The Economic Effects of the Bilateral Sectoral Agreements and the Swiss EU Membership

by

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September, 1999

Prepared for presentation at the Conference "Assessing the Medium & Long Term Effects of Integration: New Methodologies and New Issues,

Lausanne, Switzerland, October 4-5, 1999.

This paper investigates the economic effects of a possible Swiss EU-Membership as well as the completed Bilateral Sectoral Agreements between the EU and Switzerland using MULTISWISS, a multi-county computable general equilibrium model. The simulations show that the welfare gains for Switzerland (and the EU) in both scenarios will be small but positive in the long run. They also indicate that Switzerland, from an economic point of view, should pursue the EU membership.

Keywords: Computational economics, EU enlargement, integration

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* This paper is based on a project commissioned and financed by the Swiss Federal Office for Economic Development and Labour. The views expressed here are those of the authors and do not represent the opinions of the commissioning agency. The authors may be contacted at renger@ecoplan.ch.

1 Introduction

Several studies dealing with the macroeconomic implications of the European Union (EU) single market programme (SMP) show positive static and steady state growth welfare effects for the EU countries.[1] Studies on the economic effects of the Eastern Expansion of the EU predict welfare gains for the Central and Eastern European Countries.[2] Does this mean that a Swiss EU membership will also have a positive economic effect in Switzerland and the EU countries or should Switzerland, one of the richest countries in Europe[3], just reconcile the Bilateral Sectoral Agreements (BA) with the EU and refrain from the EU membership. These questions will continue to raise controversial discussions in Switzerland.

Switzerland has had a free trade agreement with the EC since 1972, as well as more than one hundred bilateral agreements with the EC. It negotiated, but did not ratify, the European Economic Area (EEA) Treaty extending the European Single Market to the EFTA countries. This treaty was rejected by 50.3% of the Swiss population and 16 cantons in 1992. In order to reduce the negative impacts of non-participation, Switzerland and the EU negotiated on bilateral agreements in the following areas: elimination of technical barriers to trade, public procurement, research and development, free movement of people, agricultural products, transport and civil aviation. In 1998 the bilateral negotiations with the EU have been concluded and now the Swiss Parliament has to reconcile the bilateral agreements. The possibility of having a referendum on the BA is not excluded.

However, full membership of the EU is the long-term political goal of the Swiss Government. In the next two years the Swiss Federal Council will assess, based on the domestic and European political and economic conditions, whether it should pursue in the short run the bilateral sectoral approach, or whether it should reactivate the membership application submitted in May 1992 and request the commencement of negotiations with the EU.

In this paper we will have a look at the possible economic effects of the BA as well as the full EU membership in Switzerland. In order to get a better insight in the forces leading to the overall welfare gains we do a complete welfare decomposition by scenario step (e.g. reduction of tariffs, ntb's or agriculture subsidies).

We will show that the overall welfare gains from giving up its isolation will be small but positive for Switzerland as well as for the EU countries. The results of this study indicate that Switzerland, from an economic point of view, should go a step farther than just reconciling the BA and should pursue the EU membership.

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1 For example: Harrison, Rutherford and Tarr [1996], European Commission [1998a], Cecchini [1988], European Commission [1998b].

2 Cf. for example Francois [1998], Baldwin, Francois and Portes [1997].

3 According to the Worldbank's World Development Indicators for 1999 Switzerland is ranked number two in the world.

The paper starts with an overview of MULTISWISS, the multi regional general equilibrium model and the data used for the simulations. In section 3 we report on the main policy simulations. In section 4 we will discuss the results, while the concluding comments are provided in section 5.

2 Brief description of the model and data

In this section we give a brief description of the model and data used.[4] The starting point for the model was the basic model developed by the researchers of the Global Trade Analysis Project (GTAP).[5] MULTISWISS is an applied general equilibrium model involving 11 regions and countries (cf. Table 1). These regions are linked through trade of goods and services.

Table 1: Countries and regions

	Country/Region	Description
1	Switzerland	
2	Germany	EU-country, EMU-member
3	Finland	EU-country, EMU-member
4	Rest of Europe	Belgium, France, Greece, Italy, Ireland, Luxembourg, Netherlands, Austria, Portugal, Spain: EU-countries and EMU-members
5	Great Britain	EU-country
6	Denmark	EU-country
7	Sweden	EU-country
8	Eastern Europe	Former Soviet Union, Bulgaria, Czech Republic, Slovenia, Poland, Rumania,
9	North America	USA, Canada
10	Asia	Among others: Japan, China, India, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand
11	Rest of World	Among others: Africa, Australia, New Zealand, Middle East, South America, Norway

Every region is characterized by 18 sectors (cf. Table 2). Every sector produces one single commodity for the home as well as the foreign market. Producers are assumed to maximize profits by a nested constant-elasticity of substitution (CES) function. We assume that some sectors operate under an imperfect competition

4 A detailed description can be found in ECOPLAN [1999].

5 For a detailed description of the GTAP model and data cf. Hertel [1997] and McDougall et al [1998] . The model was implemented in the GAMS modelling language using the GTAPinGAMS software for integrating the GTAP data base in GAMS models. GTAPinGAMS was developed by T. Rutherford of the University of Colorado. and can be downloaded from http://robles.colorado.edu/~tomruth/.

market regime and exhibit increasing returns to scale (IRTS).[6] We use estimates from Oliveira Martins et al[7] on mark-ups.

Table 2: Sectoral disaggregation

	Sector	Description
1	Agriculture	Agriculture, forestry, fishery
2	Energy, water	Manufacture and distribution of gas and electricity, water
3	Food	Meat products, vegetable oils and fats, dairy products, processed rice, sugar
4	Beverages and tobacco products	
5	Textiles	Manufacture of textiles
6	Clothes, Leather	Wearing apparel, leather products
7	Wood	Wood products
8	Paper	Paper products, publishing
9	Chemistry	Chemical, rubber, plastic products
10	Non-metals	Mineral products, coal, oil, gas
11	Metals	(Ferrous) metals
12	Electronics	Electronic equipment, metal products, manufactures
13	Motor vehicles, machines	Motor vehicles and parts, transport equipment, machinery
14	Construction	Construction
15	Trade, transport, catering	Trade, transport and catering trade
16	Financial business	Financial business, recreational services
17	Dwellings	Dwellings
18	Administration	Public administration, defense, education

Every regional household is characterized by a CES utility function, including demand for consumer goods and leisure. Governmental expenditures are assumed to be fixed.

