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General Equilibrium Analysis of Albania's Integration with the EU and South Eastern Europe

Contents

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Abstract

The aim of this paper is to provide a framework for the analysis of implications of various trade policy options for Albania. We study the impact of implementation of the Stablization and Association Agreement, free trade agreements with South-East European neighbors and reduction of the MFN tariffs. We employ a computable general equilibrium (CGE) model, which allows for evaluation of the likely impact of trade agreements on trade, output, factor rewards, tariff revenue and welfare. Our simulations indicate that Albania has a lot to gain from further integration with its neighbors and the EU. However, the benefits from regional integration can only be realized as long as Albania gains better access for its exports on regional markets. Liberalization of trade with all trading partners allows for a permanent increase of Albanian GDP by 1% on a recurring annual basis and an increase of wages by 3.4% relative to their 2000 level.

Introduction

Albania is a small open economy in transition, whose economic success to large extent is determined by its trade performance. The collapse of trade with the Council of Mutual Economic Assistance and then former Yugoslavia coupled with a deep fall in output in the first years of transition determined the deep changes in sectoral and geographical composition of trade. The EU become the major trading partner of Albania, while exports of natural resources intensive products were replaced by labor-intensive products.

Albanian trade regime is quite liberal. With the membership of the WTO Albania has liberalized its tariff structure significantly. Maximum tariff rates in 2002 amounted to 10 percent, with an average tariff of only 7.2%. Albania has taken further steps toward liberalization of its trade regime. It has signed free trade agreements with its South East European (SEE) neighbors and it is in the process of negotiation of the Stability and Association Agreement (SAA) with the EU.

The aim of this paper is to provide a framework for the analysis of the implications of these trade policy changes. We employ a computable general equilibrium (CGE) model, which allows for the evaluation of the likely impact of the trade agreements on trade, output, factor rewards, tariff revenue and welfare. Our simulations of several policy scenarios can provide some guidance as to the welfare implications of various dimensions of trade integration, the size of loss of tariff revenue and help the Albanian government formulate policies that would ease structural adjustments in sectors mostly affected by policy changes.

The remainder of this paper is organized as follows. The next section discusses the trade regime of Albania detailing the modeling assumptions employed in the general equilibrium exercise. Section 3 discusses the choice of methodology and introduces the reader to the Global Trade Analysis Project (GTAP) database. We discuss the sources of data on Albania and how the GTAP database had to be adjusted for the purpose of the model. The following section discusses the results of static and steady state policy simulations. Section 5 concludes and presents policy recommendations. In Appendix 1 I look at the implications of the last scenario combining trade policy liberalization along all dimensions and adoption of the EU standards by Albania.

1. Albania's trade regime[1]

Among the Balkan countries, Albania was quite fast to move in its transition to a market economy. The collapse of communist regime and the ensuing Balkan wars in 1991-1992 devastated the industrial base of the economy and brought about output collapse. Deindustrialization of the economy had a profound effect on the pattern of the Albanian trade: composition of exports shifted away from natural resource intensive products to unskilled labor intensive products. Meanwhile geographically trade shifted strongly away from the former Yugoslav republics toward the EU (Kaminski 2003, p.18).

Albania was quick to liberalize its prices and to abolish monopoly over foreign trade immediately after the collapse in 1991. In 2000 it joined WTO and is to complete trade liberalization by 2007. Considering the fact that unlike other Balkan countries Albania has been for a long time isolated from the rest of the world, its progress with trade liberalization is notable. Currently, the sum of exports and imports of goods and services constitutes around 45% of GDP, which is half of the regional average of 88% (EC, 2004). The share of trade in GDP has remained relatively constant over recent years (Table 1), with imports being significantly larger than exports, which manifested in a large trade deficit (around 23%).

Table 1. Albania trade dynamics

Indicator	Unit	1998	1999	2000	2001	2002
Exports	% GDP	7.4	7.7	7.1	7.2	6.8
Imports	% GDP	30.2	33.2	29.6	31.2	31.1
Trade volume	% GDP	37.6	40.9	36.7	38.4	37.9
trade balance	% GDP	-22.7	-25.5	-22.5	-24.1	-24.2
GDP	lek mln	412326	474291	530906	610426	677684

Source: IFS and author's calculations

European Union is the major trade partner of Albania – it accounts for over 65% of Albanian imports and 92% of exports (Table 2), followed by the ROW with 26% of imports and 3.9% of exports. Trade with neighbors is less significant – 8.35%, of imports and 3.79% of exports.

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[1] This section was written by Anna Kolesnichenko.

Table 2. Structure of Albanian Trade by Region and by Product Groups, 2002, %

		% in total imports				% total exports			
		Total by product	EU	SEE	ROW	Total by product	EU	SEE	ROW
	Total by region	100.00	65.56	8.35	26.09	100.00	92.30	3.79	3.91
1	Grains	2.94	0.29	0.55	2.10	2.25	2.15	0.02	0.08
2	Livestock	0.26	0.17	0.01	0.07	0.33	0.18	0.14	0.02
3	Vegetables, Frutis, Other Agricultural Products	3.00	2.35	0.21	0.43	0.17	0.15	0.01	0.02
4	Forestry and Fishing	0.09	0.09	0.00	0.00	0.51	0.50	0.00	0.00
5	Energy, Mining	0.17	0.05	0.12	0.01	0.00	0.00	0.00	0.00
6	Minerals nec	0.54	0.42	0.01	0.11	0.67	0.63	0.04	0.00
7	Food Products	17.54	11.51	0.90	5.13	7.69	5.50	0.94	1.24
8	Textiles, Clothing, Footwear	5.16	1.75	0.09	3.33	67.78	66.17	0.14	1.48
9	Wood, Paper products	3.20	2.39	0.22	0.60	2.75	2.62	0.05	0.08
10	Petroleum, Coke Products	5.71	3.12	1.19	1.40	1.95	1.12	0.61	0.23
11	Chemicals, Rubber, Plastic Products	10.10	6.18	0.71	3.21	1.03	0.80	0.12	0.11
12	Non-Metallic Mineral Products	8.96	6.93	0.82	1.21	0.57	0.47	0.06	0.04
13	Metals and Metal Products	9.29	5.70	0.68	2.91	9.13	8.88	0.13	0.12
14	Transport Equipment, Machinery and Equipment	28.02	21.45	1.11	5.46	5.16	3.15	1.52	0.50
15	Electricity, Gas Distribution, Water	5.02	3.15	1.73	0.13	0.00	0.00	0.00	0.00

Source: Author's calculations based on the data of the Albanian customs authorities.

