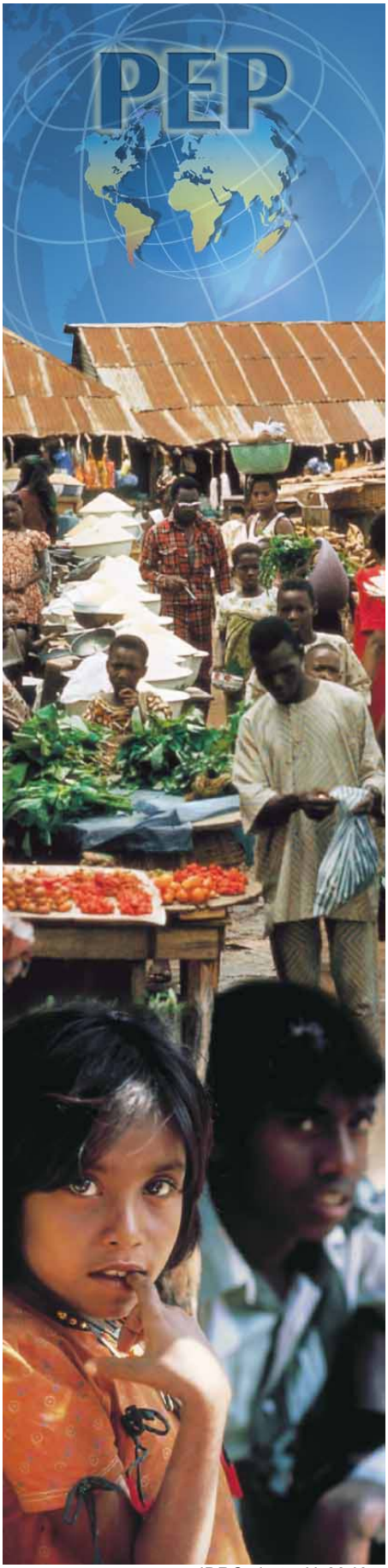

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Trade Policy and Poverty in Benin: A general Equilibrium Analysis

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Abstract

Economic and financial crisis in Benin since 1980s led the government to embark on a process of economic reforms in 1991. These reforms sought to remedy the fiscal and trade imbalances in order to accelerate economic growth. Trade policy reform was given priority. Import bans and quotas were eliminated, import duties abolished and a compensatory tax on commodities sold in the domestic market instituted. This study analyzes the effects of the trade policy reforms using a computable general equilibrium (CGE) model and household survey data. Results show that these reforms are more beneficial to households in urban areas, but contribute to worsening poverty conditions of the most poor in rural areas. If liberalization policies target better strategies aimed at fighting poverty, or at least not deteriorating the situation, they need to be designed in a way that they do not worsen the poverty conditions of the most destitute in society.

Keywords: CGE, trade, poverty, Benin

JEL Codes: D6, F13, F14, H3, I38, O55

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1. Introduction

Since the early 1980s, Benin has faced a devastating economic and financial situation. This crisis, which reached its peak in 1989, was characterized by severe decreases in final demand, collapse in per capita income, and a general decline in the fiscal and trade balances. In essence, growth was negative; investment declined significantly; the consolidated State budget showed a deficit of more than 51 billion CFA francs; and the trade and current balances seriously deteriorated, while the debt ratio reached 43.5% of exports.

Due to these conditions, Benin embarked on a process of economic adjustment and adopted numerous liberalization and reform measures needed to remedy the fiscal and trade imbalances in order to accelerate economic recovery. As is customary with Structural Adjustment Programs (SAPs), the measures implemented mainly focused on trade policy reforms, due to their impact on government revenues and their effects on overall supply which improves the structure of industrial incentives. Reforms began with the elimination of measures intended to ban imports or fix quotas on imports that constituted a significant source of distortion in the economy. Since the protection of economic sectors was to be achieved through import tariffs alone, tariff reforms were initiated in 1991, and. implemented in two stages.

Following the abolition of all quantitative restrictions, reforms were undertaken to replace existing tariff policies, which were judged to be ineffective. These reforms aimed at putting in place a rational system of tariff protection, while ensuring an adequate level of revenues.