An equation relating the cost of capital and the return to capital determines the steady-state capital stock. Tobin's Q is calibrated to unity in the base year and remains fixed at that value in the counterfactual. We assume following values for the steady state parameters:

- Growth rate: 2%
- Depreciation rate: 7%
- Interest rate: 3%

6 A good introduction on scale economies and imperfect competition can be found in Francois and Roland-Holst [1997].

7 Cf. Oliveira Martins, Scarpetta. and Pilat [1996]. This study contains estimates on mark-ups based on data from 1970 to 1990 and does not rely on the often used estimates surveyed by Pratten [1988], of which many date from the 1950s, 1960s and early 1970s.

We calibrated the social accounting data for the model using the Global Trade Analysis Project Version 4 data set for the year 1995 (GTAP 4).[8] GTAP 4 does not contain separate data on the Swiss economy, so we worked out a Swiss set of social accounting data in collaboration with the University of Geneva. The data were merged with GTAP 4 using software developed by T. Rutherford of the University of Colorado.[9]

For those not acquainted with the Swiss economy we summarize some statistics in Table 3.[10]

Table 3: Some statistics for Switzerland and the EU (1995)

	Switzerland	EUR 15
Population (in million)	7.1	372.7
Employment (in million)	3.8	150
GDP (billion ECU)	230	6'765
Exports to EU (% of total exports)	60.7%	62.9%
Imports from EU (% of total imports)	79.0%	63.6%

3 Scenarios

We will have a look at the economic effects of changes in policy parameters due to the Bilateral Sectoral Agreements (BA) or a Swiss EU membership (e.g. removal of tariffs, harmonization of compliance to EU standards, market integration, shift in consumer preferences). The implemented changes in market parameters can be grouped in three broad categories:

- Swiss Access to the European Common Market
- Tax harmonization in Switzerland and Swiss net transfers to the EU
- Swiss membership of the European Monetary System (EMS)

Table 4 gives an overview of the implemented changes, which we will comment briefly.[11]

8 Centre for Global Trade Analysis [1998].

9 The Swiss data will be made available this year to GTAP for the release of GTAP 5.

10 Europäische Kommision [1997], Bundesamt für Statistik [1998].

11 A detailed description can be found in ECOPLAN [1999], chapters 3, 4 and 5.

Access to the European Single Market

– **Tariffs**: In the case of the BA Switzerland will only have to reduce the tariffs on agricultural and food products slightly. According to trade theory this will lead to positive welfare effects. In the case of an EU membership Switzerland will abolish tariffs on trade with the EU and adopt the common EU tariff structure for imports from non-EU countries (passing the revenue to the EU).[12] These EU tariffs are in most cases higher than the original Swiss tariffs. The changes in the tariff structure will probably lead to trade diversion and creation or reduction. All the changes are modeled as changes in the ad-valorem values of the tariffs.

Table 4: Overview of the changes in policy parameters

	Description: Changes relative to the Base-case scenario «Status Quo»
Swiss Access to the European Common Market	
Tariff structure	*EU-Membership:* reduction of tariffs on agricultural products; raising tariffs on imports from non-EU countries, revenue accrues to the EU.
	BA: moderate reduction of tariffs on agricultural products
Border formalities	*EU Membership:* removal of border controls, reduction of border formalities
Transportation costs	*EU Membership:* reduction of delays at the border, increasing maximum weight for heavy goods vehicles from 28 tons to 40 tons
	Bilateral: increasing maximum weight for heavy goods vehicles to 40 tons
Compliance costs	*EU Membership:* reduction of compliance costs, principle of Cassis-de-Dijon
	Bilateral: reduction of compliance costs
Factor productivity	*EU Membership:* slightly increased pressure on innovations because of intensified competition
	Bilateral: slightly increased pressure on innovations
Labor mobility	*Both scenarios*: 115'000 persons immigrate, of whom 55'000 working people
Market integration	*EU Membership:* no market segmentation, higher product diversity, intensified competition because of demand side pressure, scale effects
	Bilateral: same effects (but smaller) as in the case of an EU Membership
Tax harmonization and fiscal policy	
Further fiscal policy measures	*EU Membership:* additional costs for unemployment insurance, reduction of subsidies and cost reductions in agricultural sectors
	Bilateral: additional costs for unemployment insurance
Net transfers	*EU Membership:* net transfers to the EU of 3 billion Swiss francs, VAT financed
Fiscal measures	*EU Membership:* Raising VAT from 7.5% to 15%, reduction of wage taxes
European Monetary Union	
Transaction costs	*EU Membership:* cost reductions trade transactions, inter banking, lower currency volatility risk
Interest rate	*EU Membership:* raise in interest rate, higher costs of public debt, higher capital price, increased foreign investment
Price transparency	*EU Membership:* Swiss and EU goods become closer substitutes, intensified competition

[12] We adjusted the EU tariffs for imports from non-EU countries in the GTAP data base to the level of the tariffs according to the Uruguay Round.

- **Border formalities**: Abolishing border control (only in case of an EU membership) will lead to a reduction of administrative costs of transacting over international boundaries. These changes are modeled as a reduction of the transport costs and range from 0.5% to 1.4%.[13]
- **Transportation costs**: Abolishing border controls will also lead to a reduction of the transportation costs (e.g. less delays at the border) of 0.04% to 1%. Furthermore, dropping the Swiss 28 tons limit for heavy goods vehicles and adopting the European weight limit of 40 tons will lead to a reduction of transportation costs (ca. 30%[14] in both scenarios).
- **Compliance costs**: In the case of the BA and an EU membership, Switzerland will adopt (part of) the EU standards (e.g. as an EU member, Switzerland has to adjust their regulations according to the Cassis-de-Dijon principle). In the Single Market Review the savings were estimated at 0.5% of the value of traded goods. We adjusted this figure downwards because of the harmonization measures already undertaken (BA: 0.08%, EU Membership 0.18% reduction).
- **Technological progress**: Factor productivity gains due to the SMP are estimated in the order of 0.1% on average and for all sectors.[15] We used this figure for the EU membership scenario. For the BA scenario we assumed half of the technological progress.
- **Labor mobility**: Both scenarios do not differ regarding the assumptions on labor mobility. We assume that 115'000 persons, of which 55'000 working people, will immigrate to Switzerland in the next 15 years.[16] This change in the population is modeled exogenously.
- **Market integration**: We assume that consumers have preferences for products depending on region of origin. Accessing the European Market Swiss consumers will more easily substitute between European and Swiss products (one reason could be that because of uniform standards, products of different origin do not differ that much anymore). This is modeled using two different preference structures („market segmentation“ and „market integration“; cf. Figure 1).