The major Albanian imports are food products and machinery – together they constitute 46% of Albanian imports (column 1 rows 7 and 14). Other significant imports are chemical, mineral and metal products. All these products are imported mostly from the EU. Imports from the ROW have similar product structure. Energy and machinery prevail in imports from neighbors (rows 10, 14 and 15).

The major exports are textiles, clothing and footwear (68%) that goes to the EU. Other significant exports include metals (mainly to the EU), food products, and machinery (EU and neighbors).

1.1 Trade arrangements with the EU

In 1992 Albania started trade liberalization with the EU by signing Trade and Co-operation Agreement with the European Union. In 2000 the EU adopted an Autonomous

Trade Preference (ATP) regime with respect to Albania,[2] which introduced substantial liberalization with respect to imports from Albania to the EU. According to this regime, the Community lifts restrictions on all industrial products and many agricultural products. The only agricultural products that remain protected are headings 0102 (cows), 0201 (fresh bovine meat), 0202 (frozen bovine meat) and 1604 (prepared or preserved fish). Out of this list, in 2002 Albania exported to the EU only fish, which accounted for 3% of Albanian exports to the EU.

In 2000 EU launched Stabilization and Association Process (SAP) for five countries of South-Eastern Europe: Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia and Serbia and Montenegro, including Kosovo. The EU is in the course of signing bilateral Stabilization and Association Agreements (SAA) with all five countries that envisage creation of free trade areas between the EU and each of the countries. On January 31, 2003, EU has launched the negotiations for SAA with Albania. These negotiations are still under way. The proposed Albanian concessions under the 8th round of the negotiations form the basis for our simulations.

At present Albania faces a free access to EU market except few fish products, exports of which are subject to quotas. According to the SAA agreement, quantitative restrictions and tariffs on exports of Albanian agricultural and food products are to be abolished, with some minor exceptions. However, these have not been yet specified in the document presented to us.

Albania on its part commits itself to full liberalization of tariffs on imports of industrial products from the EU. On the date of entry into force of the Agreement, duty shall be reduced to 80% of the basic duty. Gradual reduction will continue until full liberalization in January 2009.

The proposed commitments under the 8th round of the negotiations group agricultural and food products entering Albania into non-sensitive, medium-sensitive and highly-sensitive products. Duties on non-sensitive products will be reduced on the date of entry into force of the Agreement. The average tariff on non-sensitive products amounted to 3.6% in 2002, imports of these products accounted for 15% of total imports. This group consists of poultry, some grains, juices. Duties on medium-sensitive products will be reduced gradually over the period of 5 years. The average tariff applied to imports of these products from the EU amounted to 10% in 2002. Imports of medium-sensitive products accounted for 52% of imports. They mainly included selected dairy products, meats, fruits, vegetables, and beverages. Duties on highly sensitive products will remain at their MFN level. The average tariff on these products amounted to 12% in 2002 and they accounted for 33% of imports. This group includes livestock, dairy products, processed meats, selected processed fruits and wine.

Our modeling exercise assumes elimination of tariffs on imports of industrial products from the EU and elimination of duties on non-sensitive and medium-sensitive products. Tariffs at the 8-digit level where weighted by imports in 2002 and aggregated to sectors of the model (see Table 3). By looking at the complete abolition of tariffs even in the cases where gradual liberalization applies, we are presenting the long-run implications of trade liberalization.

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[2] Council Regulation (EC) No 2007/2000 of 18 September 2000 introducing exceptional trade measures for countries and territories participating in or linked to the European Union's Stabilisation and Association process.

Table 3. Albanian tariffs on imports from the EU

	2002 Effective Tariffs (%)	SAA Tariffs (%)	Percentage Point Reduction
Grains	7.6	3.8	3.8
Vegetables, Frutis, Other Agricultural Products	4.3	4.1	0.2
Livestock	10.7	5.1	5.6
Forestry	11.6	11.1	0.5
Fishing	11.6	11.1	0.5
Energy, Mining	2.1	0	2.1
Minerals nec	4.2	0	4.2
Food Products	10.3	3.7	6.6
Textiles, Clothing, Footwear	10.3	0	10.3
Wood, Paper products	8.1	0	8.1
Petroleum, Coke Products	7.2	0	7.2
Chemicals, Rubber, Plastic Products	6.6	0	6.6
Non-Metallic Mineral Products	11.7	0	11.7
Metals and Metal Products	10.2	0	10.2
Transport Equipment, Machinery and Equipment	5.4	0	5.4

Source: Albanian Customs Authorities (column 1), Column 2 - see text.

1.2 Trade arrangements with neighbors

As of 2002, Albanian trade with neighbors remained quite limited, with exports at 3.79% and imports at 8.35% of total volumes (Table 2). Croatia and Bulgaria are major importers - together they account for 57% of imports from neighbors (Table 5). Serbia & Montenegro is the major export destination for Albanian products (58.3% in Table 8 below).

By the end of 2003 (November 13, 2003), Albania has signed Free Trade Agreements with all its neighbors (Table 3).

Table 4. Albanian FTAs with Neighbors

Bosnia-Herzegovina	Bulgaria	Croatia	FYR of Macedonia	Moldova	Romania	Serbia & Montenegro
Signed 28/04/03 Ratified by Albania 10/07/03	Applied 01/09/03	Applied 01/06/03	Applied 15/07/02	Signed 13/11/03	Signed 21/02/03 Ratified by Albania 10/07/03 To be Applied 01/01/04	Signed 13/11/03

Source: EU 2004a, p9.

The agreements are quite similar in their provisions: they envisage removal of all quantitative restrictions and abolishment of export duties on industrial products. Import duties for industrial products are also to be abolished immediately or in phases by 2008. Macedonia is the only exception – only 8% of its industrial imports entering Albania will be exempt from duties.

The FTAs are more restrictive with respect to agricultural products: customs duties are to be abolished for some products, usually within a quota. The most common exemptions are: meat of sheep (0204), various types of fish (0302), sea products (0307), cheese (0406), honey (0409), bulbs (0601), plants (0602), peas, lentils (0713), nuts (0802), berries (0806), spices (0904 and 0910), barley (1003), millet and cereals (1008), various flowers (11), nuts (12), vegetable extracts (1302), oils from various plants (15), meat products (1601 and 1602), sardines (1604), food preparations (1806 and 2103-2106), cereal products (1903 and 1904), vegetables (2001), mushrooms (2003), fruits and cherries (2006), juices (2009), yeasts (2102), mineral water (2201) and non-alcoholic beverages (2202), cognac (22082012) and some other alcoholic beverages, some food industry residues (23).

