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AGRICULTURAL REFORM, MARKETS AND PRICES IN SLOVENIA

Emil ERJAVEČ and Jernej TURK

ABSTRACT

This paper examines the most significant developments and changes that have been occurring over a period of transition in the economy and agriculture. The paper examines the changes that have occurred in Slovene agriculture, the macro-economic framework within which agriculture operates, the functioning of the agricultural markets for staple farm commodities, the structural changes in the private sector and in the relative availability of production resources. Despite agriculture's small contribution to GDP, agricultural production is important in Slovenia, in particular in the poor regions and the rural areas, for alleviating the burden of socio-economic problems of transition and various other discrepancies. The problems of transition were compounded, also, because the economy and agriculture have suffered the loss of the Yugoslav market. With the restructuring of the economy and the re-orientation to European markets the situation is slowly returning to normal, agricultural markets are undergoing dynamic changes, production is growing and specialisation is proceeding unhindered.

Keywords:

SLOVENIA, TRANSITION ECONOMIES, AGRICULTURAL POLICY

1. Introduction

The transition to a market economy in Slovenia is proceeding at a considerable pace. During this transitional period in the Slovene economy, agricultural production seems to be an important economic lever which mitigates the burden of social and economic tensions.

Slovenia has joined several international organisations; free trade agreements have been prepared or signed with Western partners (EU, EFTA) and Eastern and Central European countries (CEFTA, the Baltic States, Bulgaria, FYR Macedonia). The final aim is clearly to achieve full membership of the European Union (EU). Agriculture plays an important role in all these negotiations. However, the significance of agriculture in the Slovene economy is relatively low compared with that in other Central and Eastern European countries.

The effects of discriminatory post-war policy against private farmers are now mostly reflected through low productivity levels attained by individual agricultural producers and through insufficient income gained from farming. Slovene agriculture is currently undergoing some huge transformations in production, structural and marketing schemes, and therefore constitutes an interesting research topic for economic analysts.

The objective of this paper is mainly to examine the changes which have occurred in Slovene agriculture since 1990. The macroeconomic framework within which Slovene agriculture operates, the functioning of agricultural markets for staple farm commodities, existing structural discrepancies in the private farm sector and relative availability of production resources within the global Slovene agricultural system, are all topics that will be discussed. Some major market price policy instruments

will also be analysed and their impact on the price levels achieved will be evaluated. Special emphasis will be placed here on observations concerning the structure of the Slovene agricultural budget. Several assumptions will be made regarding different developmental stages of Slovene agriculture during the next 10 years of economic and political reform, when intensive negotiations for full EU membership are expected.

2. Slovene Agriculture in Transition - A General Overview

2.1. Macroeconomic background

With a total area of 20,250 sq kms, Slovenia is around half the size of Switzerland and a quarter of the size of Austria. Accounting for a mere 8.4% of the former Yugoslav population, Slovenia contributed 18.2% to the total Yugoslav GDP (1989). Independence was declared on 25th June, 1991. In 1992, Slovenia was admitted to the United Nations; since 1994 Slovenia has also been one of the signatory members of the GATT and a founder member of the WTO. The Association Agreement was signed with the European Union on 10th June 1996, thus placing Slovenia among the candidates for further EU enlargement.

From the middle of the 1980s onwards, the Slovenian economy entered a period of recession, which most probably reached its lowest point in 1992. The major reasons responsible for a considerable fall in GDP (i.e. of 30% during the period 1990-1992, see Table 1) and for a huge increase in the unemployment rate (from 4.7% in 1990 to 14.7% in 1993) can be found in the collapse of traditional markets in the republics of the former Yugoslavia, the direct and indirect effects of the war in the Balkans and also in the efforts to prepare the ground for the transitional process towards a market economy. It seems that agriculture played an important role in the first stage of this transitional period of the Slovene economy. As such, agriculture represented an important buffer where social tensions were concerned through the alleviation of social and economic problems (such as those of unemployment and low incomes earned in the industrial sector).

The year 1994 (although the first signs were visible in 1993) marks a new developmental phase in Slovenia. GDP increased by 5%; industrial production grew by 6.4% - the first positive growth rate for 4 years - and the rate of inflation was reduced from 550% in 1990 to 20%. Likewise, the extent of investments in the Slovene economy has increased since 1993. Exports tend to account for more than 50% of the total GDP which, to some extent, confirms the degree of openness of the Slovenian economy.

