changes, which in return modify the trade structure. The CGE models are able to capture these “second-round” effects, and thus give a more complete perspective on the global effect of UMA. African economies are generally very open to imports and in most cases; economic growth is associated with significant growth in imports. In the case of UMA, the growth of African exports would lead to an economic boom as discussed below, which in return would create opportunities for the producers and exporters outside the African continent.

These dual effects—trade shifting and new opportunities in Africa—which should not be ignored in the analysis of the results of the simulation, would lead to a surge in exports from the non-African countries. In sub-Saharan Africa for instance, the firms from the other developing countries increase their exports by US\$ 280 million as Table 1 volume flows shows. The EU seems also to fully benefit from this dual effect, with significant increases in its exports to Africa, and, to a lesser extent, to other developing countries. Thus, the traditional effects of the preferential agreement, including trade creation in favour of the beneficiaries of the agreement and trade diversion to the detriment of the rest of the world, should be interpreted in the context of the important global trade opportunities due to trade shifting of African exporters on the one hand and trade creation in Africa on the other. Eventually, all regions in the study's aggregation enjoy an expansion in trade, except other developed and developing countries, which suffer non-significant losses totalling US\$ 12 million.

Unrestricted market access could help deepen integration of sub-Saharan Africa in the global trading system

To help Sub-Saharan Africa benefit from international trade, UMA would have to prove to be not only favourable to the integration of Africa in international trade, but also to the improvement of socio-economic parameters such as poverty.

Table 2: Selected results of the simulation of unrestricted market access with alternative GTAP closures

	Welfare (US\$ million)		GDP volume (US\$ million)		Exports		Terms of trade (% change)	
	Flexible labour	Standard closure	Flexible labour	Standard closure	Flexible labour	Standard closure	Flexible labour	Standard closure
SSA-40	1,225	321	979	59	226	113	0.41	0.44
Rest of SSA	4	1	1	1	-1	-3	0.01	0
China	-16	-17	-1	-2	6	-3	0	0
Brazil	-3	-1	-1	-1	6	1	0	0
India	-5	-7	-1	-2	4	0	-0.01	-0.01
Other developing	14	-8	-3	-3	-12	-29	0	0
Canada	2	0	-1	0	3	0	0	0
EU25	-167	-176	-28	-26	318	237	0	-0.01
US	-78	-64	-6	-6	207	149	0	0
Japan	-38	-32	-7	-7	87	44	-0.01	0
Other developed	-3	-7	-1	-1	11	-1	0	0

Source: Author's simulations with GTAP 6.0

The trade effect of UMA on the African economies appeared to be favourable. After three decades of erosion in its international share of trade, SSA-40 would enjoy a growth in the value of its exports by 0.9%, while the growth of exports of the rest of the world would not exceed 0.02%. The increase of the African market share would result from the improvement of the terms of trade of this region (+0.4%), as well as the rise in the volume of exports (+0.5%). Table 2 shows some selected indicators including the terms of trade effects. As noted previously, the simulations were conducted with two alternative closures: standard GTAP closure and one that relaxed the unskilled labour market. The discussions and conclusions in this paper focus on the flexible labour market closure.

UMA for sub-Saharan Africa may however also reinforce traditional specialisations and partnerships in the region. Almost all of the increase in SSA-40 exports is concentrated on the European and North American markets, with SSA-40 exports of more agro-processed products and vegetables going towards the EU, and textile and clothing going to the USA. This latter result may appear surprising since the baseline for this scenario already includes the phasing-out of the MFA. However, the phasing-out did not mean that the QUAD is going to dismantle its tariffs on textile and tariffs. Tariffs rather than quota barriers remained even after the MFA phase-out. In this respect, with the elimination of these tariffs on a preferential basis under the UMA, SSA-40 seems to be able to capture some market share in the textile and clothing sector given the current level of tariffs. In the meantime, 94% of new imports of SSA-40 will comprise products and services, with 57% of them being provided by the QUAD.