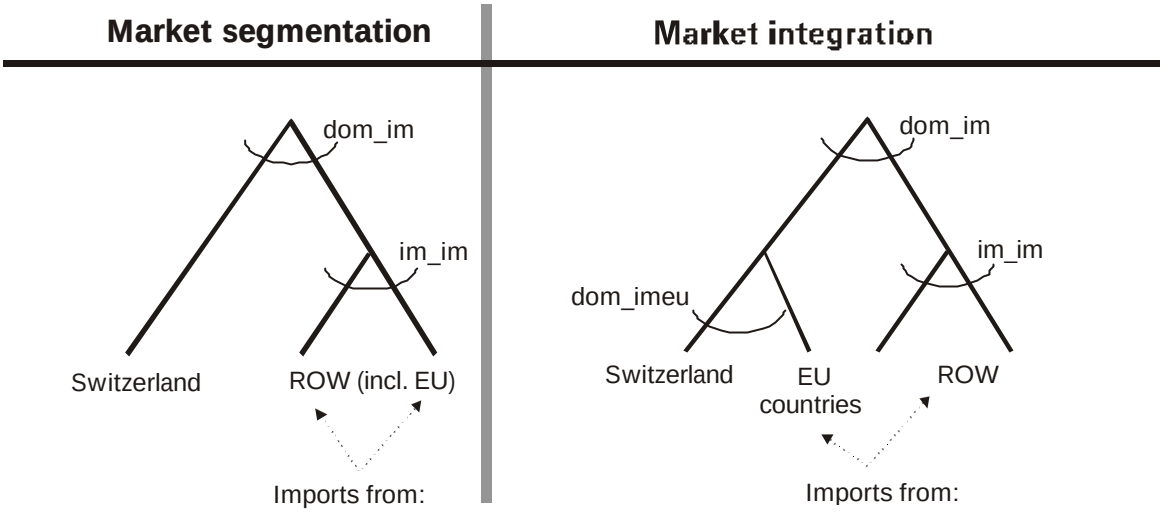
13 Transport costs are modeled as a complementary input for every traded good. Estimates were taken from the Single Market Review (European Commission [1998]) and adjusted for Switzerland.

14 Cf. ECOPLAN [1997].

15 Cf. European Commission [1998a].

16 Cf. Straubhaar [1999].

Figure 1: Market segmentation and integration



Tax harmonization and transfers

- **Net transfers to the EU**: In the case of an EU membership Switzerland has to contribute to the EU budget (agricultural levies and sugar levies, customs duties, VAT resource and GNP resource). Switzerland will also receive money from the EU funds (agricultural and social spending as well as research funds). The net transfer to the EU amounts to ca. 3 billion Swiss francs.
- **Fiscal policy**: Switzerland has to raise its VAT of 7.5% to the EU level of 15%. A part of the additional revenue (ca. 14 billion Swiss francs) will be used to finance the transfers to the EU. The use of the remaining VAT revenue is still a point of discussion. In the main scenario we assume that the remaining VAT revenue will be used for lowering the marginal income tax rate. We also examine the impact of a per capita refund.
- **Further fiscal policy measures**: Becoming a EU member, Switzerland has to adopt the EU agriculture policy. This will lead to a reduction of the Swiss agriculture subsidies of ca. 1 billion Swiss francs. Adopting the regulations concerning unemployment benefits will lead to additional costs of 0.5 billion Swiss francs. We assume that these additional costs will be financed by raising the unemployment insurance rate.

European Monetary Union

Estimating the effects of accessing the European Monetary Union (EMU) is not easy because:

- a CGE model is not the appropriate tool for studying monetary policies
- there is no common accepted economic opinion or theory on the effects of the EMU: Will the Euro become a strong or weak currency, will it boost or depress the economy?

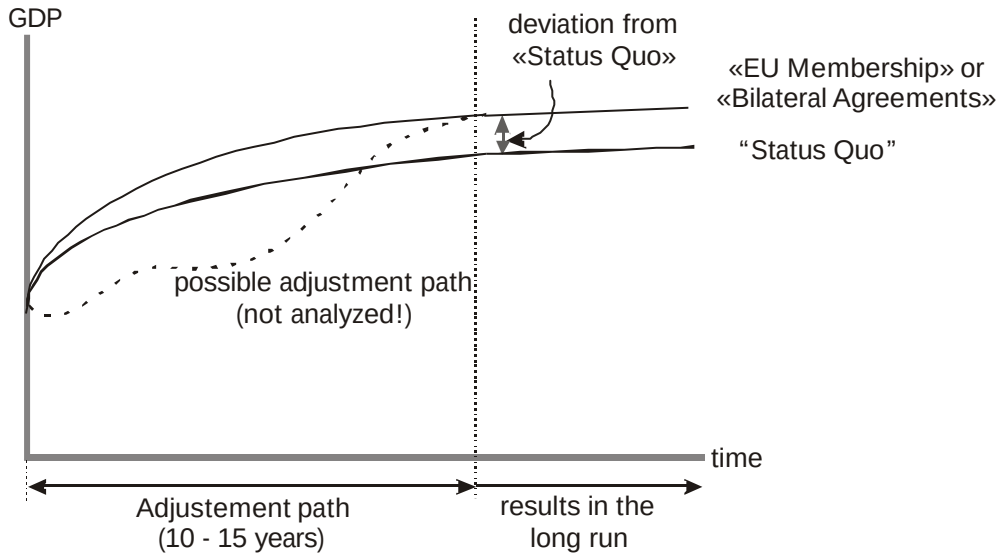
Based on a study for the European Single Market[17] and own estimates we assume that if Switzerland joins the EMU this will have the following effects:

- a reduction of the **transaction costs** (trade transactions, inter banking) because of the reduced currency volatility and one European common currency. (trade transaction costs are reduced by 0.5%, savings of 0.4 billion Swiss francs in inter-banking services, and 1.6 billion Swiss francs in bank-related customer services).
- increased **price transparency**: We suppose that Swiss consumers will more easily substitute between domestic products and products imported from EMU-member countries (the Armington substitution elasticity „dom_imeu“ in Figure 1 is multiplied by 1.25).
- **loss of interest rate advantage**: The interest rate in Switzerland will adjust to the European interest level resulting in higher capital costs for Swiss residents (1%), a higher public debt burden (1.5 billion Swiss francs, VAT financed) and higher interest payments to foreign owners of Swiss capital.

4 Results

In the following sections we will have a look at the results of the scenarios. We will look at the relative deviations of the two main scenarios «Bilateral Sectoral Agreements» and «EU membership» from the benchmark scenario («Status Quo») and decompose these effects according to the changes in the policy parameters as defined in the preceding section.

Figure 2: Results in the long run



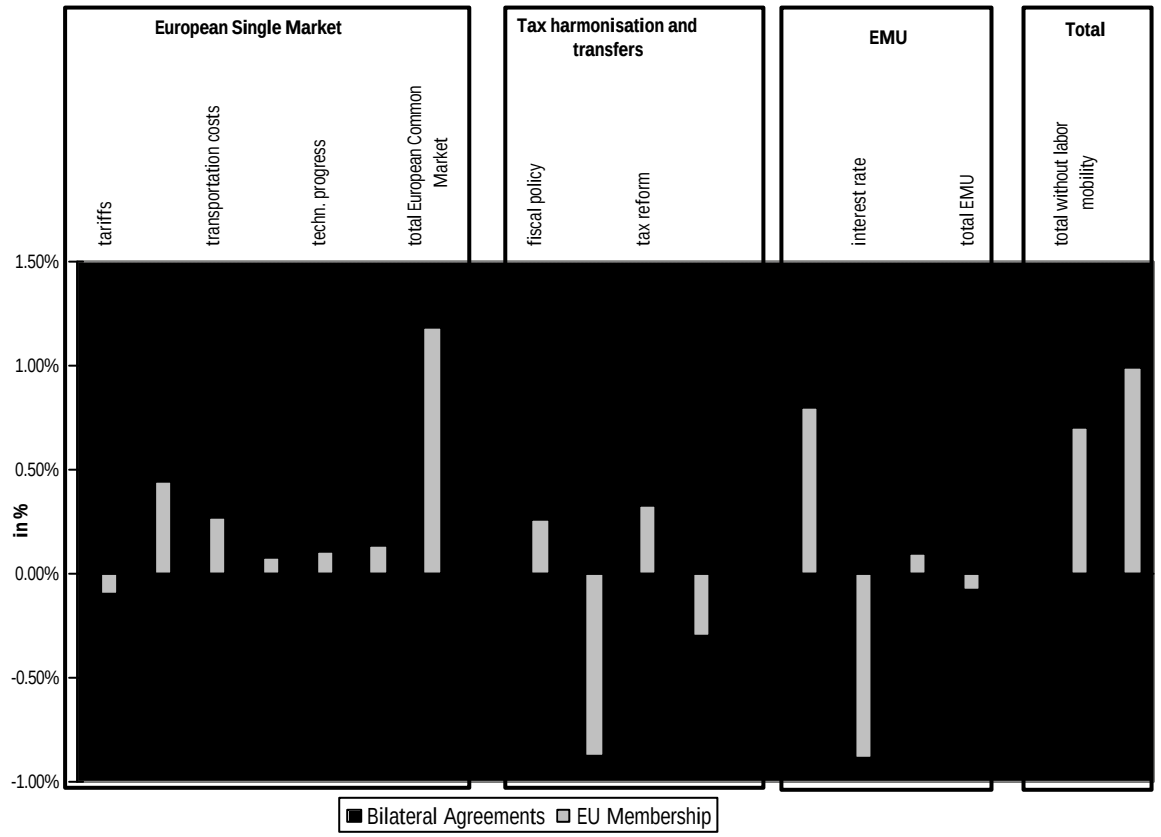
[17] Cf. European Commission [1998a].

These deviations can be interpreted as deviations from the Status-quo steady state growth path in the long run (cf. Figure 2). Because of the steady-state nature of the model, it is not possible to say something about the adjustment costs. A positive result in the long run could mean low or high adjustment costs.

4.1 Welfare effects and GDP

Figure 3 shows the decomposition of the welfare effects as a percentage of GDP (equivalent variations) for the two main scenarios «Bilateral Sectoral Agreements» and «EU Membership». The effects on gross domestic product (GDP) are in the same order and direction.

Figure 3: Welfare Effects in GDP% (per capita)



A quick look shows that the welfare effects for the scenario «Bilateral Sectoral Agreements» are mostly positive and smaller than the welfare effects for the Scenario «EU Membership». We will concentrate in the following on the scenario «EU Membership».

Access to the European Single Market

– The negative effects of the changes in the tariff regime („tariffs“) in the Scenario «EU Membership» may amaze at first glance. According to trade theory abolishing Swiss tariffs on EU imports should at least lead to a non-negative

welfare improvement. However, Switzerland has to adopt the common EU tariff structure for imports from non-EU countries and has to pass on the revenue to the EU. These tariffs are much higher than the original Swiss tariffs. The negative welfare effects from the higher tariffs and transferring the revenue to the EU more than cancel out the positive welfare effects from abolishing the tariffs on EU imports.

– Technological progress, reductions in the border formalities, transportation and compliance costs as well as opening up the EU markets („market integration") have small positive welfare effects (between 0.1% and 0.4%).

If we compare these results with the long-run results of the Single Market Review (cf. Table 5)[18], we see that if Switzerland joins the EU would not gain as much as the other European countries did in the case of the Single Market Programme. This is due to the fact that Switzerland already benefits from the European Market and reduced the NTBs on its own in the last few years.