The provisions for agricultural products, however, lack uniformity: although there are some products that are exempt under several FTAs (the list above), many products are exempt only under specific country agreements. Moreover, different timing of the introduction of the free trade provisions and application of quotas in some cases also have a potential to distort trade in the region.

Table 5 presents a summary of provisions of FTAs with neighbors. The numbers should be perceived as indicative, as they do not take account of timing of trade liberalization and quotas applied.

Table 5. Summary of provisions of the FTAs for imports from neighbors

	Croatia	Bosnia & Herzegovina	Bulgaria	Moldova	Romania	Macedonia	Serbia & Montenegro	total
Share of countries in total imports from neighbors, %	29.6	0.7	27.4	1.1	15.1	14.5	11.6	100.0
Share of agricultural imports in total imports, %	3.9	20.3	29.8	63.6	2.1	24.9	52.0	20.1

Share of products in total imports that will be exempt under FTA, %	96.1	91.8	74.3	36.4	98.0	21.1	81.2	77.1
Share of agricultural products in agricultural imports that will be exempt under FTA, %	0.3	59.5	13.8	0.0	0.5	60.4	63.9	36.1
Share of industrial imports that will be exempt under FTA, %	100.0	100.0	100.0	100.0	100.0	8.1	100.0	87.5

Overall, the FTAs envisage trade liberalization for 77.1% of imports.

Agricultural products for which free trade is envisioned account for 36.1% of agricultural imports from neighbors in 2002. The regime is the most liberal for agricultural imports from Bosnia & Herzegovina, Macedonia and Serbia & Montenegro - about 60% of them will go duty free. On the contrary, imports from Croatia, Moldova and Romania are very restricted – duty free access is envisioned only for less than 1% of agricultural imports from these countries, with their most significant agricultural imports not being tax exempt under the FTAs (Table 6). It is unclear why Albania inhibits these imports – out of these products it exports only cigarettes (1.64% of Albanian exports in 2002) and insignificant amount of walnuts.

Table 6. FTA provisions for major agricultural imports from Croatia, Moldova and Romania

Country	Most significant agricultural imports entering Albania	HS8	Share in agricultural imports to Albania from this country, %	Exemption under FTA
Croatia	spelt, common wheat and meslin	10019099	32	No
	maize seed	10051090	10.5	No
	rice	10063021	30	No
	cigarettes	24022090	19	N0
Moldova	spelt, common wheat and meslin	10019099	47.7	No item of Moldovan agricultural imports to Albania is covered by the FTA
	milk and cream in solid forms	04021019	21.3	
	walnuts	08023100	12.4	
Romania	oil-cake and other solid residues	23063000	80	No
	maize starch	11081200	6.6	No
	cows	01029051	4.3	No

The preliminary analysis of the WB staff suggests that vast majority of the quotas were not binding in 2003. Therefore the import regime of Albania following the full implementation of the FTAs with neighbors will be very liberal.

Table 7. Albanian tariffs on imports from the neighbors covered by FTAs

	2002 Effective Tariffs (%)	FTA Tariffs (%)	Percentage Point Reduction
Grains	2.8	1.2	1.6
Vegetables, Fruits, Other Agricultural Products	5.3	4.8	0.5
Livestock	8.1	6.0	2.1
Forestry	13.1	3.0	10.1
Fishing	13.1	3.0	10.1
Energy, Mining	2.0	0.0	2.0
Minerals nec	1.2	0.0	1.2
Food Products	8.6	2.7	5.9
Textiles, Clothing, Footwear	10.3	0.0	10.3
Wood, Paper products	9.5	0.0	9.5
Petroleum, Coke Products	9.1	0.0	9.1
Chemicals, Rubber, Plastic Products	5.3	0.0	5.3
Non-Metallic Mineral Products	9.8	0.0	9.8
Metals and Metal Products	7.2	0.0	7.2
Transport Equipment, Machinery and Equipment	4.5	0.0	4.5

Source: Albanian Customs Authorities (column 1), Column 2 - see text.

The FTAs' provisions for Albanian exports mirror the provisions for imports. With the exception of Macedonia, all Albanian SEE neighbors set duty free access for Albanian exports, sometimes within quotas. For some products gradual reduction of tariffs is envisioned, with complete liberalization to be accomplished by 2008 for trade with all neighbors. The fact that Macedonia retains duties for substantial number of industrial exports of Albania affects significantly Albanian industrial exports – only 53.9% of them appear to be exempt (Table 8).

The FTA provisions for the Albanian agricultural exports are more restrictive – only 10.2% of their 2002 value will go duty free, in some instances within quotas. Only Croatia establishes comparatively liberal regime for the Albanian agricultural products (49.6% are exempt).

Table 8. Summary of provisions of the FTAs for exports to neighbors[3]

	Croatia	Bosnia & Herzegovina	Bulgaria	Romania	Macedonia (FYR)	Serbia & Montenegro (FYR)	total
Share of countries in total exports to neighbors, %	1.2	0.6	0.8	0.5	38.6	58.3	100.0
Share of agricultural exports in total exports, %	51.2	11.4	13.3	0.0	10.5	41.5	29.1
Share of products in total exports that will be exempt under FTA, %	74.2	88.6	88.2	100.0	5.4	62.7	41.2
Share of agricultural products in agricultural exports that will be exempt under FTA, %	49.6	0.0	11.0	n/a	5.0	10.1	10.2
Share of industrial exports that will be exempt under FTA, %	100.0	100.0	100.0	100.0	5.5	100.0	53.9

Overall, the FTAs Albania has with its neighbors are biased against Albania: while Albania liberalizes 77.1% of its imports from the neighboring countries, only 41.2% of its exports will be allowed duty free in return. Under such conditions the FTAs will have limited effect on the Albanian exports to neighbors.

1.3 Trade regime with the rest of the world

The rest of the world is quite significant in terms of imports (26% of total imports) but less so in exports (3.9%). The major imports are food products, textiles, chemicals, metals and machinery. Major exports are food products and textiles (Table 2).

Turkey is the major trading partner of Albania from the ROW: it accounts for 28% of Albania's imports from ROW and 26% of exports. Major Turkish imports are cereal products, apparel and accessories, iron and steel. 74% of the exports to Turkey are raw hides, skins and leather. The other important importers are Russia (12% of ROW imports), China (11.5% of ROW imports) and US (8% of ROW imports). On the exports side US dominates with 41% share in Albanian exports to ROW (half of it are leather goods).