These trade trends are confirmed by the analysis of the change in the value-added in SSA-40 as shown in Table 3. The industrial value-added tends to deteriorate, except on clothing, textile and agro-processed goods, with a sharp decrease in the value added on heavy-industrial goods. Thus, as with most liberalisation scenarios, UMA for Africa would not have a positive impact on economic diversification or South-South cooperation, which are two strategic issues for the region. It would deepen the integration of SSA-40 in international trade by reinforcing its current specialisation and trade networks. But there is an upside to this result, that it will at the same time provide scope for building gradually the competitiveness in the industries where specialisation takes place especially if the complementary policies are aimed at eradicating inefficiencies that can easily accompany preferential schemes in the recipient countries.

Table 3: Main changes in the value-added of SSA-40 (% deviation from baseline)

	Change in %
Clothing	6.75
Vegetables	4.62
Textile	4.37
Livestock	0.42
Agro-processing	0.39
Cotton	-1.05
Medium technology industries	-1.1
Low technology industries	-1.5
Heavy industries	-2.54

Source: Author's simulations with GTAP 6.0

The impact of UMA on variables like GDP or welfare appears to be clearly positive. With increase in GDP volume of 0.6% equivalent to US\$979 million shown in Table 2, and improvements in welfare of US\$1.2 billion, UMA is likely to significantly improve the situation of African economies. Of particular importance, the multiplier impact of exports¹⁶ appears to be quite high, reflecting the relevance of an African development strategy based on helping Africa trade. The economic implication appears to be all the more favourable since two-thirds of the welfare gains are the consequence of the improvement in the utility of unskilled workers¹⁷. This indicates that UMA has a place in helping sub-Saharan Africa to reduce poverty and reach the Millennium Development Goals. This is particularly important given that the gains shown in Table 4 are static gains and as such in a dynamic sense, African countries could gain through trade alone at least 5 percent of the US\$25 billion aid increase that the Commission for Africa has advocated (Commission for Africa, 2005).

Table 4: Decomposition of the welfare gain in SSA-40 from unrestricted market access

Source of welfare gain	Equivalent welfare gain (US\$ million)
Allocative efficiency	134
Unskilled workers employment	845
Terms of trade improvement	194
Investment-saving balance gains	51
Total welfare improvement	1,225

Source: Author's simulations with GTAP 6.0

SSA-40 will import much more than before for consumption and also for production of export goods after this surge in economic activity. The additional imports come in the form of intermediate and capital equipments. As growth of production requires investments, sub-Saharan countries purchase more imported heavy equipment. Therefore, the volume of sub-Saharan Africa imports as seen in Table 5 would increase by 1.4% from the baseline, creating new opportunities for the partners of this region.

As in many liberalisation scenarios, UMA would induce a deterioration of the trade balance in Africa as imports grow more rapidly than the exports (see Table 5). The trade loss would equal US\$ 423 millions at constant prices, but would be reduced to US\$ 183 million thanks to the effects of the terms of trade. Given the existing trade imbalances in the region, one may wonder whether further deterioration would be bearable. If imports were constrained, the economic growth induced by UMA could be more limited than expected, which, again, calls for a cautious interpretation of the current results.

¹⁶ The exports multiplier is the ratio of the increase in GDP volume to the increase in exports volume. In this simulation, the exports multiplier is equal to 4.3 (979/229).

¹⁷ It is important to remember in interpreting these welfare gains that it is assumed in the simulations that unskilled labour is a non-fixed factor, as African unemployment of unskilled workers is high. Parallel simulations with fixed unskilled labour hypothesis show that the welfare would be reduced to US\$ 0.3 billion in that scenario. The results of the simulations under the fixed labour assumption are presented in the discussion of the results and also shown in Table 2 for selected indicators.

Table 5: Summarised implications of UMA on sub-Saharan African economies

	Change
Exports (volume)	0.5%
Imports (volume)	1.4%
Terms of trade	0.4%
Welfare	USD 1.2 billion
GDP (value)	1.3%
GDP (volume)	0.6%

Source: Author's simulations with GTAP 6.0

But unrestricted market access results in trade expansion, stability of welfare and GDP in the rest of the world

The potential opportunities that can be provided by UMA for Africa tend to be opposed because it is thought that such a measure would impose costs for the rest of the world. This tends to create strong positions in international trade negotiations against having such preferences for sub-Saharan Africa as a unit even under the enabling clause. In this regard, the impact on the economies of non-African developing countries is a key issue. If UMA implies a cost for these countries, it would justify the negative view that it is a measure for sub-Saharan Africa only, and not one favourable for development as a whole. The cost of UMA for the QUAD also has to be taken into account since there is a constituency to be convinced that UMA for sub-Saharan Africa is worth and it merits consideration. Preferential agreements are supposed to be less costly than direct aid. However, if the consequences of UMA on macroeconomic variables in the QUAD, like growth and welfare, were unbearable, the advantages of UMA to direct aid would be seen as significantly reduced.