The period of economic growth, which began in 1994, has continued. The latest estimates by the Statistical Office of the Republic of Slovenia show that GDP grew by 3.9% in 1995. For 1996, the Institute of Macroeconomic Analysis and Development produced preliminary estimations. Growth in domestic demand, slightly improved export competitiveness and the first signs of economic recovery in Europe have resulted in GDP growth which will probably be around 3.5%.

In 1996, for the first time in several years, the average annual inflation rate comprised a single-digit number (8.9%; in 1995 it reached 12.6%). However, it seems that the stabilisation measures undertaken after 1990 are gradually losing their impetus. The strict monetary and price policy only has a limited effect in reducing inflation. The major reason for this could be found in the increasing wage levels. Wages and remunerations have been increasing steadily since 1992 and have eventually created unfavourable macroeconomic situations.

During the transitional period, the Slovene Government has managed to maintain a balanced general budget account. The general government deficit is estimated at 0.2% of the total GDP. Expenditure as well as revenues declined to 46% of GDP. Imbalances persist within some governmental funds and in particular in the pension fund. When a comparison is made with other CEEC countries, the

low level of the foreign debt constitutes a macroeconomic advantage.

Table 1 - Main macroeconomic indicators and the importance of agriculture in Slovenia

		1990	1991	1992	1993	1994	1995	1996 ^p
Area	(km ²)				20,250			
Population	000				1,967			
Ljubljana - (the capital)	Inhabitants				270,759			
Gross Domestic Product (current prices)	mio US\$	17,381	12,673	12,523	12,673	14,330	18,580	18,519
GDP per capita	US\$	8,823	6,450	6,275	6,366	7,205	9,348	9,300
% agriculture / GDP	%	4.3	4.7	4.7	4.4	4.4	4.4	4.4
% industry / GDP	%	37.0	39.6	36.6	34.1	34.5	32.8	32.1
% services / GDP	%	53.0	50.0	55.0	58.0	57.1	59.2	59.6
GDP	% change	-4.7	-8.1	-5.5	2.8	5.3	3.9	3.5
Agric. GDP	% change	-1.6	-0.2	-5.5	-3.5	6.4	3.6	4.5
Industrial GDP	% change	-10.2	-11.6	-12.6	-2.5	6.6	2.3	0.7
Service GDP	% change	-0.4	-6.3	-1.2	4.0	4.2	4.9	5.1
Inflation Retail prices (annual average)	% change	549.7	117.7	201.3	32.3	19.8	12.6	9.7
Unemployment ¹	in 000s	44	75	118	129	127	121	120
	% labour force	4.7	8.2	11.5	14.5	14.4	13.9	13.9
Trade balance ²	mio US\$	-609	-262	791	-154	-338	-953	-1,040
Current account balance ³	mio US\$	530	221	926.2	191.9	540.4	-36.4	-130
Foreign debt ⁴	mio US\$	1,954	1,866	1,741	1,873	2,258	2,970	/
Budget balance	% GDP		2.6	0.2	0.4	-0.2	-0.0	-0.2
Exchange rate	SIT/US\$		55.6	81.3	113.2	128.8	118.5	135.0
	SIT/ECU		70.3	105.3	132.7	151.2	153.2	169.5
Share of agriculture in employment	%				10.7	11.5	10.4	10.0
in exports	%			6.4	4.6	4.7	4.0	4.2
in imports	%			8.5	8.1	8.2	8.5	8.3
Income for food	%	25.0	26.1	26.0	23.0	26.0	23.1	/

p= preliminary results

(1) Registered unemployed / (employees + self-employed + registered unemployed)

(2) Goods only; excluding transactions with former Yugoslav republics, 1990 & 1991

(3) Goods & non-factor services; excluding transactions with former Yugoslav Republics, 1990 & 1991

(4) Total foreign debt (just allocated debt) without reallocation of the total Yugoslav debt

Source: Institute for Macroeconomic Analysis and Development

Economic growth over the last four years has only modestly contributed to employment. Unemployment measured by a survey of the labour force still remains at the level of 13.9% (7.3% according to the ILO definition of unemployment in 1996). Stagnation of employment is on the one hand a consequence of economic restructuring and, on the other, indicates the lack of labour mobility. However, the underground economy and the system of part-time agricultural labour act as a social buffer contributing to the relatively stable socio-political situation in the country.

