

AGRICULTURAL ECONOMIC IMPLICATIONS OF A SWISS ACCESSION TO EU¹

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Abstract:

Switzerland is a case in which a rich economy built and maintained a high degree of agricultural protectionism. The Swiss agricultural sector could mainly preserve its structure due to the sealing off from international competition. The same holds true for the food and processing industries. Protectionism led to inefficiencies on all levels because the economic sectors didn't need to adapt its structures to face competition. Recent internal and external pressure led to a certain extent of reformation and deregulation. Accession to the EU would affect Swiss agriculture much more than the current GATT adaptations do, with consumers as the main winners of the adaptation process. The biggest losses are expected in the agricultural production, processing and trade sectors. Their gross profit margins would decline by one fifth and farm sale proceeds by 50%. To overcome the negative aspects of an EU accession the affected sectors would be forced to pursue a strict low cost strategy by taking advantage of economies of scale, increased cooperation between firms and stronger diversification of the production. The structural adjustments is overdue also in terms of the growing environmental pressure on agriculture from society.

Anotace:

Švýcarsko je případem země se silnou ekonomikou a vysokým stupněm protekcionismu v zemědělství. Švýcarský zemědělský sektor si mohl uchovat svou strukturu díky tomu, že se izoloval od mezinárodní konkurence.

Totéž platí i o potravinářském a zpracovatelském průmyslu. Protekcionismus vedl k neefektivnosti na všech úrovních, protože hospodářský sektor nepotřeboval přizpůsobit svou strukturu tak, aby se vyrovnal s konkurencí.

Poslední dobou dochází k určitému reformování a deregulaci následkem vnitřních a vnějších tlaků.

Vstup do Evropské Unie by Švýcarské zemědělství postihl mnohem více než současné přizpůsobení pravidlům GATTu, kde spotřebitelé jsou hlavními vítězi adaptačního procesu. Největší ztráty se očekávají v zemědělství výrobě, ve zpracovatelském a obchodním odvětví.

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Jeich hrubé ziskové rozpětí by pokleslo o jednu pětinu a zemědělský prodej by pokračoval z 50 %. Postižená odvětví by byla nucena provádět strategii nízkých cen při využití úsporných opatření tarifů, více spolupracovat na úrovni firem a přispět k většímu zpestření sortimentu výroby, aby tak překonala záporné stránky vstupu do Evropské Unie. Přizpůsobení struktury je zpožděné také pokud jde o rostoucí ekologický tlak na zemědělství ze strany společnosti.

Keywords:

Integration, accession, agricultural policy, economic consequences, Switzerland, structural adjustment

Klíčová slova:

Integrace, vstup zemědělská politika, ekonomické důsledky, Švýcarsko, přizpůsobení struktury

Agricultural Protectionism in Switzerland

Switzerland is one of the wealthiest nations in the world. It is typical for highly developed economies that only a small percentage of manpower is working in the farming sector (cf.). Biological and technical progress has allowed each single farmer to produce food for a steadily growing number of consumers. Swiss agriculture is among others influenced by the Swiss economy, EU economy, EU agriculture and the situation on the world market. Not all elements have the same impact. In times of agricultural protectionism it is above all the domestic economy that has the largest effect on Swiss agriculture while in a free trade situation it would be the world market. EU economy affects Swiss agriculture e.g. in terms of factor prices (e.g. fertilizer).

The general economic situation influences among others the labour market. In favourable times salaries are higher in the non-farming sectors. Hence there is a migration away from the farms. By 1995, the share of agricultural manpower decreased to about 4.5% while the agricultural sector contributed only about 2.5% to the Swiss GDP (LID 1995). In Table 0.1 the relations between the three economic sectors are presented.

Table 0.A Value added by economic sectors (1990)

SECTORS	VALUE ADDED				SHARE OF LABOUR
	GROSS VALUE ADDED		PER EMPLOYED PERSON		
	<i>in Mio SFr.</i>	%	<i>in 1000 SFr.</i>	<i>% of average</i>	%
Agriculture and forestry	9664	3.0	52	57	5.2
Industry	108957	33.6	90	100	33.8
Services	205282	63.4	94	104	61.0
Total	323903	100.0	90	100	100.0

Source: NZZ (1994)

Agricultural markets in Switzerland represent an economic sector that is highly protected.