Table 5: Comparison of Swiss welfare effects with SMP results

Country	GDP-change
EU	2.1%
- Belgium	4.7%
- Denmark	2.9%
- France	1.8%
- Germany	1.8%
- Greece	1.3%
- Ireland	3.5%
- Italy	2.3%
- The Netherlands	2.5%
- Portugal	2.8%
- Spain	3.0%
- Great Britain	1.3%
Switzerland	1.3%

Tax harmonization and transfers

Raising the Swiss VAT (7.5%) to the European level (15%) and the net transfers to the EU of ca. 3 billion Swiss francs will have negative welfare effects. The higher VAT will have distortionary effects and the transfers will reduce the income of the Swiss consumers. Adopting the Common Agricultural Policy (CAP) will have positive welfare effects as distortionary subsidies will be reduced. If raising the VAT is accompanied by a (small) tax reform in which the marginal taxes are reduced, the

[18] Cf. European Commission [1998a]. For this comparison we had to leave out the adoption of the European weight limit and the tariff reduction.

negative effects of the distortions and the transfers can be countered and a welfare gain of 0.8% will be the result.[19]

European Monetary Union

The decomposition of the EMU effects (Figure 3) shows that negative and positive welfare effects almost cancel out. The higher price transparency has only a small positive effect. The main positive effect can be expected from the reduction of the transaction costs. The loss of the interest rate advantage is a highly debated topic in Switzerland. Some studies, for example Peytriginet, Jordan and Kleinewefers Lehner [1999] show extreme negative effects, other studies come to the opposite conclusion (for example, Müller and Grether [1999]. We conclude that the effect will be negative (ca. 0.9% welfare loss).

Total Effects

Both the Bilateral Sectoral Agreements and the EU Membership will have positive welfare effects. In the case of the EU Membership the welfare gains of the Swiss access to the European common market will be 0.7% of GDP. If one adds the welfare effects of the expected inflow of about 110'000 EU citizens, this will lead to an additional 0.3% per capita welfare gain (total 1.0%). In the case of the Bilateral Sectoral Agreements the welfare gains are much smaller but also positive.

4.2 Trade effects

A reduction of tariffs or technological barriers often leads to lower prices and/or diminished costs. Foreign products become cheaper for consumers and producers. These changes in prices and cost structures can cause following gains or losses from:

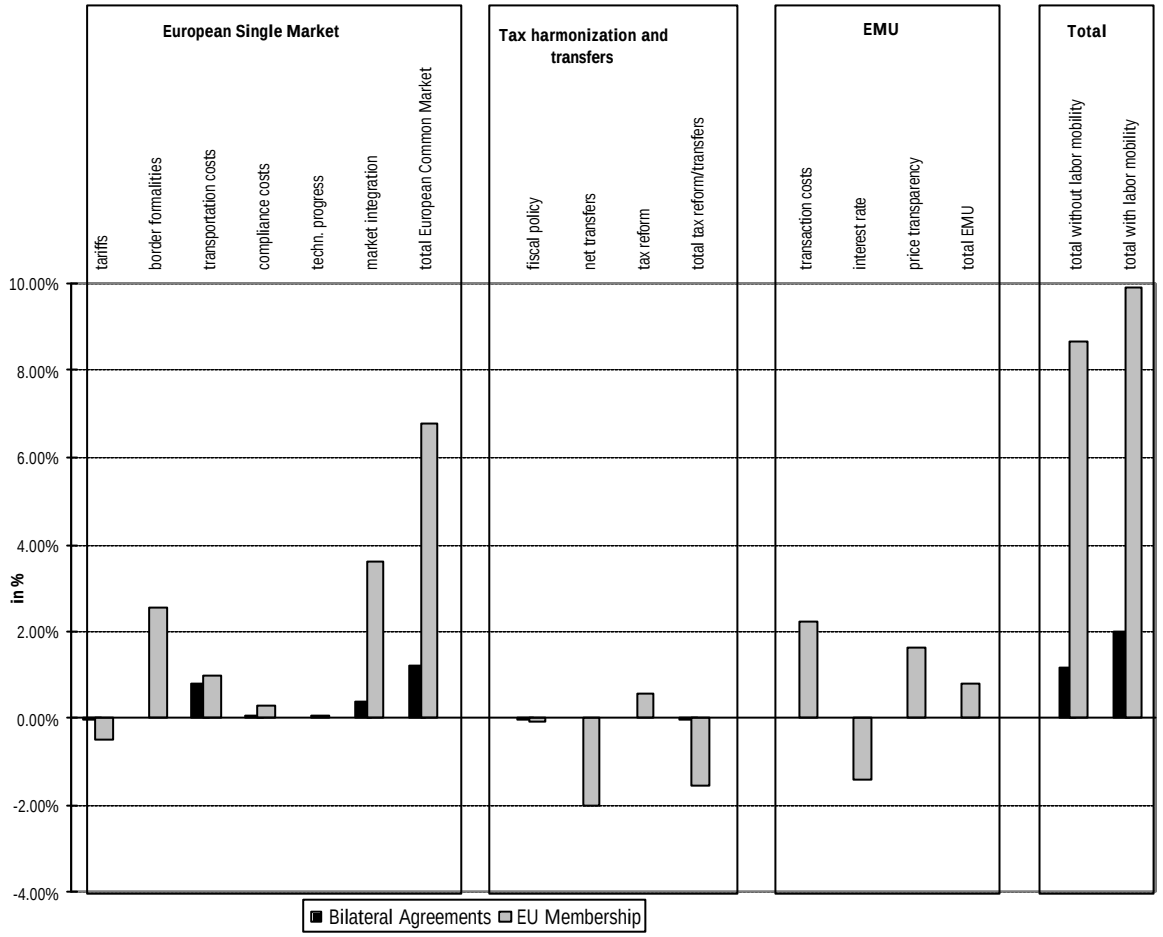
- trade creating and trade diversion
- increased competitiveness and scale effects.

Increased competitiveness and scale effects will be the subject of the next section on sectoral effects. We will first look at the trade creation and diversion effects.