In terms of trade, the previous analysis revealed that all regions of the world would gain¹⁸. The growth of exports from the other developing countries is not significant, but the expansion of the exports from the QUAD would equal US\$0.6 billion, which implies that this region would be the main beneficiary of UMA in terms of exports growth¹⁹. 80% of this increase would be due to the growth of exports to the SSA-40 markets. The impact of this increase in export volume is somehow limited by the slight deterioration of the terms of trade in Japan.

UMA would have a rather neutral effect on non-African exports. The impact of UMA on the non-African economies seems to be insignificant, and corresponds in some cases to gains of welfare as Table 6 indicates. In terms of value added by industry, no change exceeds 0.5%, and there is no clear trend indicating a reinforcement or deterioration of the comparative advantages of these regions. The QUAD countries would lose US\$ 282 million in welfare, which is insignificant given the initial level of the QUAD incomes and by extension welfare. Non-African developing countries should maintain unchanged levels of GDP and welfare. Even emerging economies, that often claim that discriminatory preferences hamper national development, would

¹⁸ Except the categories "other developed countries" and "other developing countries" which undergo negligible trade erosions.

¹⁹ Given the initial level of the exports of the QUAD, this increase is not significant, as it represents less than 0.1% of growth.

not experience any significant change in their GDP, welfare, trade balance and terms of trade as the results in Table 6 show.

Table 6: Implications of UMA on the different regions of the world with flexible GTAP closure

	Welfare (US\$ million)	Trade balance (US\$ million)	GDP volume (US\$ million)	Terms of trade (% deviation)
SSA-40	1,224.5	-422.8	978.9	0.44
Rest of SSA	4.1	0.4	1.2	0.00
China	-16.5	12.7	-1.0	0.00
Brazil	-3.2	8.3	-0.8	0.00
India	-5.0	6.2	-1.2	-0.01
Other developing	13.7	58.4	-2.5	0.00
Canada	1.6	7.9	-0.5	0.00
EU	-167.3	108.1	-27.7	-0.01
USA	-77.8	126.6	-6.0	0.00
Japan	-38.2	72.8	-7.3	0.00
Other developed	-3.1	21.5	-0.8	0.00

Source: Author's simulations with GTAP 6.0

Simulation 2: The question of preferences erosion – Doha Round scenarios and the unrestricted market access gains for sub-Saharan Africa

Simulation 1 and the discussion of the results thus far have revealed that sub-Saharan African states would gain from UMA to the QUAD markets. Although they are significant, the results of the current simulation are less important in terms of magnitude than those given by the previous simulations on this issue. The discrepancy is even greater when the standard closure of the model is used, as the welfare gain of the SSA-40 equals US\$ 320 million, roughly one sixth of the welfare gains of SSA-37 in the analysis conducted by Ianchovichina et al. (2002). It is all the more striking since the geographical aggregation used in this simulation is larger than the aggregation used by the team of the World Bank. It can partially be explained by the changes in international trade volume and prices, although the main explanation is provided by the changes in the protection data between 1995 and 2001. Table 7 compares the results of this study and that of Ianchovichina et al. (2002) highlighting the differences due to the variation in base years and macroeconomic closures.

The important result from Table 7 is that there is a case for unrestricted market access for sub-Saharan Africa as there are still gains that can be reaped in spite of AGOA, EBA and preference schemes expansions by Canada and Japan. A general and expanded preference scheme with unrestrictive rules of origin that allows cumulation across the four QUAD markets could still deliver benefits to sub-Saharan Africa. Yet, the liberalisation expected from the current WTO Round could erode the benefits of such a measure. This is especially so given the obligations that the developing states have to reciprocate the preferences they enjoy (even if under the principle of less than full reciprocity), as well as the severe restrictions currently associated with preferences, including non-cumulative rules of origin.