This protectionism originated after World War II when the Federal Act on Agriculture (1951) was enforced. Market principles are still excluded to a large extent in many branches of agricultural production. The bigger state interventions are in some sectors of the economy the more measures the state has to enforce to eliminate undesired side effects. However, each intervention by the state means welfare and allocation consequences.

In order to fulfill the main objectives of Swiss agricultural policy there are three main groups of instruments currently in use.

- Improvement of the production structure and the framework conditions
- Price and selling guarantees
- Transfer (direct) payments

OECD calculations that compare the domestic support with (distorted) world market prices show that about 70% of agricultural income comes from support payments. **Chyba! Neznámý argument přepínače.** shows PSE figures for various countries. It is interesting to note that there is a direct correlation between the political support of agriculture in a country and the production intensity.

Table 0.B Agricultural producer subsidy equivalents (PSE) and the use of chemical fertilizer per hectare, 1980s

	AGRICULTURAL PSE (%), 1979-89	CHEMICAL FERTILIZER USE (KG PER HA OF ARABLE LAND AND PERMANENT CROPS), 1985
Australia	11	24
USA	30	94
EC-10	39	303
Switzerland	71	437

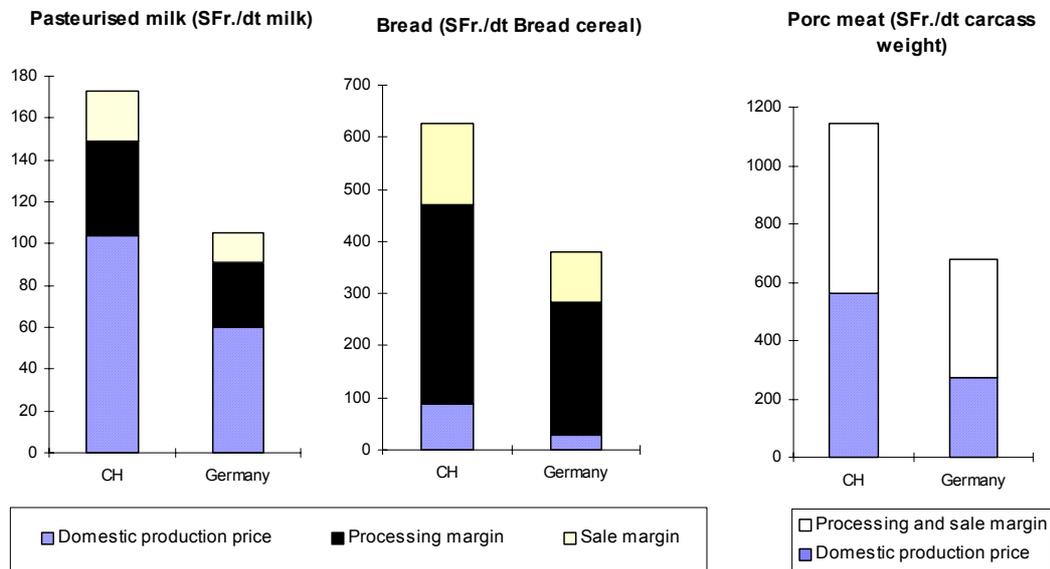
Source: OECD (1990)

Switzerland as a small country is a price-taker. The quantities traded on the world market don't influence the behaviour of these markets.

The food processing industries were similarly influenced by agricultural protectionism. The lower competition intensity led to over-capacities and inefficiencies. The gross margins are much higher as in the EU as is shown in **Chyba! Neznámý argument přepínače.** Compared

to Germany, in the milk sector it is above all the gross margins for standard products as milk and butter that are much higher in Switzerland.