Accession to the WTO has accelerated trade liberalization process in Albania. Between 1997 and 2002 the maximum tariff rate reduced from 40% to 10%.[4] All tariffs are bound by MFN rates, and bindings are to be gradually reduced. The majority of tariffs on industrial products, however, still remain above the level of the EU Common External Tariff (CET). In Table 9 we present the results of simulation on adoption by Albania of CET for industrial products.

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[3] Albania does not export anything to Moldova, so there is no column for Moldova in the table.
[4] Kaminski, 2003, p.30.

Table 9. Albanian MFN tariffs and the CET on manufacturing products

	2002 ROW Effective Tariffs (%)	CET (%)	Percentage Point Reduction
Grains	2.0		0.0
Vegetables, Fruits, Other Agricultural Products	2.8		0.0
Livestock	10.1		0.0
Forestry	7.3		0.0
Fishing	7.3		0.0
Energy, Mining	9.9	0.0	-9.9
Minerals nec	0.4	0.0	-0.4
Food Products	7.1		0
Textiles, Clothing, Footwear	12.3	10.3	-2.0
Wood, Paper products	5.6	0.7	-5.0
Petroleum, Coke Products	9.9	0.0	-9.9
Chemicals, Rubber, Plastic Products	6.2	3.3	-2.9
Non-Metallic Mineral Products	9.7	3.7	-6.1
Metals and Metal Products	11.7	1.9	-9.8
Transport Equipment, Machinery and Equipment	4.5	3.6	-0.9

Source: Albanian Customs Authorities – Column 1, WITS – Column 2.

The sectors mostly affected by the adoption of the CET include energy and mining products, petroleum and coke products, metals and metal products. Reduction of tariffs for metal products is likely to produce the most significant effect on imports from ROW due to their significance in Albanian imports from ROW.

If the implementation of the FTAs with neighbors and SAA with the EU is accompanied by the lowering of the MFN tariffs the potential for trade diversion and welfare losses associated with it will be minimized. The likelihood of replacing low-cost suppliers from the ROW with high-cost suppliers from the preferential trade areas decreases significantly with lowering of the external tariffs.

2. Data and the methodology

2. 1 The choice of methodology

We use GTAP (Global Trade Analysis Project[5]) database and multiregional trade model developed by Harrison, Rutherford and Tarr (HRT) implemented in their evaluation of the impact of trade liberalization under the Uruguay Round and other trade policy related experiments (HRT, 1996a and HRT, 1996b). Application of a multilateral model for such a small country as Albania is mainly dictated by the need to account for the benefits of improved access to foreign markets. Without the modeling of the likely response of foreign countries one can only capture these benefits by changes in the terms of trade of Albania. The multilateral model allows for the endogenous modeling of the lowering of tariffs on Albanian exports. In addition we also learn about the impact of trade policy changes on other regions i.e. SEE and the EU.

The model employed in this study is a standard static computable general equilibrium model. It includes several price-wedge distortions such as factor taxes in production, value-added taxes, import tariffs and export subsidies. All taxes except for tariffs remain unchanged in simulations. Production involves combination of intermediate inputs and primary factors (capital and labor). We assume a Constant Elasticity of Substitution (CES) function over primary factors and a Leontief production function combining intermediate inputs with factors of production composite. Primary factors are mobile across sectors within a region, but immobile internationally. Each region has a government, whose revenue is held constant at the benchmark level and a single representative consumer. The trade balance is also held constant in counterfactual simulations.

Demand for final goods arises from a Cobb-Douglas utility function. Within each region, final and intermediate demands are composed of the same Armington aggregate of domestic and imported varieties. The composite supply is a nested CES function, where consumers first allocate their expenditures among domestic and imported varieties and then choose among imported varieties. In the imperfect competition case firm varieties enter at the bottom of the CES function. However, the present simulations are based on the perfect competition version of the model.

2.2. Working with the GTAP database

The data on all regions of the model except for Albania originates from the Global Trade Analysis Project Version 5 database, which includes the national and regional input-output structures, bilateral trade flows, final demands pattern and government intervention benchmarked to 1997. The GTAP database contains data on 66 regions or countries, but it does not include Albania nor all of its SEE neighbors as separate regions. Therefore we generated an aggregation that singled out Turkey and imposed Albanian data on it, forcing adjustment on the data on the rest of the world. A similar methodology was also applied in case of the analysis of the Croatian accession to the WTO (Sohinger, Galinec, Harrison, 2001). However, the above study did not incorporate Croatian trade flows, while our study does impose the Albanian trade flows. These adjustments are discussed in more detail in the next sub-section. Further, we aggregated the GTAP regions to the EU15, Rest of Central European Associates[6] (CEA

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[5] www.gtap.org
[6] GTAP includes Poland and Hungary as separate regions, but since Albanian trade with these countries is negligible we included them in the ROW aggregate.

i.e. Bulgaria, Czech Republic, Romania, Slovakia, Slovenia) and the remaining countries into the Rest of the World (ROW) aggregate. The CEA aggregate is adjusted to represent the SEE neighbors with whom Albania signed free trade agreements (see section 2).

The GTAP database dissaggregates economic activity into 57 sectors. These were aggregated to 24 sectors to match the GTAP data to sectoral composition of the Albanian input-output tables. The five factors of production in GTAP database were aggregated to capital - CAP (including besides physical capital also natural resources and land) and labor - LAB. In the absence of division of employment across skilled and unskilled labor in Albania we aggregated skilled and unskilled labor in other regions too.

2.3 Data on Albania

The major source of data on Albania is the 24 sector input-output table for 2000 constructed by Mark Horridge (2002). Data on macro aggregates such as the level of GDP, trade flows and taxes originates from the Albanian Ministry of Finance. The Institute of Statistics provided the data on the distribution of value added across sectors, which incorporated the estimates of the size of informal or un-recorded economic activity. Horridge used shares in agricultural output from the IMF (2002) to split up agriculture between the 13 corresponding agriculture sectors in the original 57 sector input-output tables. The *INSTAT 2000 Structural survey of economic enterprises* gave suggestions for other splits of economic activity across sectors; in other cases the author followed the proportions of the composite Greece-Turkey-Portugal IO table. Trade data applied in this exercise was based on the 1997 trade flows. We updated trade flows to reflect the 2002 structure of trade and import taxes.