Table 7: Comparison of the UMA simulations with different base years

	Current study - relaxed labour (GTAP 6.0)	Current study - standard closure (GTAP 6.0)	lanchovichina et al. - standard closure (GTAP 4)
Welfare changes (US\$ million)			
Developed	-285	-278	-5,569
SSA	1,225	321	1,786
Developing	-6	-32	294
World	933	11	-3,489
SSA Exports changes (US\$ million)			
To developed	454	384	3,431
To developing	-225	-267	-888
To the World	229	116	2,543

Source: Author's simulations with GTAP 6.0 and lanchovichina et al. (2002)

How serious are the preferences erosions concerns amidst less than full reciprocity commitments?

It is important to recall that after the 1996 Singapore Summit, which called for an improvement in the market access of LDCs exporters, many countries put into place preferential agreements in favour of the poorest countries. In May 2000, the American Congress adopted the African Growth Opportunity Act (AGOA) in order to "offer tangible incentives for African countries to continue their efforts to open their economies and build free markets". Under the provisions of this Act, eligible African countries enjoy better market access to the U.S. and also an increased number of duty free lines. The European Parliament also passed the initiative "Everything But Arms" (EBA) in February 2001. The objective of EBA was even more ambitious than the objective of AGOA, as all exports from LDCs, except arms, are supposed to be granted duty free access to the European Union²⁰. In the meantime, Japan and Canada revised their preferential agreements in 2001 and 2003, leading to large products extension coverage. Although significant constraints limited the full utilisation of these agreements, it seems that significant gains were realized after the implementation of these preferences. According to Mold (2004), AGOA contributed to significant growths in African exports towards the United States between 2001 and 2003, reaching USD 33.4 billion²¹. In the same way, Japan liberalized its agricultural imports from Africa in recent years, which may explain why the gains associated with the full liberalisation of the Japanese markets is much lower in simulation 1 of this study than in the simulations conducted by lanchovichina et al. (2002). Part of the gains of UMA identified in the simulations done on 1995 protection data appear to have been captured by the recent improvements in preferences.

However, the current Doha WTO Round could erode the benefits of UMA, as the MFN tariffs are likely to decrease substantially after its implementation. Many outcomes are possible given the current stage of the negotiations. Using the same baseline data and hypotheses as those used in the previous simulation, this paper have distinguished four scenarios of liberalisation to assess the possible impact of the Doha Round on the UMA gains realised in Simulation 1. These scenarios do not correspond in an exact way to the different stances of the WTO members. The type

²⁰ Except in the cases of sugar, rice and bananas, for which the quotas will be gradually phased-out between 2006 and 2009.

²¹ A large part of this increase is due to the oils exports from Nigeria and Angola.

of tariff cut formula and explicit special and differential treatment in the July Package is not the ones used in these scenarios. The tariff cuts calculated here are based on the GTAP aggregated applied tariffs while those calculated by WTO members are normally based on HS-6 bound tariffs. However, given the uncertainties regarding the outcome of the Doha Round, and the ambitions of this second simulations exercise in this paper, the scenarios constitute a satisfactory approximation to assess the potential erosion of UMA benefits.

The four scenarios correspond to: a strong linear cut on all tariffs by 50% (scenario 1); a moderate linear cut on all the tariffs by 25% (scenario 2); a tariffs cut on industrial products by 50% and by 25% on agricultural products (scenario 3); and, a cut by 25% on industrial tariffs and by 50% on agricultural products (scenario 4). SSA-40 would be fully exempted from any tariffs cut commitments²², and other developing countries would be allowed to apply tariff cuts inferior by 10% to the tariffs cuts implemented by developed countries in the spirit of less than full reciprocity principle aimed at deepening developmental dimension of the Doha Round. Table 8 provides a summary of the impacts of each of these four scenarios on welfare, income, terms of trade and trade balance for SSA-40. The figures in Table 8 start from the same baseline as that of scenario 1 that assessed UMA. They simply show what the various cuts would mean to the SSA-40 and do not assume that UMA is in place.