Figure 0.A Production cost for milk, bread and porc meat (Ø 1989/90)



Source: MÄRKI (1994)

The different policies led to different farm sizes in the countries. While the average farm in Switzerland cultivates about 16 ha of land, the respective figure for Great Britain is about 70 ha.

Pressures for Changes

The protectionism of the last forty years led to a situation that makes it difficult for the agricultural sector to quickly adapt to the new challenges. In recent years, internal, and even more so, external factors have created pressure to reform agricultural policy and to deregulate agricultural markets. The pressure to liberalise Swiss agricultural policy focuses on three main domains (cf. also **Chyba! Neznámý argument přepínače.**):

- A. Internal ecological and financial pressure
- B. Gatt adjustment
- C. EU challenge

Internal ecological and financial pressure

In the seventies it was part of Swiss agricultural policy to maintain as many farms as possible. In order to enable farmers an income that is comparable to the one in other sectors farmers were advised to increase their production intensity. Many farmers established e.g. pig keeping on their small farms which resulted in a high animal density in certain regions. This, as a consequence, caused growing environmental problems.

In the course of the *Law for Water Protection* a reduction of animal density (3 LU/ha) was imposed which will cause adaptation problems for many specialised farms. There are several ways to fulfill the regulations of the law: increasing the size of the farm, reducing the number of animals or a combination of the two ways.

The new requirements concerning environmental protection is also mirrored in the growing share of ecologically-motivated direct payments for farmers. There is a steady increase in ecological payments while price support measures stagnate or even decline.

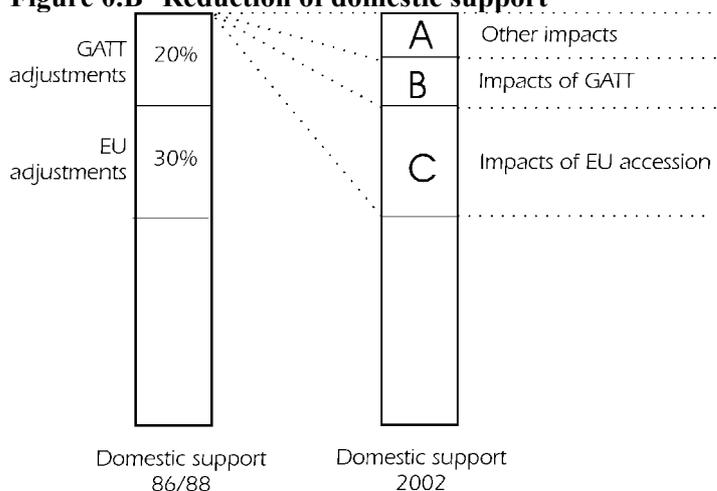
GATT Adaptation

In an open economy like Switzerland the external pressure usually outweighs the internal one. The changing world markets, the growing world population, the different views of the environment, increasing importance of multilateral negotiations and the continuing integration into EU are the main external factors influencing Swiss agricultural policy. Currently, it is above all the GATT commitments that dominate the deregulation process in Switzerland.

Until the year 2002 the domestic support is supposed to be reduced by 20% compared to the base year 1986/88. Production independent payments ("green box") are exempted from reduction. The GATT commitments demand the export subsidies to be reduced by 20%. Subsidised exports shall be reduced by 21% in terms of quantity.

In **Chyba! Neznámý argument přepínače.** the different impacts on agricultural domestic support in Switzerland are presented.

Figure 0.B Reduction of domestic support



The various pressure factors on Swiss agriculture will among others result in a reorganization of agricultural support. There will be a shift from price and selling guarantees to direct payments which will increasingly be influenced by environmental concerns.