The phasing out of the internal tariffs in case of an EU-Membership will cause the Swiss home market prices to fall. This will lead to an increase in the total volume of imports and a fall in domestic production. The overall effect will be positive. The trade-diverting effect (replacing inexpensive imports from non-EU countries by more expensive products from EU-countries) will be negative. The sum of the effects depends on the elasticities and price differences.

[19] Although the marginal labour tax is rather high (ca. 30%), the combination of raising the VAT and reducing the marginal labour tax does not lead to higher welfare effects. This is due to the fact that the Swiss VAT is not an uniform tax and the VAT is raised proportionally, so the distortion will be high.

Figure 4: Change in import volume



European Single Market

As already discussed in the preceding section on welfare effects, negative effects are due to the fact that Switzerland has to adopt the EU tariff structure for imports from non-EU countries, that lie above the original Swiss tariffs. This will lead to a reduction of the total import volume. The reduction of border formalities, delay times at the border, increasing the maximum weight for heavy goods vehicles to 40 tons as well as the reduction of the compliance costs have a positive influence on the import volume.

Tax harmonization and transfers

As imports are subject to the VAT the increase of the Swiss VAT will have a negative effect on the imports. Another reason for the fall in imports is the reduction of GDP resulting in a loss in income.

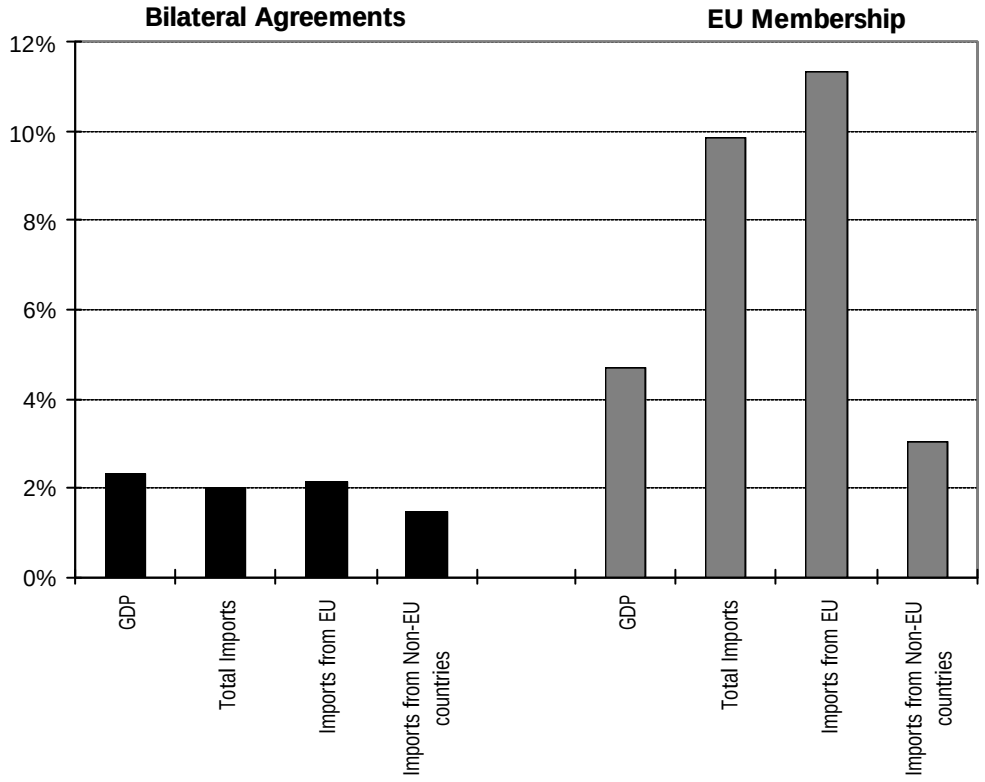
European Monetary Union

The EMU will have a positive effect on imports in spite of the higher interest rate that leads to a smaller GDP. The positive effect is due to the reduction of the transaction costs in trade and the higher price transparency.

Figure 5 shows that especially in the case of an EU membership a trade diversion will occur. Switzerland will import more from the EU countries at the cost of non-EU countries. Although the Swiss imports from non-EU countries increase, they fall relatively to the increase in GDP.

The changes in total export volume are comparable to the changes in imports.

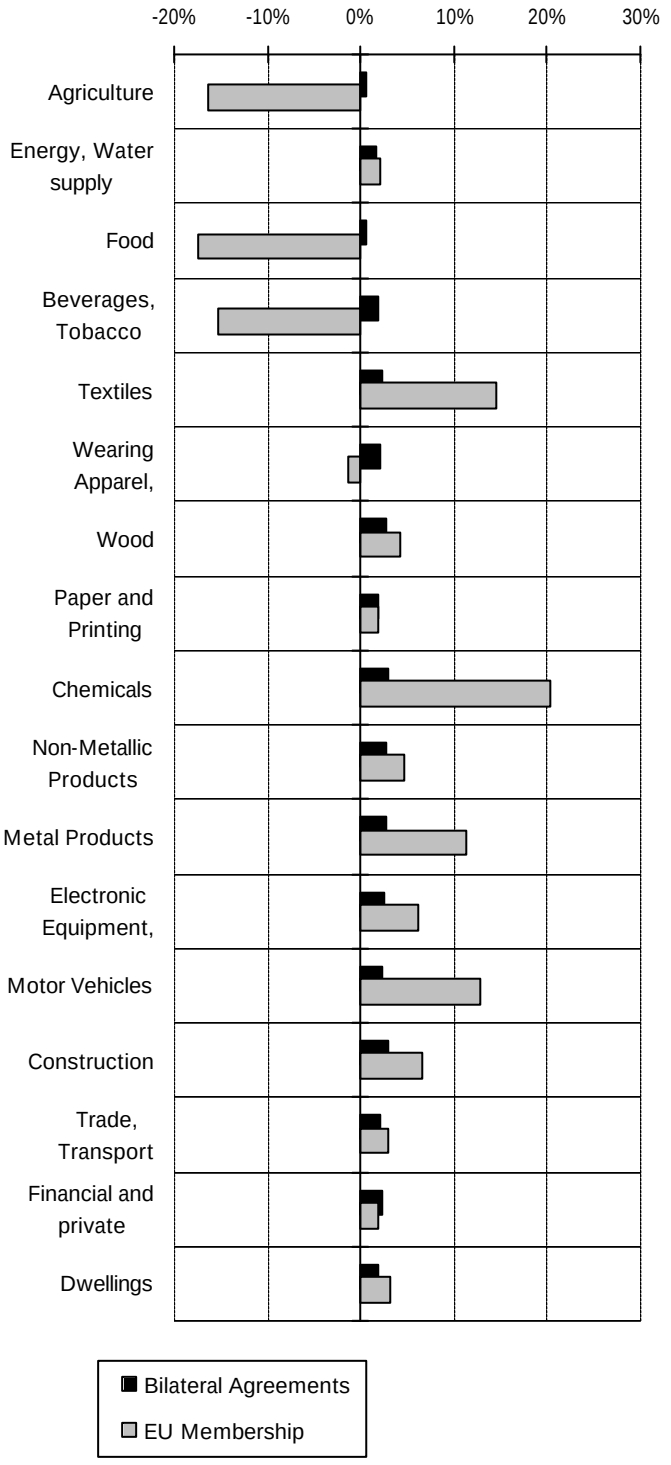
Figure 5: Trade creation and diversion (GDP and Imports)