2.2. Agriculture in the whole economy

The significance of agricultural production in the Slovene economy is relatively small (around 4.5% of GDP and 10.0% of total employment after transition); with further economic development it may continue to decline. Nevertheless, the macroeconomic indicators do not illustrate the importance of agriculture for rural development and the stability of Slovene society. More than half of the Slovene population resides in rural areas. Moreover, during the period of economic crisis agricultural production has represented an important buffer for social tensions. This was one of the reasons that small agricultural plots remained in production and the profound subsistence nature of farm production in Slovenia has been maintained. In addition, investments in Slovene agriculture were negligible.

The large proportion of the total of Slovene land under forests (around 60% of all land is forested), its harsh relief (70% of all agricultural land is in areas with aggravated production conditions) and the considerable share of meadows and pastures in the total of agricultural land (the Slovenian percentage is the third largest in Europe), are the most important features of the composition of Slovene land. These relatively unfavourable conditions for production diminish the competitiveness of Slovene agriculture, since they make production more expensive and reduce the choice of possible production orientations. Otherwise, the environmental conditions for agriculture in Slovenia can still be considered as relatively favourable. Agricultural production on some 70-80% of agricultural land in Slovenia does not have a particularly negative environmental impact and can be regarded as a minor potential source of environmental pollution. The relatively favourable ecological conditions can be seen as a comparative advantage in the promotion of an environmentally-friendly farming system in Slovenia.

The fact that for several decades investment in land purchase has been the only safe private investment in the Slovene economy has, to a certain extent, resulted in land immobility. Viewed from the standpoint of the general standard of living, there is a case for argument that the prices of land currently approach the highest price levels for land in Europe (10,000 to 30,000 \$ /Ha for arable land)! To date, land leasing has not really been accepted as an important means of land transfer in Slovenia.

2.3. Development of the agricultural market

In the case of Slovene agriculture, transitional stress was not as dramatic as it has been in the case of the other CEE countries (European Commission, 1995). During the period 1990-1993 the growth of gross agricultural output exhibited a continuous tendency towards decline (10% fall in gross output compared to the aggregated average from 1986 to 1989, Table 2). In 1992 and 1993, there was a significant decline in the volume of crop and livestock production. The fall in the volume of production can be predominantly attributed to the loss of the Yugoslav market, severe drought problems in recent years and the difficulties in designing the new framework of agricultural policy.

The loss of the former Yugoslav market had a most negative effect on poultry production, which had suffered the highest rates of negative growth (Tables 2, 3, 4 and 5). In 1993, a fall in poultry production of 30% was noticed when compared to the period 1986-1989. As a result, the orientation of poultry production has changed considerably (i.e. with the production of turkeys on many individually-owned agricultural holdings). During the same period, the number of cattle diminished by around 8% and the number of cows by 13% (Table 3). Meat production fell by 13% and total milk production by 8%. On the other hand, there is no significant change to be seen in the production potential for pig farming. The marketed share of pig products is considerable and represents approximately one half of the total production on the agricultural estates where hogs are reared. It must be stressed here that the number of middle-sized private farms rearing pigs has increased slightly, as a consequence of the quite favourable economic climate currently being experienced by private pig producers (home-produced fodder).

During the first period of transition (1989-1993), only fruit and wine production exhibited considerable positive growth rates, which are attributed primarily to rapid adaptation of production orientations to meet the new economic challenges posed by the market (modernisation of production, business incentives, proper sale and trading networks etc).

Since 1990, a certain process of production restructuring has taken place which has been directly reflected in the structure of gross agricultural output. Before the transition, livestock production comprised 60% of total agricultural production, while crop production constituted the remaining 40%. With a slow but persistent process of stagnation in animal husbandry and a simultaneous growth in crop production (especially fruit and wine growing), the latter orientation is gaining space and importance within the whole Slovene structure of agricultural production at the expense of livestock production.