The different pressure factors result in two political options:

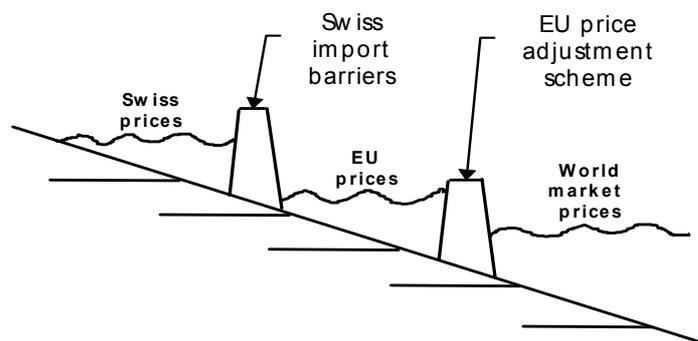
- ① Direct payments
- ② Structural adjustment

EU Challenge

The EU is the main trading partner of Switzerland. In 1994, in terms of value 73% of imported agricultural goods came from the EU, and 57% were exported to the EU (SBV 1995). Various bilateral agreements link Switzerland with the EU. Agricultural policy, however, remained predominantly autonomous. Since 1992 the Swiss government is pursuing a policy of integration into the EU. It can be assumed that Switzerland would have to take over the Common Agricultural Policy (CAP) of the EU within a period of five to ten years. There would be rather strict regulations for most agricultural markets. The biggest elbowroom would probably be left for direct and structural policy payments, as long as they are financed by the national government.

A possible EU accession influences the agricultural sector even before a full economic and political integration into EU. The world market of agricultural commodities is characterised by disarrays (TYERS/ANDERSON 1992). Prices are distorted ones rather than real market prices. Also in the EU agricultural prices don't reflect market prices. Due to the past and present protection measures of EU agricultural policy EU prices are generally higher than on the world market while Swiss prices are on an even higher level. In Chyba! Neznámý argument přepínače. the price situation of agricultural commodities in different trading countries is schematized.

Figure 0.C International market situation

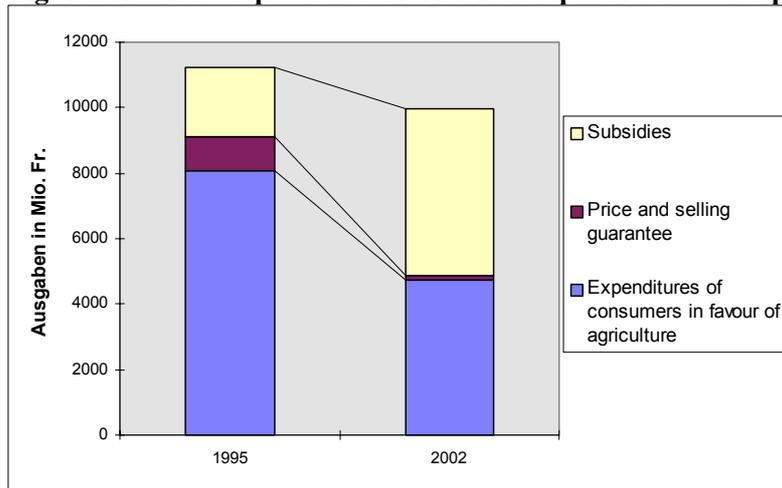


The market arrangements of the EU try to guarantee a stable and relatively high product price by means of variable custom duties and state intervention to control domestic quantities. The

EU prices are decidedly above world market level. However, they are also considerably lower than Swiss prices.

Due to high product prices Swiss farmers didn't have to face a big pressure to cut down production costs. Thus, there are a lot of inefficiencies in many agricultural sectors. An accession to EU would mean much lower prices which brings with it the need for farmers to lower their costs in order to be able to compete with EU farmers.

Figure 0.D EU adaptation scenario: Development of total expenditures



Source: RIEDER/RÖSTI/JÖRIN (1995)

In the course of adaptation to the CAP of EU it can be expected that there will be a change in the structure of total expenditures for agriculture as **Chyba! Neznámý argument přepínače.** shows. Consumers would have to pay considerably less, price and selling guarantees would almost disappear and direct payments/subsidies are expected to grow in importance.

Calculations by RIEDER/RÖSTI/JÖRIN (1995) anticipate an increase of direct payments from about 1'300 Mio Sfr. (ca. 800 Mio ECU) in 1993 to about 4'300 Mio Sfr. (ca. 2'700 Mio ECU) in 2005.