4.3 Sectoral effects

The following figures show the sectoral effects (sales, imports and exports) for both scenarios «Bilateral Sectoral Agreements»“ and «EU Membership». Only in the case of an EU Membership there are some obvious winners and losers: The sectors „Agriculture“, „Food“, and „Beverages and Tobacco“ loose up to 18% of their sales. The sectors „Chemicals“, Textiles“, „Electronic Equipment and Machines“ and „Motor Vehicles“ gain up to 20%.

Figure 6: Sectoral effects: sales (changes in %)



These effects are easily explained looking at the characteristic features of the loosing and gaining sectors:

The „looser“ sectors

– are either sectors that sell a high percentage of their production on the domestic market or rely heavily on imports,

– face, due to the phasing out of tariffs, the reduction of ntb's, etc., an intensified competition on the European and Swiss market,
– loose part of their competition advantage as agricultural subsidies are reduced,
– are characterized by small scale effects.

A quick glance at Table 6 with some indicators concerning competition shows that the number of firms in the loosing sectors is reduced (which is accompanied by a raise in scale effects and markup). An EU membership will lead to a concentration process in these sectors and a decline of X-inefficencies.

Table 6: Changes in number of firms, scale effects and mark-up (Scenario «EU Membership»)

	Number of Firms	Skale effects	Mark-up
Agriculture	--	++	++
Energy, Water supply	+		
Food	--	++	++
Beverages, Tobacco	--	++	+
Textiles	++	-	-
Wearing Apparel, Leather Products	-	++	+
Wood	+		
Paper and Printing			
Chemicals	++	--	--
Non-Metallic Products	+	+	
Metal Products	++	-	-
Electronic Equipment, Machinery	+		
Motor Vehicles	+	++	
Construction		+	
Trade, Transport			
Financial and private business			
Dwellings			
Public Administration			

++: Increase more than 5%; +: Increase between 1% and 5%
--: Reduction more than 5%; -: Reduction between 1% and 5%

The „gaining“ sectors

- are highly specialized sectors,
- rely heavily on exports and gain from the improved access to the European market,
- are sectors characterized by a high potential of scale effects,
- are only partly affected by the reduction or rise of the tariffs.

Table 6 shows that an EU Membership will lead to an intensified competition on the sectoral markets (the number of firms increases; scale effects and markups are smaller).

Figure 7: Sectoral effects: exports and imports (changes in %)