We re-balance the GTAP data set to include Albania in two steps. First, we generate an aggregation that treats Turkey as if it were Albania, which amounts to re-labeling Turkey for ALB and generating aggregation of regions, sector and factors described above. Secondly, we adjust the country representing Albania to reflect Albanian data. This involves imposing Albanian intermediate transactions, value added and demand from the input-output tables. We also adjust the Albanian trade flows, their distribution among sectors and regions, as well as the level of import taxes based on the data for 2002 provided by the Customs authorities of Albania. The procedure for the imposition of the new data and re-balancing of the data set is a part of the GTAPinGAMS package documented in Rutherford (2002). It amounts to a least-square minimization of differences between the original and new data set, which creates the best match of the new data imposed. This minimization is constrained by the requirement that the data set needs to remain micro-consistent.

As a result of this procedure we end up with the data on Albania that is fully consistent with the I-O tables for 2000 and with the trade flows and import taxes updated to 2002 levels. The main factors influencing the trade policy results are the shares of imports in consumption, exports in production, composition of trade and taxes. The preliminary data indicates that structure of the economy did not change significantly between 2000 and 2002 and full data set was not available for 2002. Therefore it seems that the use of 2000 input-output tables should have led to similar results as if the 2002 data were available.

The CEA region is used as a representation of the SEE neighbors, with which Albania signed free trade agreements. The trade flows between Albania and its preferential trading partners are imposed on trade with the CEA region. The CEA includes the Czech Republic, Slovakia and Slovenia instead of SEE-4, so such an

approach might to some extent overestimate the potential impact of trade liberalization with the neighbors, as the size of the FTA is bigger than actual.

Another implication of the fact that the CEA region in GTAP database includes some new members states and some countries that are expected to join at the later stage is that we can include in our model only EU15. As a result the new member states are included in the Rest of the World aggregate. The results however would be very similar if all EU25 countries were included as Albania trades very little with the new member states.

3. Defining Policy Simulations

We look at three major trade policy changes discussed in section 2 and the impact of introducing them all at once:

1. Full implementation of the SAA with the EU.
2. Full implementation of FTAs with neighbors.
3. Adoption of the CET on industrial products.
4. Full implementation of the SAA and FTA with SEE (scenarios 1 and 2 combined).
5. Same as (4) plus adoption of the CET on industrial products (scenarios 1,2 and 3 combined).

The reductions in barriers to trade decrease the prices of goods for consumers, as well as prices of intermediates and capital goods for producers. The extent of these gains depends on the amount of trade between the trading partners and the trade creation and trade diversion effects. Liberalization of trade leads to increased efficiency of resource allocation, as demand shifts to regions with the lowest cost suppliers. However the gains from trade also involve adjustment costs and may be associated with potentially painful restructuring in Albania and significant redistribution effects.

On the export side lower barriers to trade may lead to higher foreign demand for domestic products and therefore higher prices of domestic goods depending on the supply side response. While increased domestic prices have a welfare decreasing effect on domestic consumers, they may lead to an improvement in the terms of trade (TOT), which is a source of potential welfare gain. However, a fall in the prices of imported intermediate goods is likely to result in a positive supply response and a possible fall in prices of domestic goods. So the overall effect depends on the increase in demand for exports and the extent to which domestic consumers substitute imports for domestic goods. The resulting change in the terms of trade cannot be predicted a priori. The application of a CGE model which incorporates demand and supply side effects allows us to capture the above mentioned processes and formulate predictions regarding the impact of trade policy changes on production, trade, prices, factor rewards and welfare. The welfare measure employed in this study is the equivalent variation in national income expressed as a percentage of the benchmark income. This welfare measure takes into account the purchasing parity of income. Therefore an increase in income is welfare improving as long as the prices of consumption goods do not rise faster than income.

In case of each scenario we present both short run and long run implications. In the long run simulations we allow for the adjustment of capital stock. The calculation of steady state growth effects follows HRT (1996a). In the static or short run scenarios the price of capital is allowed to vary within each country, while capital stock is held constant. In the steady state scenario capital stock in each country is allowed to adjust,

while the price of capital in each country is held constant. This approach is in the spirit of the equilibrium concept in multi-sectoral planning models. It assumes that there exists invariant capital stock equilibrium. It is defined as a set of prices, production and investment levels for which the economy is able to grow at a steady rate with constant relative prices.

We follow HRT (1996a) by defining the optimal capital stock as the capital stock such that the cost of investment, including depreciation and interest, is exactly equal to the capital rental rate. However, the commodity composition of investment is not modeled explicitly. Instead I use the assumption that the price of capital within each region is equal to the price of a basket of consumption goods. Further, it is assumed that given the return to capital in benchmark equilibrium, the capital stock in each country is optimal. The steady state calculation fixes the price of capital and allows the capital stock to find an endogenous level.

This approach provides an upper bound of the potential welfare gains as it ignores the adjustment costs and foregone consumption necessary to increase investment. For sufficiently high discount rates the costs of forgone consumption could overturn the benefits of capital accumulation. Baldwin (1992) suggests that that the welfare effect is much smaller than the output effect for this component of the gains. Although in the steady state scenarios we continue to measure welfare as equivalent variation as a share of GDP, it has to be born in mind that incorporation of the cost of the investment required to build up the capital stock may substantially reduce the estimates of welfare gains cited below. On the other hand our approach does not incorporate the potential gains due to productivity improvements or endogenous growth theory "learning by doing" effects.

4. Results
4.1 SAA with the EU

The detailed discussion on the SAA is provided in section 2.1. Our assumptions about the liberalization of Albanian tariffs on imports from the EU amount to full abolition of tariffs on industrial products and complete or partial elimination of tariffs on agricultural goods in accordance with the Albanian schedule of concessions. By looking at full abolition of tariffs even in the case of products where quotas apply, we estimate the upper bound of possible implications of the liberalization of imports from the EU.

Table 10. Implications of the full implementation of Albania's commitments under the SAA with the EU

(% CHANGE)	SHORT RUN	LONG RUN
Welfare (Equivalent Variation as a Share of GDP)	-0.72	0.46
Wage	1.14	2.46
Capital Rental	0.95	
Revenue from Taxes on Imported Goods*	-13.63	-12.93
(in million 2000 USD)	-53.72	-48.81
Capital Stock		2.5

* These include customs, excise and VAT.

Source: model simulations.