Not only the farming sector would be affected by the full integration into EU. The milk processing industries would have to face a decrease in their marginal revenue by 27% (MÄRKI 1994, p. 98). About half of the milk is processed to cheese in Switzerland. This branch would have to face an enforced competition among the processors. The presently highly protected milk market would be left with a very small level of state intervention. The milk processing industry is characterised by over-capacities due to a highly decentralised distribution over the country. This results in an inefficient and expensive production.

In the cereals sector it can be expected that there will be an increasing concentration process of cereal collecting points and mills. Today, this sector still predominately comprises small to medium-scale firms which are destined to disappear under more severe competition conditions.

Chyba! Neznámý argument přepínače. shows the effects of GATT and EU integration on the agricultural as well as up- and downstream sectors according to calculations by MÄRKI (1994). In the EU scenario the big winners would be the consumers while the primary production would lose most.

Table 0.C Financial effects of GATT and EU integration on the milk, meat and bread cereal market (in Mio Sfr., rounded)

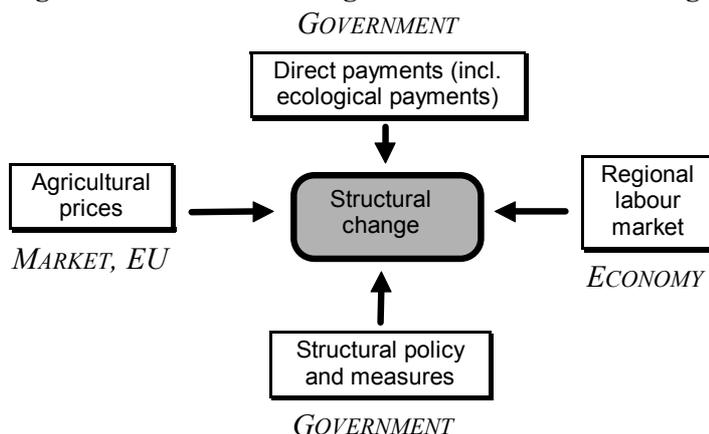
	GATT scenario	EU scenario
State	160	580
Primary production.....	-1'050	-3'430
Processing and marketing.....	-510	-1'430
Additional valorisation.....	30	80
Abroad	170	0
Final consumption.....	1'200	4'200

Source: adapted from Märki (1994), p. 224

Strategies for Swiss agriculture

There are various factors exerting pressure on Swiss agriculture. shows the main factors determining the necessary structural change.

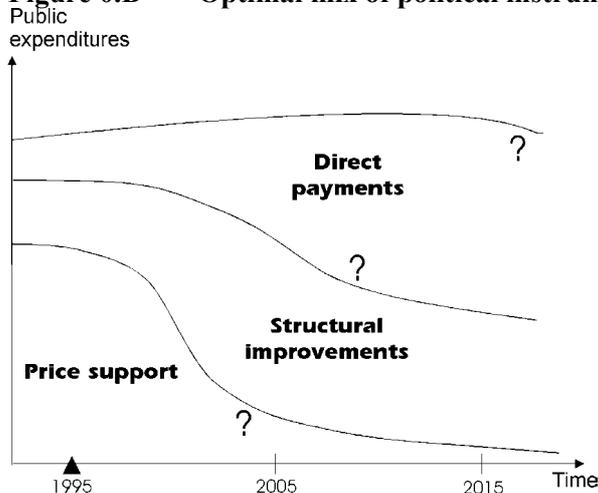
Figure 0.A Determining factors of structural change



In each stage of the development of agricultural structure there is a certain mix of political instruments supporting agriculture. The various pressure factors on agriculture will determine which mix of political instruments will be optimal for the future (cf. **Chyba! Neznámý**