Finally, with its other partners in the Economic and Monetary Union of West Africa (UEMOA), Benin was committed to the establishment of a customs union whose objectives were the complete abolition of internal tariff barriers, and the institution of a Common External Tariff (CET). With regard to this tariff, the customs duty, which replaced the fiscal duty, retained the same rates, except for the 15% rate. In this regard, the main difference between the CET and the old tariff was the categorization of products[1].

Taking into account the ongoing debate on trade policy reforms, it might be thought that in Benin the above measures would not lead to the desired distribution of income and poverty. Trade liberalization can however be expected to affect the poor through:

- changes in the prices of tradable goods, and access to new products;
- changes observed in the domain of employment and relative wages;
- economy vulnerability to external shocks;

- incentives to invest and to innovate; and
- the impact of foreign trade on tax revenues.

In Benin's case, the central issue is whether or not tax and tariff reforms would favourably influence the incomes of the poor and lead to improved equity in the distribution of income. The main objective of this study is to analyze the effects of the complete abolition of import duties and the institution of a compensatory tax on commodities sold on the domestic market. The study used a computable general equilibrium model (CGE) and data from two household surveys conducted during the period 1999-2000.

The use of CGEs in studying the impact of economic reforms on income distribution dates back to the 1980s. Studies in this category included those by Adelman and Robinson (1979), Dervis, de Melo, and Robinson (1982), and the Social Dimension of Development (SDD) version of CGEs developed for Benin by the INSAE, with the technical support of CIRPEE of University of Laval.

The remainder of the paper is organized as follows: section 2 presents background information on trade liberalization and poverty in Benin. A brief literature review on the various ways in which poverty is taken into account in CGEs and the specifications of the model used here is presented in section 3. Simulations and analyses conducted, as well as the results are presented in section 4. Section 5 concludes.

2. Trade Liberalization and Poverty in Benin

2.1 Description of Tariff and Tax Reforms in Benin

In this context, numerous economic liberalization and reforms were adopted to adjust internal and external imbalances, and to accelerate economic growth. Among the reforms implemented, trade policy was given priority, beginning with the elimination of import bans and quotas, which were an important source of distortion in the economy. Tariff reform in Benin was carried out in two stages. The first stage began in 1991, and the second after the CFA franc devaluation in 1994. These two phases of tax reform were aimed at transforming tariffs into an incentive instrument for industry, while at the same time ensuring an adequate level of public revenues. In 1991, the goal was to simplify the existing tariff structure, which was characterized by a multitude of very specific taxes. This simplification helped scale down the number of taxes levied on imports from sixteen to six, and reduced the number of specific taxes. At the end of this first stage, only two taxes (radio and television taxes) remained, and were consolidated under "Other Taxes". The taxes, however, have never been enforced. On the other hand, most of the specific taxes were converted into *ad valorem*

[1] Attribution of rates to each product.

taxes, which were combined with the fiscal tariff. This tax was composed of 18 different rates, varying from 0% to 63%.

To complete the reform, the second stage was implemented. This stage had two objectives, namely, completing tax simplification, and rationalizing the fixing of rates. It should be noted that adjustments effected in 1994 only affected the fiscal tariff. To reduce the complexity of the tariff structure, the number of fiscal tariff rates was brought down from eighteen to five. Moreover, uniformity was introduced and variations in the interval of rates were drastically reduced, dropping between 0% and 20%. Another adjustment effected during the second stage was the abolition of the commodity price list (system), which remained in use after the first stage, as well as the "Other Taxes", whose content was converted into *ad valorem* taxes and included in the fiscal tariff.

These trade liberalization measures changed the landscape of the national economy. In effect, tariff reforms brought about a reduction in the tax ratio on imports. The theoretical level of taxation declined from 33% during the period 1983-1990 to 30% during the period 1991-2001. Reductions in the level of theoretical taxation induced an increase in the real tax ratio; from 16.6% in 1983-1990, it increased to 17.6% during the period 1991-2001.

The contribution of foreign trade to growth became increasingly significant with the extensive opening up of the economy. During the economic crisis that preceded the reforms, GDP growth was weak and its annual average fluctuated around 1.9%, and even became negative in 1989. With the advent of the democratic revival, which marked the recovery of the economy in the aftermath of the reforms, the GDP began increasing at an annual average rate of 4.8% between 1991 and 2001. The degree of openness to trade also increased from 60.9% to 63.7% during this period.