Lower tariffs on imports from the EU reduce prices of imported intermediate and final goods from the EU relative to goods from other regions. This results in a shift in imports towards EU products (see Table 11). Lower prices of imported goods from the major supplier of imports result in a fall in domestic prices. Lower prices translate into an expansion of exports to all regions. These are long run implications when all the adjustments will have taken place. Therefore we are looking at a period of perhaps a decade over which *ceteris paribus* exports of Albania to the EU would grow by 34% (relative to benchmark i.e. 2000 level). The sector which records the highest increase in exports is textiles, clothing and footwear (43%). This is not surprising given that exports of this sector accounted for 56% of total exports in 2002 and that 98% of exports of TCF was directed to the EU. Exports of metals and metal products, transport equipment, machinery and equipment, minerals n.e.c. also record high increases in exports. This in turn in possible only when domestic production in those sectors increases significantly (see Table 12).

Given the assumption of no change in total employment, production of the majority of other sectors decreases as factors of production are drawn to the TCF and other expanding sectors. This surge in exports is unlikely to occur over a short period of time. Even if output can be expanded significantly, the marketing ability of the Albanian producers and the quality of their products will severely limit the ability of expansion of Albanian sales in the EU.

Tariff revenue drops by 13%. This leads to a small fall in income and welfare in the short run. In the longer run when capital stock is allowed to grow by 2.5% in response to higher return to capital the abolition of import tariff on the EU products leads to a small welfare gain. Wages rise slightly faster then the return to capital, as the implementation of the SAA leads mainly to expansion of labor-intensive sectors in Albania.

The fact that welfare implication of SAA are negative in the short run and very small in the long run is due to the fact that we are looking only at one policy change out of the range of changes following the implementation of the SAA, namely the reduction in tariffs on EU products. Tariff revenue accounts for a large share of government revenue and the model does not incorporate introduction of alternative sources of revenue such as increase of domestic tax rates or transfers from the EU. The SAAs are more than free trade arrangements. They encompass also such issues as competition policy, environmental issues, standards, and investment conditions. They aim at harmonization of legislation with that of the EU and assistance in institution building in order to implement the relevant legislation. All these policies will contribute to proximity of business environment and to the reduction of real costs of trade. This should lead to higher inflows of foreign direct investment and stimulate trade. These effects are not incorporated into our study, as we mainly focus on different options for trade liberalization.

Table 11. International trade implications under short run scenarios (% change relative to 2000)

	EU15	SEE	ROW
1. SAA with the EU			
Imports from	12.5	-19.4	-21.4
Exports to	35.5	25.2	25.6
2. FTA with SEE			
Imports from	-2.4	29.47	-2.12
Exports to	3.2	2.37	2.43
3. Adoption of the CET			
Imports from	-4.1	-5.2	11.9
Exports to	5.6	4.4	3.8
4. Combined 1+2			
Imports from	10.6	2.7	-22.5
Exports to	38.2	27.0	27.6
5. Combined 1+2+3			
Imports from	7.3	-1.1	-12.7
Exports to	40.6	29.0	28.9

Source: model simulations.

Table 12. Output changes under short run scenarios (% change relative to 2000)

	SAA with the EU	FTA with SEE	CET on industrial products	Combined Scenario (Short Run)	Combined Scenario (Long Run)
	(1)	(2)	(3)	(4)	(5)
Grains	1.2		0.4	1.1	1
Vegetables, Fruits, Other Agricultural Products	-1.3	-0.1	-0.1	-1.3	-1.4
Livestock	-0.4	-0.1	0.1	-0.3	-0.4
Forestry	-0.6	-0.2	-0.1	-0.7	-1
Fishing	1	0.1	0.2	1.1	1.1
Energy, Mining	-2.6	-3.1	-3.7	-5.1	-8
Minerals nec	11.9	2.2	2.7	13.6	14.4
Food Products	-2.8	-0.1	0.1	-2.8	-2.9
Textiles, Clothing, Footwear	28.7	2.5	3.7	31	32.4
Wood, Paper products	-1.5	-0.3	-0.3	-1.6	-2.1
Petroleum, Coke Products	-5.1	-3.9	-5.4	-8.1	-12
Chemicals, Rubber, Plastic Products	2	0.6	0.4	2.4	2
Non-Metallic Mineral Products	-13.4	-1.7	-0.8	-14.1	-14.7
Metals and Metal Products	1.8	0.3	-2.4	2.2	0.4

Transport Equipment, Machinery and Equipment	10.6	1.3	3.2	11.5	13
Electricity, Gas, Water	1.3		0.4	1.3	1.3
Construction	0.2	-0.1	0.1	0.2	0.5
Transport	-0.2	0.1	0.1	-0.2	-0.1
Trade, Hotels	-0.6			-0.5	-0.5
Communications	-0.5	-0.1	-0.1	-0.5	-0.6
Financial Services	0.5		0.1	0.5	0.5
Real Estate Services	-1	-0.1	-0.2	-1	-1.1
Other Services	-1.6	-0.3	-0.3	-1.7	-1.9
Public Admin., Defense, Health, Education	1.1	0.1	0.1	1.2	1.2

Source: model simulations.

4.2 FTA with neighbors

This experiment involves liberalization of tariffs on imports from SEE countries in accordance with the FTAs discussed in more detail in section 2.2. In some sectors abolition of tariffs on industrial goods involves an absolute reduction of duty up to 10 percentage points (see Table 7). As a result of tariff reduction prices of goods from the SEE region fall relatively to prices of domestically produced goods and imports from the EU15 and the ROW. Imports from SEE increase significantly (almost 29.5%) replacing to some extent domestic production in selected sectors (see Table 12). The reduction in domestic prices is not big, as imports from SEE amount to only 8.35% of total imports (Table 2). At the same time the revenue from taxes imposed on imported goods (i.e. customs, excise and the VAT) increases slightly due to a surge in imports. A small increase in exports following a decrease of prices on the domestic market cannot compensate for a surge in imports and does not lead to output expansion. Overall Albania records a negligible welfare loss of 0.1% of GDP.

Table 13. Implications of the liberalization of tariff on imports from SEE

(% CHANGE)	Liberalization of Albanian tariffs under FTA with SEE		In addition free access to SEE markets	
	SHORT RUN	LONG RUN	SHORT RUN	LONG RUN
Welfare (Equivalent Variation as a Share of GDP)	-0.11	-0.06	0.05	0.39
Wage	0.2	0.22	0.21	0.62
Capital Rental	0.08		0.4	
Revenue from Taxes on Imported Goods*	0.76	0.86	1	1.36
(in million 2000 USD)	2.87	3.25	3.78	5.13
Capital Stock		0.14		0.82

* These include customs, excise and VAT.
Source: model simulations.