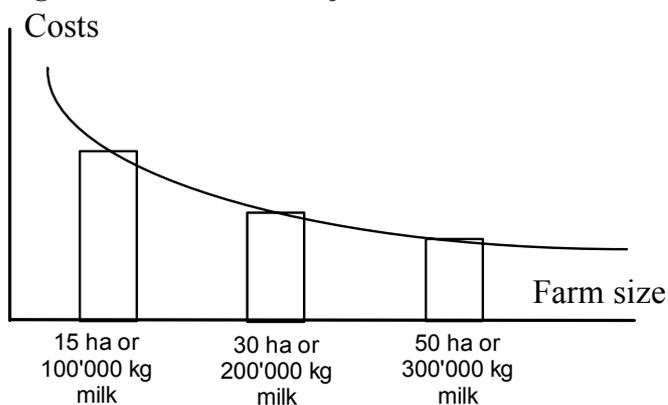
argument přepínače.) Presumably direct payments will play a predominant role in the medium and long-term.

Figure 0.B Optimal mix of political instruments



There is a strong pressure for farmers to bring down their production costs. As Swiss farms are rather small in size the present structure causes high production costs. A method to achieve a decrease in production costs could be the intensified cooperation among the farmers (machine rings, farming societies etc.). Such cooperations have the same effect as the growing of the farms, i.e. economies of scale (cf. **Chyba! Neznámý argument přepínače.**).

Figure 0.C Structural adjustment and cost reduction



Structural change is increasingly necessary because of:

- ① Public financial support: There is a decreasing political willingness to support agricultural production.
- ② Ecological requirements: There is an increasing pressure from society demanding environment-friendly production systems.
- ③ High cost agriculture is no longer financially supportable

In the transition period until the full adoption of the CAP the following tasks should be pursued:

- *Liberalisation* of the border controls and custom regulations. This will take place anyway in the course of fulfilling the GATT commitments
- *Lowering of guarantee prices*. This should be accompanied by an adjustment of the quotas to the new market situation.
- *Direct payments* and *investment support* accompanying the adjustment process

Conclusions

The structural adjustment process leads to the following main conclusions:

- The political goal of maintaining the number of farms by means of price support was a failure.
- The maintenance of a high cost structure by means of direct payments was destined to collapse at a certain stage.

According to the different pressures outlined above we can define four possible paths Swiss agriculture could follow (cf. **Chyba! Neznámý argument přepínače.**). If Swiss agriculture wants to comply with the future requirements concerning ecology (sustainability) and competitiveness, only Path ③ seems to be appropriate. In order to be able to cope with the challenges of this path, a lot of adjustments still have to be accomplished.

Table 0.A Possible paths for Swiss agricultural policy

	<i>Path I</i> Production-oriented agriculture	<i>Path II</i> Ecology-oriented agriculture	<i>Path III</i> Ecological and competitive agriculture	<i>Path IV</i> Maintenance agriculture
<i>Objective</i>	Maintenance of as many farms as possible	Maintenance of as many farms as possible as well as of an environment-friendly agriculture	Maintenance of competitive as well as environment-friendly agriculture	Maintenance of a minimal production ability
<i>Strategy</i>	Maintenance of income by supporting cost reduction measures and new income opportunities <ul style="list-style-type: none"> ↳ Consolidation or extension of the traditional support policy ↳ No additional measures in favour of the environment 	Maintenance of income by supporting cost reduction measures and new income opportunities and concomitant support of ecological tendencies <ul style="list-style-type: none"> ↳ Consolidation or extension of the traditional support policy ↳ Additional coupling of support with environment regulations 	Weaker braking of structural adjustment by means of reducing or eliminating existing contributions, linked to a strong support of ecological tendencies <ul style="list-style-type: none"> ↳ Reduction of the traditional support policy ↳ Linking remaining measures to re-enforced environmental regulations ↳ Possibly making available more funds for environment-friendly production systems 	Guarantee of a certain level of production ability through the maintenance of a minimal infrastructure as well as sufficient suitable area <ul style="list-style-type: none"> ↳ Drastic cutback of the traditional support policy ↳ Guarantee of the qualitative and quantitative soil protection ↳ Maintenance of minimal training possibilities (know-how), production, processing and marketing structures

Source: BAUR/ANWANDER/RIEDER (1995)

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