Table 8: Possible impacts of Doha Round agricultural and industrial liberalisation on SSA-40

	Impact of Scenario 1	Impact of Scenario 2	Impact of Scenario 3	Impact of Scenario 4
Welfare gains	-247.3	-174.41	-209.42	-136.26
GDP value	-0.44	-0.29	-0.36	-0.21
Terms of trade	0.04	0.02	0.02	0
Trade balance	318.45	189.58	270.23	141.35

Source: Author's simulations with GTAP 6.0

If UMA were to be implemented simultaneously with these liberalisation scenarios, its benefits would be significantly reduced, as the welfare gain of SSA-40 would decrease by between 30% and 50% from its initial level (see Table 9). This erosion of the UMA gains would be least in the scenario that contains an ambitious agricultural liberalisation. This result indicating reduced preference erosion with deep liberalisation of the agricultural markets is consistent with other findings that SSA would benefit most from an ambitious Doha liberalisation of the agricultural products markets (see Economic Commission for Africa, 2004).

²² The July Package exempts all LDCs from making tariff reduction commitments, and in the case of industrial tariffs, every country with a tariff consolidation level below 35%. Hence, only 8 African countries will have to apply a formula on their industrial tariffs: Botswana, Gabon, Morocco, Namibia, South Africa, Swaziland, Tunisia and Egypt. Gabon is the only country of SSA-40 that will have to apply the industrial tariffs cut formula.

Table 9: Impact of the UMA on SSA-40 after the Doha Round: Preference erosion scenarios

	UMA after Scenario 1	UMA after Scenario 2	UMA after Scenario 3	UMA after Scenario 4
Welfare gains	606.16	688.36	834.67	916.27
GDP value	0.65	0.74	0.9	0.99
Terms of trade	0.2	0.23	0.28	0.31
Trade balance	-207.81	-244.98	-278.53	-315.48

Source: Author's simulations with GTAP 6.0

However, the gains realized through UMA would still be significant, especially if WTO members are willing to commit themselves to strong agricultural tariff cuts. The effect of these scenarios would be negative for the SSA-40 without UMA as the results in Table 8 indicated. Unrestricted market access comes out clearly as a way to make up for the potentially negative impact of Doha unless its ambitious on agriculture, and creates a benefit—as well as an incentive—in the current multilateral negotiations. Furthermore, if UMA undergoes preferences erosion, this erosion will still be smaller than the erosion of the margins of the current preferential arrangements. By extending the coverage of the multiple existing preferences, and simplifying the rules of origin by making them cumulative, UMA would indeed answer the concern of many African countries regarding the erosion of the preferences that they currently enjoy²³.

Table 10: The cumulated effect of the Doha Round and UMA for SSA-40

	Scenario 1 & UMA	Scenario 2 & UMA	Scenario 3 & UMA	Scenario 4 & UMA
Welfare gains	358.86	513.95	625.25	780.01
GDP value	0.2%	0.4%	0.5%	0.8%
Terms of trade	0.2%	0.3%	0.3%	0.3%
Trade balance	110.64	-55.4	-8.3	-174.13

Source: Author's simulations with GTAP 6.0

Simulation 3: What is the maximum reciprocity that would make the sub-Saharan Africa's welfare gains neutral in an UMA environment?

Article 1 of the GATT regulation stipulates, “any advantage, favour, privilege or immunity granted by any contracting party shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties”. Two exceptions are permitted by international law: preferential agreement and free-trade area. Preferences have to be granted on a fair basis to all countries at the same development stage. In this case, preferences would have to be granted to all countries at the same level of development as the

²³ Preferences erosion remains one of the main concerns of the African negotiators in the Doha Round. However, they were only mentioned in the agreement on the framework of Doha, and not explicitly treated at this stage of the negotiations.

SSA-40²⁴, which may include developing countries from South America and Asia. Given the size of some of these countries, the QUAD may be reluctant to grant UMA without discrimination. Thus, the most likely legal way to make UMA conform to WTO regulation would be to transform it into a reciprocal free trade arrangement between SSA-40 and the QUAD²⁵.

Full reciprocity from SSA-40 would raise serious economic difficulties for these countries. These difficulties have been thoroughly analysed in numerous studies on the implications of the Economic Partnership Agreements the European Union is currently negotiating with sub-Saharan African countries (see Karingi et al. 2005). Dismantling trade barriers on imports from the QUAD would significantly reduce the policy space of these countries, and it would also shrink the available public resources in these countries and lead to a surge of imports from the QUAD to the possible detriment of domestic and regional production. The fear of de-industrialisation has been expressed as a realistic one if sub-Saharan African countries were to reciprocate on current preferences for WTO compliance. In the long run, it would limit the capacity of SSA-40 to foster development through strategic industrialisation measures.