However, our exercise ignores the implications of concessions granted to Albanian products entering the SEE markets. We do not incorporate the specific provisions of the FTAs with respect to Albanian exports, but we look at the impact of free access for Albanian exports to the SEE markets. The results are reported in the last two columns of Table 13. As expected a combination of liberalization of imports and improved access to the SEE markets leads to a small welfare gain in Albania (0.4% of GDP in the long run) and an increase in revenue from taxes on imported goods of 1.4%.

4.3 Adoption of the CET on industrial products

The last simulation looks at the implications of substantial liberalization of protection on imports from the ROW. The biggest tariff reductions are recorded in Coke and Petroleum Products, Metals and Metal Products and Energy and Mining. As goods from the ROW become relatively cheaper imports from the ROW increase substantially and replace domestic production, especially in the above mentioned sectors (see Column 3, Table 6). In several other sectors such as Textiles, Clothing and Footwear, Transport Equipment and Machinery or Other Metals cheaper intermediate inputs lower the prices of domestically produced goods. This leads to increased demand for Albanian products abroad and expansion of production and exports.

Despite a surge in imports from the ROW the revenue from taxes on imported goods falls slightly. This is the main factor behind a negative, albeit close to null, impact of the adoption of the CET on Albanian welfare. The welfare impact of the adoption of CET is very small, because trade with the ROW accounts for less than one third of total trade of Albania. In the long run the expansion of capital stock allows for the expansion of output and the long run welfare implications are very small, but positive. Also tariff revenue is expected to increase slightly in the long run scenario.

Table 14. Implications of the adoption of the CET on industrial products

(% CHANGE)	SHORT RUN	LONG RUN
Welfare (Equivalent Variation as a Share of GDP)	-0.07	0.14
Wage	0.33	0.56
Capital Rental	0.24	
Revenue from Taxes on Imported Goods*	-0.06	0.2
(in million 2000 USD)	-0.23	0.72
Capital Stock		0.49

* These include customs, excise and VAT.
Source: model simulations.

The results of our simulations are in line with the theoretical literature on regional integration (see World Bank, 2000). Regional integration arrangement (RIA) between small low-income countries does not necessarily bring benefits to integrating regions. It might lead to rationalization and elimination of unnecessary duplication of plants, which will result in more efficient allocation of resources. Market integration can also attract

FDI. However, these gains can only be realized if there are no other significant obstacles to trade and depend on the extent to which opening of the markets increases competition on the domestic markets. If external tariffs remain high trade diversion is likely. Quite often a loss of tariff revenue, which is an important source of government income in many small countries outweighs the welfare gains due to more efficient allocation of resources. This seems to be the case of liberalization of Albanian trade with its SEE neighbors or with the ROW, which results in significant trade diversion. Only once the adjustment of capital stock is taken into account production and exports are expected to increase slightly and lead to welfare gains.

It has to be born in mind that in case of this like any other CGE modeling exercises the results are very sensitive to the assumptions about the elasticities of substitution between domestic and imported goods and between imports from different sources. This study employs the parameters used in the GTAP model, which are in turn based on a review of the literature on elasticities of substitution in developing countries (GTAP, 2000). Unfortunately, at present the estimates of these elastictites for Albania are not available. However, the simulations not reported here show that the implications of the third scenario are particularly sensitive to the employed parameters. Doubling elasticties of substitution leads to higher imports, increase in tariff revenue, greater fall in domestic prices and as a result a slight increase in Albanian welfare. The direction of welfare changes in the previous two scenarios is robust to the assumptions about the parameters of the demand function.

4.4.The combined scenarios

Finally, we look at the implication of two more trade policy options i.e. liberalization of tariffs under SAA and FTA with SEE neighbors and a combination of all scenarios discussed in the previous sections. We find that in both cases welfare implications are positive even in the short run. This is mainly due to the fact that liberalization along all dimensions reduces the potential for trade diversion and allows for the full realization of efficiency gains. Liberalization of trade with all trading partners allows for the permanent increase of Albanian GDP by 1% on a recurring annual basis and an increase of wages by 3.4% relative to their 2000 level.

Exports of Albanian products to the EU could increase by almost 40%, while exports to other regions would expand by 30%. Imports from the ROW and SEE neighbours would be replaced to some extent by imports from the EU. In our long run scenario an increase in the return to capital encourages investment and results in an expansion of capital stock by 3.4%. This in turn allows for the growth of output in the majority of sectors. The highest increase would be recorded in textiles, clothing and footwear, transport equipment, machinery, electronic equipment, and minerals. Production of a few selected sectors such as non-metallic mineral products, coal and petroleum products, energy and mining would be replaced by imports.

Table 15. Implications of trade liberalization with the EU, SEE and the ROW

(% CHANGE)	Liberalization of tariffs under SAA and FTA with SEE		In addition adoption of the CET on imports of industrial products	
	SHORT RUN	LONG RUN	SHORT RUN	LONG RUN
Welfare (Equivalent Variation as a Share of GDP)	-0.74	0.55	-0.62	0.97
Wage	1.28	5.08	1.6	3.4
Capital Rental	1.06		1.35	
Revenue from Taxes on Imported Goods*	-15.5	-14.1	-16.7	-15.1
(in million 2000 USD)	-58.5	-53.2	-60	-57
Capital Stock		2.75		3.4

* These include customs, excise and VAT.
Source: model simulations.

Given that in the static scenarios the return to capital in the Albania increases, the capital stock in Albania is no longer optimal and expands to bring the rate of return to capital to the benchmark level. The expansion of the capital stock of 3.4% increases the amount of resources in the economy and allows for the growth of output in the majority of sectors. The highest increases are recorded in Textiles, Clothing and Footwear, Transport Equipment, Machinery and Equipment and Minerals (see Table 12 for details).

In Appendix 1 I look at the implications of the last scenario combining trade policy liberalization along all dimensions and adoption of the EU standards by Albania.

5. Conclusions

Our simulations indicate that Albania has a lot to gain from further integration with its neighbors and the EU. However, the benefits from regional integration can only be realized as long as Albania gains better access for its exports on regional markets. Liberalization of imports alone can lead to welfare losses. Therefore the implementation of the FTAs with SEE neighbors that ensures better market access for Albanian products is crucial for full realization of benefits from greater regional integration.

