

**Services Trade Liberalization between the European Union and Africa
Caribbean and Pacific Countries: A Dynamic Approach**

by

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1. Introduction

That the services sectors affect employment and welfare especially through their strong links to other sectors in the economy is firmly unarguable. Globally, the services sectors directly employ 70% of the unskilled labour and about 85% of skilled labour. Just as important, services produce 24% and 32%, respectively, of intermediate goods used in the key sectors of agriculture and manufacturing. In both developed and developing countries, many services such as communication, insurance, and transport remain, however, highly protected (van Limburg, 2010 Fontagné et al. 2011). In the trade negotiation between ACP and the EU countries under the Economic Partnership Agreement (EPA), the liberalization of the trade in services is stalled by numerous issues stemming mainly from fears of losing tax revenues and employment (Brenton, 2010; Bendini et al. 2012). The fears arise because trade negotiators' uncertainties over the sectoral impacts and overall welfare and employment effects when trade liberalization in the goods markets is accompanied by trade in the services markets. For example, negotiators fear that the significant labour productivity gap in the service sectors between the EU and the ACP could worsen unemployment, specifically the loss of less-skilled jobs in the EU and of more skilled jobs in the ACP. Additionally, the concern that a liberalization of the goods markets without the liberalization of services markets may hamper any progress to achieve any intended gain has often been ignored. A lack of adequate information regarding the sectoral impacts and overall welfare and employment effects of the liberalization of services trade lies at the heart of these fears and prevents well-informed decisions.

The purpose of this paper is to contribute to filling the knowledge gap and estimate the welfare and employment effects of the liberalization of services trade between ACP and EU countries. Of primary importance is the timing of the liberalization of the service sector with respect to the liberalization of the goods sectors, especially for the impacts on and implications for employment and welfare. This paper uses a dynamic general equilibrium model (GDyn) and takes into account the differences in labour productivity trend among trading blocks and regions. The simulation includes varying the rates of productivity growth and technological progress and the timing and the rates of tariff cuts in the services sectors to examine the extent of welfare and employment effects. The scenarios are designed to determine the distribution of the welfare and employment gains or losses among regions and among sectors for the time horizon 2010-2050. To our knowledge, no past study has attempted to perform such analysis. The findings are intended to provide policy implications especially to increase welfare and employment for countries for the ACP and EU trade.

2. Literature review: The ACP-EU Services Trade

2.1 Features of Importance of the services sector in ACP and EU trade

ACP and EU countries have made progress in negotiating the liberalization of merchandise trade but remain reluctant to fully address the liberalization of the services trade. The main reason for delay is uncertainty regarding the effects of such trade liberalization for welfare and employment and of trade imbalances. Globally, services contribute up to 24% and 32% respectively of the value of intermediate goods in agriculture and manufacturing. For both the EU and ACP groups, service sectors play an even more important role in their economy, especially in job creation. Service sectors employ the majority of unskilled labour and the large majority of skilled labour in both ACP and EU countries. For instance, in the EU, 67% of employed unskilled and 82% of employed skilled labour are in the service sectors. The respective figures for ACP countries are 54% and 90%. These figures indicate that any change in trade policies for the service sectors affect not just them but also other sectors such as agriculture and manufacturing in ACP and EU countries. But so far, quantitative information of such impacts remains elusive.

Services trade, though overshadowed by goods trade in the Economic Partnership Agreements, is an important trade component for both the ACP and the EU. Data show that services export represents on average of 15 % of total trade value of ACP countries (reaching 35% for the Pacific and Caribbean groups of the ACP) and about 22% of total trade of EU countries. More important, services represent non-negligible parts of the ACP trade with the EU: ACP services export to the EU represents about 24% of the ACP total exports to the EU, and 28% of ACP imports from the EU are services.

Although services trade is an important component of ACP-EU trade, the balance remains in favour of the EU. Recent data (Figure 1) on ACP-EU services trade show that the ACP as a whole is a net importer vis-à-vis the EU in all except two aggregated sectors: the communication and transportation sector and the utility sector. In large sectors such as finance and business services and construction services, the ACP is a net importer, which could be attributed to many reasons including the different sizes of the economies, difference in labour skills and productivity, and difference in capital endowment between the two trading blocs. Still hampered by poverty and unemployment problems, ACP countries hope that reversing their status on services trade will help solve these problems.

(Figure 1)

2.2 High barriers and trade costs in the service sectors

Uncertainties over total welfare and employment effects of the liberalization in services trade are also due in part to high barriers and trade costs on both sides. To date, data on the level of trade barriers remain patchy because many non-tariff barriers remain difficult to estimate. There are also many hidden costs of services trade (linked to merchandise trade) that create complications in the estimation.

However, the few available data on the distortions in services trade point to a high trade cost in services trade in both the EU and the ACP. For instance, Fontagné et al. (2011) provide a measure of the tariff equivalent showing that trade costs are particularly high for both developing and developed countries (Table 1). It seems obvious that any sensible reduction of these high barriers and trade costs will have significant impacts on ACP services trade values and welfare.