The year 1994 marks a clear reversal of the negative tendency in the gross agricultural output

(Table 2), with yields in crop and milk production increasing steadily (Table 4). This is more or less the result of some structural changes to certain product orientations. Marginal and older farmers have been dismantling their agricultural activities. On the other hand, more professionally-run types of farms are emerging as the result of several investment schemes. It is not surprising, therefore, that higher efficiency and productivity levels have lately been observed on these farms. This process was supported by the promotion of targeted market policy measures and the improvement of the performance and activities of the extension services.

Table 2 - Gross agricultural output in Slovene agriculture

Gross Agricultural Output	1986-1989	1990	1991	1992	1993	1994	1995	1996 ^p
Total	100	101.6	102.0	91.7	89.3	107.7	111.6	112.1
Crop production	100	107.2	109.1	86.2	86.5	131.0	134.0	131.3
- Cereals	100	116.9	114.1	90.3	92.5	113.9	108.7	105.4
Fruits	100	106.5	86.1	105.6	110.9	116.6	111.6	106.0
Grapes and wine	100	100.4	97.0	109.6	115.1	121.0	103.9	124.7
Livestock production	100	97.7	99.1	92.0	86.1	85.4	88.5	90.2
- Cattle (milk, beef)	100	96.3	97.9	95.9	88.2	91.3	95.5	97.4
- Pork	100	97.2	95.8	93.0	100.1	98.7	104.1	109.3
- Poultry	100	100.1	102.9	83.0	68.7	60.5	60.1	60.7
Share in total GAO								
- Crop	40.1	47.1	49.5	45.6	52.0	57.5	53.1	52.0
- Livestock	59.9	52.9	50.5	54.4	48.0	42.5	46.9	48.0

p= preliminary results

Source: Statistical Office of the Republic of Slovenia

Table 3 - Evolution of livestock production

Livestock (in 000s)	1989	1990	1991	1992	1993	1994	1995	1996
Cattle	546	546	533	484	504	478	477	496
- cows	243	255	231	220	211	210	210	215
Pigs	576	558	588	529	602	591	571	592
Poultry	13,279	13,521	12,766	13,134	11,424	10,592	10,194	9,320
Laying Hens	2,429	2,340	2,440	2,323	1,858	1,800	1,840	1,653
Horses	12	11	10	11	9	9	8	8
Sheep and Goats	24	23	20	28	21	20	19	28

Source: Statistical Office of the Republic of Slovenia

Table 4 - Agricultural production in Slovenia

	Unit	1986-1989	1990	1991	1992	1993	1994	1995	1996 ^p
Production									
Cereals	000 t	516	578	558	426	455	564	540	530
		1986-89 = 100	112	108	83	88	109	105	103
Wheat	000 t	167	200	181	178	168	182	177	161
		1986-89 = 100	120	108	107	101	109	106	96
Coarse grains	000 t	341	369	368	240	280	376	358	362
		1986-89 = 100	108	108	70	82	110	105	106
Beef	000 t	48.9	48	44.5	47.5	42.5	41	45.7	48
		1986-89 = 100	98	91	97	87	84	93	98
Pork	000 t	53.7	56.5	54.5	57.3	66.3	69.7	69.1	72.5
		1986-89 = 100	105	101	107	123	130	129	135
Poultry	000 t	73.8	75.3	75.3	57	49.1	45.6	56.1	57
		1986-89 = 100	102	102	77	67	62	76	77
Eggs	000 t	24.1	24.7	27.5	21.6	20.0	19.5	19.0	19.4
		1986-89 = 100	102	114	90	83	81	79	80
Milk	mio.lits	595	579	624	563	533	559	590	580
		1986-89 = 100	97	105	95	90	94	99	97
Yields									
Cereals	t/Ha	4.2	4.7	4.7	3.6	3.6	5.1	5.0	4.9
		1986-89 = 100	112	112	86	86	121	119	117
Wheat	t/Ha	3.9	4.6	4.3	4.2	3.8	4.3	4.2	4.3
		1986-89 = 100	118	110	108	97	110	108	110
Milk	kg/cow	2,305	2,340	2,789	2,640	2,610	2,676	2,810	2,700
		1986-89 = 100	102	121	115	113	116	122	117