Fortunately and although the efficacy is not tested, WTO regulations allow certain flexibilities in the reciprocity principle, under the condition that tariffs are eliminated on “substantially all the trade between the constituent territories”²⁶ of the free-trade area. In practice, WTO regulations permit unequal levels of reciprocity inside a free-trade area if it includes members with different levels of development. For instance, in the case of the free-trade zone created by the European Union and South Africa, the EU offered to liberalise 95% of its tariff lines on imports from South Africa, while South Africa is to liberalise only 86% of its tariffs on European imports. Given the discrepancy between development in the QUAD and the SSA-40, it is likely that a certain asymmetry between the commitments of these regions would be permitted.

Would current interpretation of Article XXIV favour SSA-40?

Using the same aggregations and baseline as the previous simulations²⁷, this paper tested three degrees of reciprocity to assess the impact this would have on UMA. In the first scenario, SSA-40 would allow duty free access to its markets on 60% of imports from the QUAD. The tariffs on the rest of these imports, which correspond to the most taxed imports, remain the same. On the same basis, two other alternative scenarios corresponding to 80% and 90% of reciprocal commitments were tested. The results summarised in Table 11 show that the effects of reciprocity tend to be negative where the degree of asymmetry is limited. On the other hand, the effect of reciprocity is quasi-neutral on the welfare of the SSA-40 if this group grants duty free privilege on only 60% of its imports from the QUAD. If it cuts tariffs to zero on 90% of these imports, the induced welfare loss roughly equals the gains of UMA, meaning

²⁴ Cape Verde has the highest HDI rank in the SSA-40 (105th), which is higher than Indonesia, Vietnam, South Africa, Egypt or Pakistan.

²⁵ It is important to note that many emerging economies, like Brazil and India, have pushed hard for preferential agreements to be either granted to all developing countries of the same development level, or transformed into regional agreements. This pressure has led developed countries to integrate the preferences into regional agreements or grant new preferences to homogeneous categories of countries. Hence, the European Union EBA initiative in favour of LDCs and its current moves to transform the Lomé/Cotonou partnership into reciprocal Economic Partnership Agreements.

²⁶ Article 24 Paragraph 8 of the GATT rules.

²⁷ The potential effects of the Doha round are not taken into account in these simulations.

that there will be complete erosion of potential gains from unrestricted market access. At 80% of reciprocity, the welfare loss represents around 40% of UMA gains. An important result from these scenarios is that most of these welfare losses, as well as the negative trade impact, are the result of deteriorating terms of trade of SSA-40.

Table 11: The impact of reciprocity in tariff cuts by SSA-40 on UMA potential gains

	60% reciprocity	80% reciprocity	90% reciprocity
Welfare	-16.74	-505.14	-1119.44
GDP volume	0.13	0.04	-0.17
Trade balance in volume	-1159	-1101	-898
Terms of trade	-0.05	-0.5	-0.87

Source: Author's simulations with GTAP 6.0

Clearly, under the current interpretations of Article XXIV, gains from unrestricted market access would be completely eliminated since the SSA-40 would be expected to reciprocate up to 90% for the QUAD sourced imports. The maximum reciprocity that would safeguard the UMA gains is that of 60%. Put differently, the QUAD would have to harmonise their existing preference schemes for SSA-40 and extend them to cover all the tariff lines. For reciprocity purposes, which can be justified under the less-than full reciprocity principle in the current Doha Round, the SSA-40 can liberalise up to a maximum of 60% of its tariff lines on QUAD imports. However, it is important to also note that this level of asymmetry aims at ring-fencing the UMA welfare gains, but does not permit a dynamic industrialisation strategy for the SSA-40. Further discounts on level of asymmetry could therefore be argued under the developmental objectives.

5. Non-tariff barriers and the effective use of preferences

The general equilibrium analysis that has been applied in the foregoing analysis, does not include specific constraints to the preferential agreement, which could reduce the magnitude of the real effects of UMA, if they were maintained. These constraints are highlighted in this section, to emphasise the point that even with UMA, more would still have to be done for SSA-40 to realise in a genuine way, the potential benefits that were indicated in simulation 1.