(Table 1, here)

2.3 Significant gaps in labour productivity

An important feature of the services trade between the ACP and the EU countries is the significant gaps in labour productivity between the two trading blocs. As in the agriculture or manufacturing sectors, van Dijk (2013) shows, as reported in Table 2, that there is a huge gap in labour productivity in the service sectors (such as finances and business services), especially between ACP countries and the rest of the world including the EU. This productivity gap increases the uncertainty regarding employment impacts of services trade liberalization. If services trade is liberalized, the EU fears of losing services jobs to the ACP, especially jobs that require less skilled workers. Conversely, the ACP fears of losing some of its already strained skilled labour supply to the EU. This is why addressing the likely impacts of the liberalization in the service sectors on ACP and EU employment is important.

(Table 2 here)

The ACP and EU countries have been reluctant to address the liberalization of trade in the services sectors because of the huge implications for welfare and employment and because of trade imbalances. Because of the asymmetric economic size and labour skill between the two, the EU is a net exporter of services while the ACP group is net importers of services. Recent data on ACP-EU services trade data show that for 6 services sectors, the ACP group is net importers vis a vis the EU, except in the communication and transportation sector and in the utility sectors.

Figure 1 (net exports of service ACP and EU)

For ACP countries, services sectors use 54% of unskilled and 90% of skilled labour currently employed. Liberalization of trade in services will therefore affect much of the labour use

For the services sector, the difficulties also reside in measuring the trade distortion since undeclared non-tariff barriers seem to prevail.

2.4 A recap of the results from the static model

To grasp the importance of studying the services trade liberalization between ACP and EU countries, we briefly summarize the results of the simulation using the standard (static) GTAP model. Taking into account the differences in labour productivity growth rates, we find that the current average protection in the services sectors makes the six ACP groups lose about USD 10 billion in total per year. In that base case scenario, such loss is borne mainly by SADC and Pacific and Caribbean groups due especially to decreased employment income in the service and also manufacturing sectors. Contrastingly, the EU gains by about USD 200 billion, 70% of which comes from increased allocative and technical efficiency, and only about 10% from an increased employment income.

Furthermore, engaging in EPA on goods but with service markets still protected will increase the ACP's total welfare by about USD 1.8 billion compared to the base case. The distribution of such a relatively slight gain is however mixed in that the Pacific and Caribbean and the Eastern and Southern Africa (mainly COMESA) groups are much better off than the rest of the ACP groups. The relatively slight welfare increase and its mixed distribution are consistent with the dragging of the negotiation on goods under the EPA as the ACP countries appears not gaining much from the application of the EPA in goods. The EU on the other hand will gain in total welfare (including employment income from its skilled labour) an additional 8 billion USD from the EPA.

But, more importantly, simulation results using the static GTAP model also show that halving bilateral tariff in services (in addition to the liberalization of trade in goods) between ACP and EU will increase ACP groups' welfare significantly by an additional USD 6.2 billion (i.e. about USD 8 billion gain with respect to the base case scenario). The gain in employment income is more than 50% of that welfare gain, pointing to a significant employment effect of the liberalization of the services market. The gain is already non negligible relative to the small size of some of the ACP economies. More strikingly the result indicates that with a halving of the protection in services sector, ACP groups' welfare gain is more than three times larger than their gain under full elimination of bilateral tariffs with the EU on goods' market. These results place higher importance on the liberalization of the service markets for welfare improvement and especially job creation for both the ACP and EU groups. But these results raise serious concern about how these impacts will last over the years, and what will be the effects on capital stocks and investment, hence, the need to use the dynamic approach

3. The Dynamic Model

This paper uses a Dynamic General Equilibrium model, GDyn, (Ianchovichina, McDougall, 2000; Ianchovichina, Walmsley 2012) which is a recursive-dynamic version of the standard GTAP model (Hertel, 1997). The GDyn model includes a multi-sector multi-country model that provides an accounting exercise of how shocks (such as changes in tariff, productivity growth, capital stock, and rates of investment returns) affect prices and incomes and hence welfare and employment over time. Additionally to its advantageous ability to track the policy effects over time, GDyn takes into account the ownerships and changes in the stock and flow of capital investment arising from various shocks including the change in trade

policies in the goods and services markets. Income from these household investments both local and abroad are counted in the household and country income. These investment effects of trade liberalization in goods and services affect regional welfare and employment.

3.1 Investment Theory and GDyn

Adjustment in the rates of returns:

The main thrust of the investment theories in the GDyn model is that in the short run, there are discrepancies between the expected and actual rates of returns and between the rates of return across regions but only in the long run that these rates converge to a single rate. A shock in the economy often creates such discrepancies and the adjustment towards convergence may take time. GDyn takes into account such imbalances during the adjustment and provide an accounting exercise about how the economy is affected over time. Generally, high capital stock is consistent with low rates of return ((i.e. a negative correlation between level of capital stock and rate of returns), and more important, investment rate declines when capital stock is high. But because of error and expectations and imperfect mobility of capital, rates of returns may rise (attracting investment) when capital stock is high and rising. Likewise, the rates of returns across region converge only in the long run but in the short run they exhibit discrepancies needing time for adjustment. The speed of all these adjustments may differ within and across the regions. In summary, within the region/country, the expected rate adjusts towards actual rate, and over time the actual rates across regions move towards a single constant rate of return.