2.2 Evolution of foreign trade

In general, imports and exports witnessed a drop in volume and registered negative growth rates in the order of -3.8% and -0.6%, respectively, during the period of economic and social crisis (1983-1990). With the implementation of reforms and subsequent economic recovery (1991-2001), an increase in both imports and exports was evident, with average growth rates of 14.0% and 14.7%, respectively. The advent of structural reforms during the period 1994-2001 was followed by stronger growth in both imports and exports compared to that witnessed during the previous period; annual average rates of growth increased from 14.3% to 16.1%, respectively.

In terms of value, the annual growth rate for imports rose from -3.8% during 1989-1990 to 15.3% during 1991-2001. As for exports, they increased from a negative rate

of -0.6% during the crisis to 2.6% in the recovery period, and then soared to 16.0% following the implementation of reforms (table 1).

Table 1: Evolution of external trade

Average annual rate of growth (%)			
	Period	**1983-1990**	**1991 –2001**
Imports	In value	-3.8	15.3
	In volume	-3.8	14.0
Exports	In value	-0.6	16.0
	In volume	-0.6	14.7

Source: INSAE/SEC, SCN

Table 2 shows the trade structure for imports. Foodstuff had the largest share in the total value of imports during both the 1983-1990 and 1991-2001 periods, amounting to 33.4% and 19.6% respectively. Thus, in value terms, Benin increasingly imported investment goods and mineral products and less of food stuff. On the other hand, textiles and cotton imports showed an appreciable decrease from 28% between 1983 and 1990 to 17% between 1991 and 2001.

Table 2: Structure of imports

Structure of Imports						
Period	**Foodstuffs**	**Cotton, textiles**	**Investment goods**	**Mineral products**	**Chemical products**	**Others**
1983-1990	33.4	28.0	13.7	16.6	8.0	0.3
1991-2001	19.6	17.1	17.6	18.1	10.2	17.4

Source: SEC/INSAE

As for the structure of exports, the analysis reveals that Benin's main export product is cotton (table 3). During the two periods cotton's export share in the total export revenue increased from 51.3% to 80.6%. The share of revenue from energy products decreased drastically from 26% in the period 1983-1990 to 3.2% in the period 1991-2001. Generally, Benin's export products are not diversified; they basically consist of primary agricultural products. Thus, Benin's export structure has seen no real dynamism or impetus.

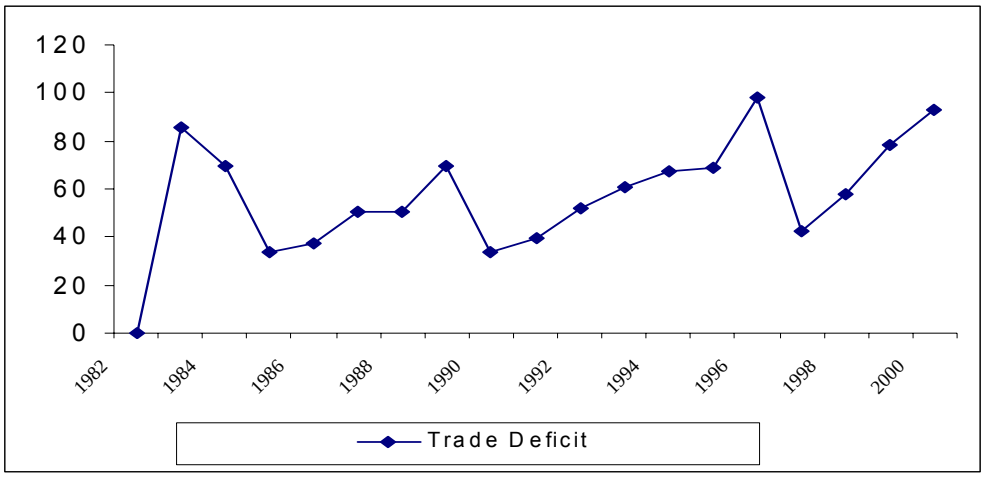
Table 3: Structure of exports

Structure of exports					
Period	**Cotton**	**Foodstuffs**	**Energy products**	**Others**	**Total**
1983-1990	51.3	2.6	26.0	20.1	100.0
1991-2001	80.6	5.9	3.2	10.3	100.0