Firstly, preferential agreements induce high administrative costs, mainly linked to the rules of origin. Estevadeordal et al. (2003) estimate that the administrative costs of compliance correspond to an import tax of between 2% and 5.7%. Given the erosion of preferential margins induced by the different WTO Rounds, these costs are not always covered by the benefits of the preferences.

Secondly, rules of origin are often too restrictive. Rules of origin oblige beneficiary countries to prove that a certain percentage of the value-added has been created within its national territory, thereby restricting sourcing from third countries. For small and un-diversified economies, whose manufacturing sectors are dependent in large measure on production inputs, this clearly limits the capacity to export. In some agreements, the cumulation of value-added between different beneficiaries of the preferences is permitted to reach the required valued-added. However these rules are often complex, difficult and expensive to administer, and are not compatible

between different schemes. In the case of AGOA, Mattoo et al. (2003) estimate that 80% of the potential gains of this preferential scheme are lost due to restrictive rules of origin. Besides, rules of origin also add to specific conditionality rules, according to which the beneficiary countries have to open up their economies to products and investments coming from the preferences-granting country, as evidenced by the AGOA requirements.

Thirdly, the multiplicity and lack of permanence of preferential schemes limit their clarity and efficiency. After the Singapore Summit of 1996, which called for improved access of LDCs to other markets, 28 new preferential schemes were created in favour of LDCs. Each agreement has its own rule, so that, as noted by Steven et al. (2003) in their study of 179 products exported from Africa to the QUAD countries, few products can enter export markets under different preferential schemes. Most of these agreements have no contractual value, and can be cancelled on a discretionary basis. On five occasions, the US GSP has expired without being immediately renewed, and was subsequently only reopened for short periods (one or two years). Most recently, as Mold (2004) indicates, GSP expired on 30 September 2001 and was not renewed for almost a year.

Hence, the current organization of preferences does not offer optimal results. In some cases, African exporters prefer paying the MFN tariffs on their exports rather than using preferences. Almost half of South African garment exports towards the USA face MFN tariffs, despite South African garments being eligible for preferential trade status under AGOA (see Steven et al. (2003)). UMA will not deliver its expected benefits under the current fragmented, unpredictable and restrictive preferences framework. The implementation of UMA would need a multilateral initiative on the harmonization of the preferential agreements, a reduction of the associated administrative costs as well as increased flexibility of the rules of origin.

6. Conclusions

Africa still has a lot to gain from UMA in the QUAD markets. AGOA, EBA and extended Japanese and Canadian GSP agreements have significantly improved the access of African exporters to the US and the EU. However, eliminating all tariffs on exports from African countries would boost the value of African exports by 3.5% and welfare by US\$ 1.2 billion, which represents more than 6% of the US\$19.4 billion in official aid that Africa received in 2002 (see World Bank 2002).

In the context of the Doha Development Round, the hypothesis of UMA is of interest. Such a measure would certainly be favourable for Africa, and indirectly to all developing countries given the African economic boom is likely to result, with an insignificant cost for the QUAD. It would introduce special and differential treatment for Africa. As tariff barriers diminish and preferential agreements lose favour in the multilateral system, UMA appears to be the last tariff preference that would give a real advantage to Africa.

The impact of this measure would be correlated to the level of liberalisation the Doha Round will induce, as well as the level of reciprocity required for SSA-40. If WTO members are willing to cut tariffs sharply, UMA could soften the negative impact these cuts would have on SSA-40. If WTO members are not willing to make major cuts in agricultural tariffs, then UMA is likely to deliver significant benefits for SSA-40. However, reciprocity could largely limit the benefits of UMA if the level of asymmetry is limited between SSA-40 and the QUAD. However, a high level of asymmetry, allowing SSA-40 to keep their tariffs unchanged on roughly 40% of its imports from

the QUAD, would preserve the benefices of UMA even though this would still not be expected to address fully the developmental concerns of the sub-Saharan Africa countries.

In conclusion, this study did not aim at quantifying the economic impact of non-tariff barriers specifically associated to preferential agreements, such as rules of origin, legal uncertainties or compensatory measures African countries have to take in favour of QUAD countries. Yet, the fact remains that Africa will not be able to capture all the benefits of UMA if these barriers are still in place. Hence, the simplification and rationalisation (harmonisation) of the different schemes would be an essential action to enable genuine unrestricted access for sub-Saharan African exporters.

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