Ownership of capitals:

The other main characteristic of the GDyn model is that households' savings can be invested in local firms or, via Global Trust, in foreign firms. Income received by Household from its investment in both local and foreign firms is taken into account in the national income. These features of savings and income are unique to the GDyn model.

3.2 Approach and Scenarios

The model closure includes assumptions that there are unemployment in both skilled and unskilled labour in the ACP countries and unemployment in skilled labour only in the EU. This research involves a base case and three scenarios to analyze the effects of the timing of the reduction of the tariffs on services sectors between ACP and EU countries. The policy scenarios are mainly aimed at comparing the trade, employment and welfare effects of an immediate (2017) vs. a delayed (2030) liberalization of ACP-EU services trade. The time horizon to be considered is, thus, between 2015 and 2050. Moreover, a deeper analysis of the distribution of the welfare and employment effects across sectors will be conducted. In the GDyn model, the base case will include projections on GDP, population, technological improvement. Formally, the scenarios are explained as follows.

Scenario D0 (Base Case):

- Macro including GDP forecasts (which are calibrated by first endogeneizing TFP and exogenising GDP, and then use the obtained values to simulate these increase as GDP increase);
- UR and China accession to WTO;
- Average tariff equivalent in the service sectors over the simulation period

Scenario D1: Liberalization of goods trade by 2017: All shocks in the base case (GDP, investment, population, consumption, labour, labour productivity) are maintained and all reciprocal tariffs on goods trade between ACP groups and EU countries eliminated by 2017.

Scenario D2: Liberalization of both goods and services trade by 2017: This scenario maintains policy shocks of Scenario D1, and adds that all bilateral tariffs on services are halved. This 50% tariff reduction of service trade is an ad hoc representation of a liberalization in services trade but it can be changed when sensitivity analyses are performed.

Scenario D3: Liberalization of goods trade by 2017 and services trade by 2030: Reciprocal tariffs on goods are eliminated by 2017 (as in Scenario D2) but tariffs on services are halved by 2030. Sensitivity analysis is also performed to see the impacts on welfare and employment with different rate of tariff cuts.

3.3 Data aggregation and sources

The model features 15 regions (including 6 ACP regions), 12 sectors (including 6 service sectors) and 5 main factors.

Regional aggregation: West Africa, Central Africa; Eastern and Southern Africa; East Africa; SADC; Pacific and Caribbean; MENA (Middle East and North Africa); EU-25; North America; Latin America; Asia Developing (Thailand, Malaysia, Indonesia, Vietnam); Asia Industrialized (Japan, South Korea, Singapore, Hong-Kong; Taiwan); Oceania (New Zealand and Australia); BRIC (Brazil, Russia, India and China), and Rest of the World.¹

Sectoral aggregation: Raw Food and Agriculture; Processed Food; Extraction; Textile and Apparel; Light Manufacturing; Heavy Manufacturing; Transport and Communication Services; Construction and Dwelling Services; Finance, Business Insurance and Trade Services; Utility (Electricity, water, gas manufacture distribution) Services; Government (PublicAdmin, Health/education/Defence) Services; Recreation and other Services;

Factor aggregation: Skilled labour; Unskilled labour, Capital, Land, and Natural resources

The data used in tandem with the GTAP and GDyn is GTAP Database 9 that includes tariffs and other trade data on 140 regions and 57 commodities (sectors). These data permit the aggregation described earlier. The values of average tariff equivalent of protection in service sectors based on estimates initially by Van Leeuwen, N. and A. Lejour (2005) and refined by Fontagné et al. (2011) are taken into account. The Macro projections on GDP and labor

¹ The ACP countries are aggregated according in the EPA groups

growth (population active) are given in the appendices. Moreover, the policy shocks file include shock in productivity.

4. Simulation Results

4.3.1 Welfare and Employment impacts

Liberalization of goods and services generally lowers the price of capital goods (because less protection on merchandises entices less protection and decline in price of capital goods). Moreover, trade liberalization increases the gain from renting capital goods. Both the drop in price of capital goods and the increase in the gain of renting capital goods lead to an increase in the rate of investment returns. As the rate of investment return grows, investment grows in the liberalized economies (here the ACP countries) in the short run before the rental price reverts over time to its constant long term rates, which also make the rate of returns converge to their long terms rate. It is during this adjustment period of trade liberalization that capital is expected to be accumulated in the trading countries. The increase in income from these investments add to trading countries national income and reinforce the welfare gain from trade liberalization over time. The returns (income) from the increased investment by the domestic households in domestic and foreign firms add to national income, hence to welfare and growth.

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