Source: INSAE/SEC

Further analysis of Benin's import and export revenues reveals that it has experienced a persistent deficit in its trade balance. During the economic and social crisis of 1983-1990, a serious deterioration in export revenues weighed heavily on the trade balance, making the trade balance deficit reach a level of 10% of GDP. The recovery and restructuring period (1991-2001) was marked by declining deficits, as a result of a surge in exports. This downward trend in the balance of trade deficit was more noticeable between 1998 and 2001 (3.7%), despite a drop in export receipts (figure 1).

Figure 1: Evolution of trade deficit in Benin (1983 – 2001)



2.3 Benin's poverty profile

To establish the poverty profile, two types of studies were used. These included light household surveys (LHS) in urban areas and surveys on living conditions (SLC) in rural areas. In this context, a poor household was defined as one whose annual expenditures per adult equivalent are lower than the poverty line. This poverty line varies according to area of residence. In the rural areas the per capita poverty line increased from 42,075 CFA francs in 1994-1995 to 51,413 CFA francs in 1999-2000, whereas in urban areas it increased from 48,629 CFA francs in 1994-1995 to 91,705 CFA francs in the period 1999-2000.

Three poverty indicators were calculated to determine Benin's poverty profile. They include the headcount index, which captures the incidence of poverty or the proportion of poor people within a population (P_0), the poverty gap, which captures the depth or intensity of the poverty phenomenon (P_1), and the squared poverty gap, which captures the severity of poverty and the extent of inequality among the poor (P_2).

In Benin since 1995, the incidence of poverty has remained statistically stable. Over the period 1999-2000, 29.6% of the population was considered as poor, compared to 28.9% in 1995. Despite this stability, the severity of poverty has risen, pointing to increasing inequality among the poor. In other words, even though the proportion of poor households has not changed significantly, poor households were more stricken by poverty in 1999 than in 1995.

In Benin poverty is more of a rural than an urban phenomenon. In rural areas, poverty incidence was 31.2% in 1999. The depth and severity of poverty were 8.5% and 3.4%, respectively, in 1999-2000. In urban areas, the proportion of poor people was 24.6% in 1999, and the depth and severity of poverty were 9.5% and 5.4%, respectively. Hence, there is a positive correlation between the degree of urbanization and poverty.

Although the depth and severity of rural poverty have not changed significantly over this period, they have increased by 5% in urban areas. An increase in the depth and severity of poverty in the urban areas between the two periods suggests that impoverishment has become more pronounced in urban households, even though the proportion of poor people have remained unchanged. Inequality in the distribution of household income, therefore, seems to have increased between 1995 and 2000.

Beyond the monetary aspects of poverty, it is important to look at the evolution of non-monetary poverty, which deprives the poor of the satisfaction of certain basic needs such as access to education, healthcare services, drinking water, food, survival, and the ability to make decisions about events affecting their personal lives. This aspect of poverty is measured by the Human Development Index (HDI) developed by the United Nations Development Program (UNDP). This indicator attempts to quantify certain forms of destitution in four basic areas of human life: the capacity to live longer and in good health; knowledge (education); economic means; and participation in social life. Thus, according to the HDI country ranking, Benin is classified as one of the 15 least developed countries in the world. Benin's poor ranking is due primarily to the low rate of literacy among adults, and the low level of per capita income.

Comprehending the phenomenon of poverty through its determinants provides the essential elements for targeting actions aimed at reducing poverty efficiently. This type of study demonstrates that the determinants of poverty in Benin basically concern household socio-economic characteristics. The results of these studies vary slightly from one area to another. Yet, whether in rural or urban areas, the main determinants of poverty frequently noted are, among others, large size of households, low level of schooling, and the gender of the household head.