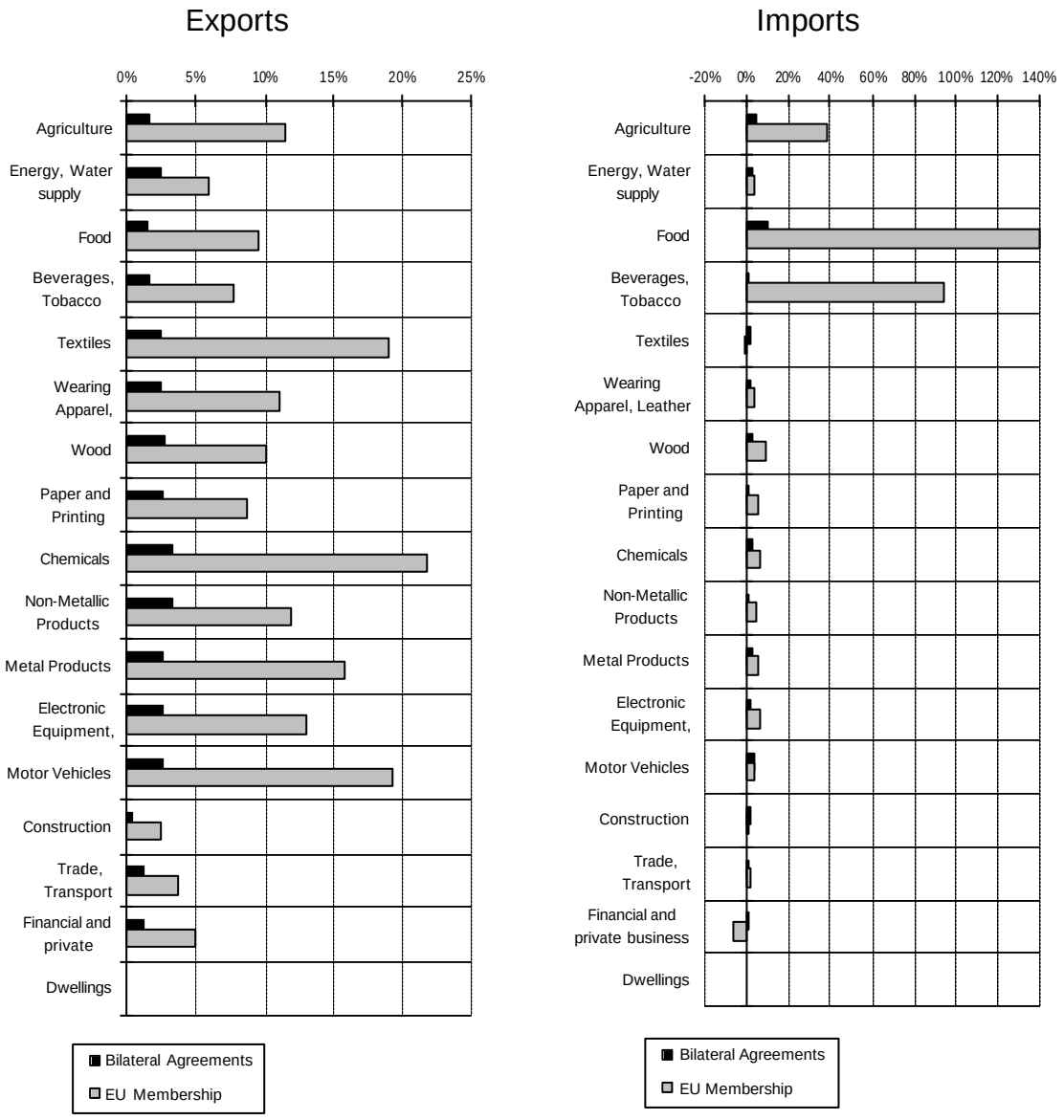


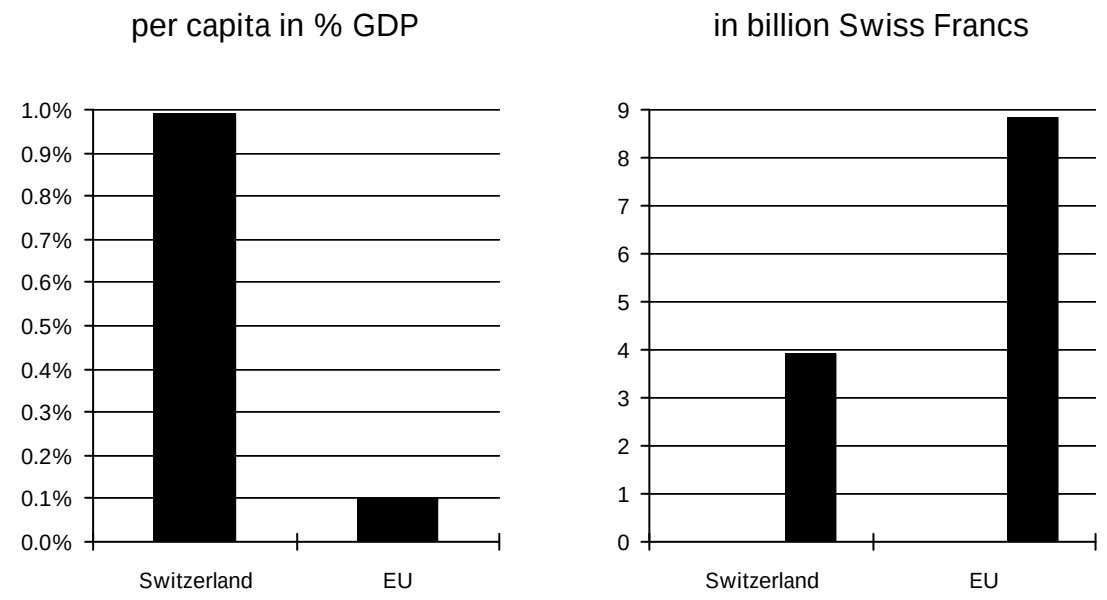
Figure 7 shows the sectoral trade effects. Exports will rise in almost every sector and once again, the gaining sectors mentioned above will gain relatively more. The changes in sectoral imports show that the Swiss consumers will gain especially from the lower prices for products from the agricultural and food sectors.

4.4 Regional welfare effects

Although the analysis of the effects on the Swiss economy is the main subject of our study, we will take a quick glance at the welfare effects for the EU. If Switzerland pursues the EU Membership burdensome negotiations with the EU will follow. If most of the EU countries, this would facilitate the negotiations with the EU for Switzerland.

Figure 8 shows the per capita welfare gains for Switzerland and the EU. As Switzerland is only a small country concerning population or GDP, the positive welfare effects of 1% per capita (or 4 billion Swiss francs) will hardly result in an equivalent welfare gain or loss for the EU. Figure 8 indicates that there are no losses for the EU countries if Switzerland joins the EU. On the other hand, these gains will be very small (less than 0.2% of GDP or 9 billion Swiss Franc yearly).

Figure 8: Welfare effects (Scenario «EU Membership»)



5 Conclusions

Our study shows that:

– the Bilateral Sectoral Agreements lead to welfare gains in the order of 0.5%. These gains are mainly due to the increased immigration of EU citizens and the

productivity gains in overland transport due to the higher maximum weight limit for heavy goods vehicles

- a Swiss EU membership will lead to higher welfare gains compared with the Bilateral Sectoral Agreements. This in spite of Switzerland becoming a net payer of transfers to the EU in case of an EU membership. The relative small gains are due to the fact that Switzerland already reaps some of the profits of the European Single Market.
- The advantages of an EU membership compared to the Bilateral Sectoral Agreements are the abolition of border formalities, more competition, reduced transaction costs, and the opening up of the agriculture market. The disadvantages for Switzerland are the higher interest rate and the net transfers to the EU.
- If Switzerland joins the EU and raises its VAT, it could use part of the revenue for a reduction of the high Swiss income tax, thereby improving Switzerland's international competitiveness.
- The Bilateral Sectoral Agreements do not lead to structural changes. A Swiss EU Membership by contrast will produce sectors that gain and loose. The sectors „Agriculture", „Food" and „Beverages and Tobacco" belong to the group of loosing sectors. The sectors „Chemicals", Textiles", „Electronic Equipment and machines" and „Motor Vehicles" notch up gains in sales.
- In the case of a Swiss EU Membership Switzerland will increase trade with the EU and (relatively to GDP) reduce trade with non-EU countries.
- Switzerland and the EU countries will gain from a Swiss access to the EU.

The results of this study indicate that Switzerland should go a step farther than just reconciling the BA and should, from a long-run economic point of view, pursue the EU membership.

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