The most promising opportunity for Albania is presented by integration with the EU. Apart from political benefits of the SAA process, such as providing the policy lock-in mechanism to pursue further reforms or ensuring the stability of business environment, which should encourage foreign investment, elimination of the remaining barriers to imports from the EU can lead to significant expansion of trade and income. However, our results indicate that liberalization of trade should proceed along all dimensions, as the biggest gains are to be realized when Albania lowers its barriers to trade with respect to all trading partners. The steady state welfare implications of a full implementation of trade provisions of the SAA, FTAs with neighbors and adoption of the CET amount to 1% of the benchmark GDP on a recurring annual basis. In this scenario expected increase in wages amounts to 3.4% relative to its 2000 level. Albania experiences large increases in trade volumes and significant structural adjustments with positive output changes across the majority of sectors.

Apart from the benefits captured by our modeling exercise, further opening of the Albanian markets will result in greater competition and force domestic firms to restructure and become more efficient. The potential gains stem also from relocation of outward processing activities induced by enlarged market covered by the FTAs.

Liberalization of trade with all trading partners leads to substantial loss of tariff revenue. To some extent this is likely to be outweighed by assistance that the EU grants to its associated members. However, the introduction of reforms that would broaden the tax base and improvements in the effectiveness of tax collection are necessary to avoid a huge drop in government revenue.

Further the success of Albania in supplying the EU or other markets are not guaranteed and will depend on several factors. The lower costs of factors of production will be balanced against transport costs, quality of infrastructure and security of market access. A reduction of excessive transport and transit costs, as well as elimination of cumbersome customs procedures and widespread corruption of customs officials are necessary for the full realization of gains stemming from the improved market access. The success of elimination of non-tariff barriers to trade in turn depends on the close cooperation with the neighboring and transit countries.

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Appendix 1

Standards costs

One of the elements of the SAA is the harmonization of technical standards with the EU law. Business surveys conducted before completion of the Single Market indicated that simplification of border formalities and harmonization of product and safety standards were viewed as the most important internal market barriers. The existence of these barriers is therefore likely to be an important obstacle to expansion of exports of Albanian products to the EU.

The differences in technical regulations and standards, which vary between domestic and the EU markets, require producers to manufacture or package goods in forms, which are different than for their domestic markets. Standardization costs therefore increase the cost of production for exports relative to the costs of production for the home market. The most recent Stabilization and Association Report by the EC (EC, 2004b) indicates that Albania has adopted so far 42% of the European Standards. However, an important element of the reform i.e. the formulation of Accreditation Directorate is still pending. Also the number of people dealing with accreditation is not sufficient. Therefore it seems that the cost so obtaining the relevant documents which would certify compliance with the EU law is still significant.

Our modeling exercise has only an illustrative purpose. We apply rough numbers from the Cost of Non-Europe study (EC, 1988) to estimate the existing additional costs due to differences in regulations and standards. Based on extensive interviews of EC firms the costs of obstacles to trans-border activity were expressed as a per cent of turnover. One of the obstacles considered were technical standards. The authors assign to each industry a number between 0 and 4. In this index "0" indicates no costs implied by a given barrier, "1" corresponds to a cost of less than 1% of turnover and indicates that respondents experience a significant but not prohibitive nuisance, and "4" indicates a cost of 3% or more and significant barriers to trade. I assume that the same costs are now faced by Albanian producers who wish to export their products to the EU. The standards costs are modeled as additional value added in each sector where trade takes place. This approach ignores the fixed cost elements of implementation of new standards. However, these are mostly one-off investments and their magnitude is not likely to be significant.

Table A1. Standards cost rate faced by Albanian exporters

	STANDARDS COST RATE (%)
Grains	2
Vegetables, Fruits, Other Agricultural Products	2
Livestock	2
Forestry	2
Fishing	2
Energy, Mining	1
Minerals nec	1
Food Products	2
Textiles, Clothing, Footwear	1

Wood, Paper products	1
Petroleum, Coke Products	1
Chemicals, Rubber, Plastic Products	2
Non-Metallic Mineral Products	1
Metals and Metal Products	1
Transport Equipment, Machinery and Equipment	3

Source: see text.

The impact of compliance with EU standards and regulations on the costs of producing for exports requires more discussion. Most foreign companies that invested in Albania already incorporate the necessary requirements. This is also the case of producers already exporting to the EU, whose products already comply with EU regulations. For those firms accession to the internal market is likely to reduce the costs of compliance due to greater availability of the conformity assessment centers in Albania and greater competition between them.

On the other hand, for small Albanian firms which have been producing only for domestic market, the introduction of EU regulations, in some cases stricter than domestic regulation, may impose additional investment. A certain part of this investment will be undertaken in the normal course of replacing existing equipment over the coming years. However, in some cases the costs of compliance may be significant, e.g. in the dairy industry. In case of Poland a study of a small sample of manufacturing firms (IKCHZ, 2002) indicates that firms that already comply with the EU regulations needed between 6 months to 3 years to obtain necessary certificates and adjust production processes. The estimated costs of compliance amounted to about 0.5%-2% of the firms' annual sales. The small and medium firms which do not comply yet with EU regulations will also benefit from the establishment of the network of conformity assessment centers and lower costs of getting products certified in conformity with national regulation. Despite significant costs, the small firms are likely to benefit most from the ability to export to the enlarged EU, as three quarters of small firms in Poland declared that foreign standards and technical regulations are the major barriers to their exports to the EU. Overall, it seems likely that all firms will experience some reduction in standards costs.

I study the welfare implications of the reduction of these costs by 25, 50, 75 and 100% in addition to the elimination of tariffs in accordance with the SAA, FTAs with neighbors and adoption of the CET.

Table A2. Welfare effects of the liberalization of trade along all dimensions (combined scenarios 1,2,3) and elimination of standards costs (equivalent variation as a percent of GDP)

	COMBINED SCENARIOS 1,2,3	COMBINED SCENARIOS 1,2,3 PLUS REDUCTION OF STANDARDS COSTS BY:			
		25%	50%	75%	100%
Welfare	0.97	1.08	1.19	1.30	1.41
Wage	3.41	3.54	3.66	3.79	3.91
Capital Stock	3.43	3.61	3.75	3.89	4.03

Source: own simulations.

Our results indicate that full elimination of standards cost increases Albanian welfare by additional 0.4% of GDP. This is only a rough estimate as the actual costs of producing to foreign standards might as well be higher. However, we do not have any actual data for Albania or any of the accession countries.

Our simulations indicate that even though it seems that liberalization of trade does not lead to huge gains i.e. only around 1% of benchmark GDP, it has to be born in mind that we are not studying several other aspects of the SAA. If one takes into account some other elements of the SAA such as e.g. harmonization of standards, the gains are rising.