In essence, poverty increases with household size. Households with more than six members display poverty incidences twice as high as those with three members, in both urban and rural areas. Moreover, the effect of household size on the incidence of poverty seems more perceptible in the urban area where the rate of poverty for households with six members or more is four times that of households comprising three members. In addition, the poorest households are those with household heads aged 35 years and above. Similar tendencies are also observed in the depth and severity of poverty. Furthermore, households whose heads have some level of schooling are usually less poor than those whose heads have no schooling at all, and this result is verified in urban and rural areas alike.

3. The Model

3.1 A Brief Survey of CGEs in Benin

Work on general equilibrium models in Benin essentially began in 1993. Since then, a series of studies focusing on various areas have been carried out using this tool.

Regarding analyses done on the impact of trade liberalization measures, we may cite the study by Adjovi and Sinzogan (1997), which involves a simulation of the 1991 tariff reforms in Benin. On the impact that economic policy had poverty, there are two main studies. The Modeling Cell at the National Institute of Statistics and Economic Analysis (INSAE), in collaboration with CIRPÉE of University of Laval in Canada, developed a Social Dimension of Development (SDD) version of the Institute's CGE. This version's survey results listed households as being poor and non-poor, based on budget consumption.

In another study, Adjovi (2002)[2] analyzed the impact of the allocation of public spending on poverty in Benin. In effect, Benin has received external support in the context of the Heavily Indebted Poor Countries (HIPC) initiative, which, in principle, is intended to contribute to the implementation of actions likely to lead to a reduction in poverty. The main objective of the study was to determine the impact of alternative uses of public funds allocated to relieve poverty in Benin. Unlike other studies, the model used in the study took into account three kinds of labour markets; informal, formal (or modern), and the civil service. Following Savard and Adjovi (1998), this study explicitly integrated unemployment in the model, and introduced education and health externalities.

3.2 Features of the Model

The model in the current study focuses on the labour market by first taking the informal, formal and civil service (government) labour markets into consideration. In the government sector, the output is a Leontief function of intermediate consumption, and concerns civil servants' labour only. In the other sectors, the model is modified through addition of a composite labour variable, which in turn is combined with capital in the value-added function. Unemployment is taken into account in the model, including those workers laid off from the public and parastatal sectors, as well as students waiting to join the formal job market after completing their studies. Finally, following Subramanian (1994) and Dorosh (1994), an endogenous labour supply is introduced into the model in such a way that the labour force would increase (decrease) if the informal real wage increase (decreases) relative to the initial wage.

[2] The work was part of a large effort to measure the micro impact of macro policies in the context of Benin, MIMAP and also IDRC-Canada.

3.3 Calibrating the Model

To solve the system, the model's parameters need to be chosen or calibrated. The unemployment rate in the base year is 12.6%, as provided by the 1995 Employment Observatory Statistics. The absorption rate of laid-off workers by the informal sector (λ) is 80%, a figure taken from Maldonado (1994). Other parameters were calibrated to reproduce the base year in the usual manner. The elasticity of substitution used in foreign trade functions were drawn from Savard et al. (1994).

4. Findings

In order to illustrate the impact that trade liberalisation may have on both income distribution and poverty, a simulation was performed on the effects of a total and unilateral elimination of customs tariffs. In order to make up for the loss of revenue resulting from the abolition of import customs duties, a compensatory consumption tax was introduced. The liberalisation of foreign trade consequently had no effect on public spending.

4.1 Global Analysis

The elimination of customs tariffs leads to a fall in import prices, which in turn reduces the consumer and producer prices of local competing goods. Understanding the magnitude of these repercussions requires an analysis of the initial situation, and especially initial tariff levels, the rate of import penetration and the level of substitution between local and imported products by sector of activity. To this effect, table 4 shows the initial situation in terms of import taxes and the structure of the various markets.

The data reveal that two sectors, notably industrial crops and tradable services have near-zero initial tariff rates and very low levels of imports and exports. On the contrary, all other sectors are heavily protected, with tradable services, food industries and modern industries dominating the import and export markets.

Table 4: Initial structure of the economy in Benin

Sectors	Tariff rate	Value added share	Import share	Export share	Import penetration rate	Export intensity
Food crops	15.8	36.9	2.0	4.9	2.1	3.7
Industrial crops	0.3	4.9	1.0	1.2	6.4	5.5
Food industries	14.7	1.6	26.6	23.1	65.5	62.5
Agriculture and handicraft	14.7	4.3	2.9	0.5	6.8	1.0
Modern industries	21.0	4.4	56.5	13.9	58.1	26.8
Other small-scale industries	18.0	5.2	5.4	0.1	11.2	0.1
Tradable services	0.0	42.8	5.6	56.3	4.2	24.7
Total	17.5	100.0	100.0	100.0	19.6	17.0

Source: Authors' computations.

4.2 Impacts on prices and production

Table 5 shows the percentage changes in the major endogenous variables included in this study. The elimination of customs duties leads to a general drop in import prices (PMi), which in turn is reflected in the price of goods sold in the local markets PDi), and finally in producer prices (Pi). Naturally, the two most protected sectors, "modern industries" and "other small-scale industries", saw the greatest drop in import prices and, consequently, in domestic prices (by 7.9% for modern industries and 5.2% for other small-scale industries), as local producers are compelled to reduce their prices in the domestic market in order to remain competitive. Similarly, since food industries faced increased import competition (12.8% drop in the PMi), and given the level of substitutability between local and foreign products, there was an equally significant domestic price drop in this sector (6.9%).

In terms of impacts on import volumes, the largest increases were in sectors that combined a considerable drop in import prices with a high level of substitutability between local and imported goods: small-scale industries (8.6%), agriculture and handicrafts (6.9%) and food crops (6.6%). On the whole, imports increased by 3.6%. However, it is worth mentioning that there was a drop in the volume of imports for sectors with an initial rate of customs duties equal or close to zero – industrial crops and tradable services – where import volumes decreased by 3.4% and 4.6%, respectively. Two factors explain these decreases. On the one hand, since the balance of payments was fixed, an increase in imports for some of these goods had to be compensated by a reduction in imports for other goods, and/or by an increase in exports. On the other hand, the general drop observed in domestic prices led to a reduction in imports for these products.

Table 5: Impacts on prices, production and foreign trade

Sectors	Import prices	Import volumes	Domestic sales	Domestic prices	Export volumes	Output	Producer prices
Food crops	-13.6	6.6	-1.4	-4.9	2.7	-1.2	-4.7
Industrial crops	-0.3	-3.4	0.2	-4.2	2.3	0.3	-4.0
Food industries	-12.8	2.6	-3.3	-6.9	3.2	0.8	-2.6
Agriculture and handicraft	-12.8	6.9	-2.5	-3.5	0.6	-2.5	-3.4
Modern industries	-17.3	4.3	-5.4	-7.9	1.8	-3.5	-5.8
Other small-scale industries	-15.2	8.6	-1.8	-5.2	3.0	-1.8	-5.2
Tradable services	0	-4.6	0.1	-5.8	6.9	1.8	.3
Total		3.6	-1.4		5.01	-0.2	-4.4

Source: Authors' computations.

Increased competition from imports made the local market less attractive for domestic producers. Both domestic demand and prices dropped, except in the case of industrial crops and tradable services, which registered slight increases of 0.2% and 0.1%, respectively. Under these circumstances, the only choice left for producers was to turn to the export markets, which became relatively more profitable. Moreover, as highlighted earlier,

external constraints led to real exchange rate devaluation such that the increase in imports was compensated by a similar increase in exports. Considerable increases in exports are witnessed in the tradable services, food industries and food crops sectors. However, for modern industries, export effects are not very significant, in spite of considerable reductions in domestic prices. This weak reaction was essentially due to the fact that the sector employs only one variety of workers (formal workers), and can consequently not easily increase its production, given the limited availability of this category of workers. On the whole, there was a 5% increase registered in the volume of exports.

The overall impact on domestic production, resulting from the simultaneous increase in exports and fall in domestic sales, was very small (-0.2%). The three booming sectors, which could be coined as the "winning" sectors in the liberalisation process, are, undeniably, tradable services (1.8%), food industries (0.8%) and industrial crops (0.3%). The sector that lost most in terms of production was modern industries, which registered a drop of 3.5%. It is obvious that the tradable service and industrial crops sectors, the two least protected sectors, suffered the least from tariff reductions. These sectors also benefited from reductions in the cost of their raw materials and production factors, especially labour, thus allowing some improvement in their competitive position on foreign markets. Although the agriculture and handicraft industry sector suffered the counter effect of tariff decreases, it was less affected than the modern industries sector, for example, since a great part of its production was already export-oriented. The export intensity coefficient for the food industry exports was 62.5%, while only 26.8% for the modern industries sector (table 4). The food industry sector suffered less than the modern industries sector, as its level of dependency vis-à-vis the domestic market was much lower, even though their initial levels of customs duties were very close.

4.3 Impacts on factor remunerations

Table 6 show the impact that remuneration has on production factors. Since the formal salary rate is exogenous, and given that there are no informal workers in the food industry and modern industry sectors, the drop in product prices and the value added to these sectors will be fully reflected in capital remuneration. On the other hand, activities in the food industries, industrial crops and tradable services sectors are growing, and this mitigates the drop in capital outputs, as the lowest decreases have been registered in these three sectors.

Table 6: Factor remunerations

Sectors	dPi	dPVA	DVAi	wLi/wL	riKi/rK	dwt	dri
Food crops	-4.7	-5.3	-1.0	40.9	38.0	-3.8	-7.2
Industrial crops	-4.0	-3.7	0.3	6.7	3.5	.8	-3.4
Food industries	-2.6	-3.9	0.8	0.0	1.5	0.0	-3.0
Agriculture and handicraft	-3.4	-7.3	-2.5	4.5	4.7	-3.8	-11.1
Modern industries	-5.8	-10.2	-3.5	0.0	6.4	0.0	-13.7
Other small-scale industries	-5.2	-5.2	-1.8	5.5	5.7	-3.8	-6.8
Tradable services	-4.3	-3.0	1.8	42.3	40.3	-3.2	-1.6
Total*	-4.4	-3.9	0.0	100.0	100.0	-2.7	-5.3

Source: Authors' computations.

4.4 Impacts on household income

The impact of these changes on household income is quite significant and depends on household income sources. Table 7 shows that the incomes of all households decreased, a trend more pronounced in rural area households (-5.5%) than in urban area households (-3.1%). The evolution of income in households in rural areas could be explained by the considerable amount of work done by household members who provide the main source of income (79.0%), as compared to households in urban areas (46.8%), whose incomes are derived from various sources. Even though the drop observed in the capital income is greater than that in labour, and households in urban areas derive a much greater portion of their income from this source, the overall drop in income in urban areas is less than that seen in rural area households. A greater diversification in sources of income would make urban households less vulnerable to the consequences of a widespread drop in the remuneration.

Table 7: Impact of factor remunerations on income

	Change in remuneration rate		Revenue share		Impact on income	
	Urban	Rural	Urban	Rural	Urban	Rural
Labour	-2.7	-2.7	46.8	79.0	-1.3	-2.1
Capital	-5.3	-5.3	36.7	19.8	-2.0	-1.1
Other sources of income	0.0	-1.9	16.0	1.2	0.1	2.3
Total	-	-	100.0	100.0	-3.1	-5.5

Source: Authors' computations.

In order to grasp the impact of unilateral liberalization on welfare, a comparison must be made between the drops in income and the cost of living, followed by the price drops for imported goods. The evolution of the consumer price index as well as that of final demand composite prices will obviously be the key element in the diagnosis made here. It could be immediately assumed that those households that allocate a large proportion of their consumption budget to products highly subjected to competition with imported goods would witness a more appreciable drop in the cost of living. The last two columns in table 8 show how prices are distributed, depending on whether consumers live in rural or urban areas. The observation made is that households in urban areas proportionately consume more

tradable services (29.1%), and mostly products from modern industries (18.3%) than the households in rural areas which, on the contrary, use a large portion of their own budget in buying products from the food industry and handicraft sectors.

Table 8: Impact on consumer prices

Sectors	Mi/Qi	dPMi	DPDi	dPCi	Rural	Urban
Food crops	2.1	-13.6	-4.9	-1.5	33.1	30.3
Industrial crops	6.4	-0.3	-4.2	-0.4	1.6	0.9
Food industries	65.5	-12.8	-6.9	-8.1	7.0	7.6
Agriculture and handicraft	6.7	-12.8	-3.5	-0.6	33.3	4.8
Modern industries	58.0	-17.3	-7.9	-11.4	5.8	18.3
Other small-scale industries	11.2	-15.2	-5.2	-3,0	5.7	9.0
Tradable services	4.2	0	-5.8	-2.6	13.5	29.1
Total	19.6	-14.9	-5.4	-4.3	100.0	100.0
Variation of the consumer prices index					-2.4	-4.1

Source: Authors' computations.

As shown in the table the drop in handicraft product prices was practically zero, while the drop for manufactured product prices was 11.4%, the sharpest of all the products. Even though the drop in food industry prices is not negligible (-8.1%), it does have the same impact on household consumer purchases, since the rural and urban households allocated the same proportion of their budget to them. On an aggregate level, and given consumption structures within each of the above environments, it can be seen that consumer prices decreased more in the urban areas (-4.3%) than in the rural areas (-2.4%).

When measured in terms of equivalent variation, urban area households' welfare improved by 2.0%, while that of rural area households it deteriorated by 3.0% (table 9). For households in urban areas, the nominal drop in income was less significant than that for consumer prices, whereas the reverse was true for rural area households. The entire population saw a drop in its well-being (-0.3%), given that the rural population is larger than the urban population.

Table 9: Household welfare

	Urban	Rural	All
Change in the nominal income (%)	-3.1	-5.5	-4.2
Change in the consumer price index (%)	-4.1	2.4	-3.2
Equivalent variation (%)	2.0	-3.0	-0.3

Source: Authors' computations.

Trade liberalization, therefore, enhances the well-being of households in the urban areas, yet has a rather unfavourable effect on households in rural areas, and on the entire population. Can this assessment be verified in terms of the impact on poverty? The Foster-Greer-Thorbecke (FGT) indicators, and notably those relating to poverty incidence (P_0), depth (P_1) and severity (P_2), will be used to answer this question.

The initial indices of poverty level computed from household surveys conducted in urban and rural areas reveal that the incidence of poverty is markedly higher in the rural

areas than in urban areas; the proportion of poor people living in rural areas is estimated at 38.9%, whereas it is only 32% in the urban areas (table 10). A very important divergence between urban and rural areas can also be seen in the depth and severity of poverty (FGT1 and FGT2) indicators.

Table 10: Poverty indicators (Foster-Greer-Thorbecke (FGT))

	Poverty line	FGT0			FGT1			FGT2		
		Initial	Simulated	Variation	Initial	Simulated	Variation	Initial	Simulated	Variation
Urban	113,740.0	32.0	30.0	-4.9	11.0	10.5	-4.8	5.6	5.3	-4.9
Rural	74,294.0	38.9	39.8	2.4	10.9	11.2	3.1	4.3	4.5	3.8
Total	94, 017.1	35.4	35.0	-1.0	11.0	10.59	-1.0	5.0	4.9	-12

Source: Authors' computations

The number of poor people within the entire population is much lower since the liberalization policy was implemented. However, some opposing trends can be observed in the urban and rural areas. A decline in all these indicators is observed in the urban areas, where the incidence, depth and severity of poverty dropped by 4.9%, 4.8% and 4.9%, respectively. On the contrary, the situation of households in the rural areas is deteriorating, where the incidence, depth and severity of poverty increased by 2.4%, 3.1% and 3.8%, respectively.

On the whole, it can be concluded that trade liberalization has a serious impact on both income distribution and poverty. However, the impact on the poorest people living in urban areas is a positive one, whereas in the rural areas the situation of the abandoned populations continues to deteriorate.

5. Conclusion

Based on the findings presented, it is important to note that a total and unilateral abolition of import duties and taxes, and the institution of a compensatory consumption tax are more beneficial to households in urban areas than to those in rural areas. Moreover, these reforms contribute to worsening poverty conditions of the poorest people in the rural areas. It is, therefore, important to acknowledge that if liberalization policies target to develop better strategies aimed at fighting poverty, or at least not worsening the situation, they must be designed with great caution, as they could very well lead to a worsening of the poverty condition of the most destitute in society, and even to social upheavals, and finally shatter the economic benefits derived from the elimination of international trade distortions.

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