p= preliminary results

Source: Statistical Office of the Republic of Slovenia

The levels of production and yield achieved in 1994 show that the development of Slovene agriculture was only briefly interrupted; the transition effect was not really a dramatic one (except in the case of poultry production). The trend adopted in 1994 has also been maintained in 1995 and 1996, but at a slower pace. Compared to that in the pre-transitional period, gross agricultural output has increased by some 12%. Apparently, the crisis in livestock production has already reached its peak. Pig production has increased by 10% compared to that in the period 1986-89, and the level of poultry production has settled at around 60% of that for the pre-transitional period. Milk and beef production have recorded some positive growth rates; however they have still not achieved the pre-transitional levels. While the development of fruit growing has partly ceased, the potential for wine production has increased tremendously. Certain field crops (sugar beet, maize) have also exhibited positive growth rates, a fact which has directly contributed to the rise in total Slovene crop production. However, the corresponding shares of crop and livestock production in the total Slovene agricultural product have not altered significantly since 1993.

2.4. Agricultural trade

The foreign agro-food trade balance is traditionally negative. Agricultural trade represents around 4% of Slovene total exports and 8.5% of total Slovene imports. The agro-food trade balance worsened during the whole transitional period. In 1996 the export of agricultural products increased (by 3.5%) for the first time during the transitional period, and their import decreased (by 3.1%). The ratio of imports to exports was around 48% (41% in 1995). However, this ratio was significantly lower than the average import/export ratio throughout the whole of Slovene foreign trade (90%).

Slovenia only has important surpluses in hops (their production is traditionally export-orientated), poultry products and milk (Tables 5,6). At the same time, Slovenia imports cereals, sugar, vegetable oils and red meat. The structure of exports has partly changed since independence. The beef and veal sector has moved into deficit and imports of live animals and carcasses sharply increased between 1993 and 1994.

Where the structure of exports (SITC classification) is concerned, the most important share in 1996 was constituted by milk products (022, 024), even though exports were significantly lower than in the previous year. Alongside the milk and milk products, the most important product groups are live animals, meat and meat products (011, 012 and 017). The greater part of the exports of this group comprises poultry, while pork is the most important imported product. The third most important group of products is constituted by alcoholic and non-alcoholic beverages (111, 112) each accounting for more than 5%. In 1996, this group exhibited the highest rate of increase. The share of mineral waters (around 25,000 tons) was also important as well as that of wine (90% bottled wine) and beer. Slovenia enjoys relatively good production and environmental conditions for fruit growing. Fresh fruits constituted the greatest share of the structure of exports; domestic fruits were exported (while citrus fruits were imported). Slovenia primarily exported apples (15,000 - 25,000 tons) and pears (1,500 - 3,000 tons). Of the fresh vegetables, potatoes constituted the largest share of exports where quantity and value are concerned.

The biggest share in the value structure of imports was that of fruit (054), cheese and curd (024), vegetables (054) and meat (012), feedstuffs for animals (081) and products from the group of "edible products and preparations" (098). Slovenia is a net importer of cereals for human nutrition and animal fodder. Cereals for animal feed constituted the largest share of imports (with 70% represented by maize). Wheat dominated among cereals for human nutrition (80% in quantity terms).

The countries of the former Yugoslavia have remained the most important agricultural foreign trade partners (55% of exports), followed by the European Union (46% of imports, Table 7). Due to high imports the CEFTA countries have also assumed importance. In 1996, a positive foreign trade balance was obtained with the countries of the former Yugoslavia. Exports increased and the traditional trade flows were re-established. There was a negative balance of trade with other

important trading countries, with a deficit of more than 75%. For the first time since 1993, exports and imports from the European Union decreased in 1996.

Table 5 - The self-sufficiency of some staple Slovene agricultural products (%)

Product	1992	1993	1994	1995
Bread cereals	59	44	55	64
Maize	42	52	59	59
Sugar	21	23	36	37
Oil and Fats	8	7	10	3
Potatoes	100	96	100	98
Vegetables	64	60	73	77
Fruits	92	89	96	98
Wine	114	93	100	90
Hops	1,588	1,641	1,447	1,344
Beef (carcass)	100	88	71	83
Pork (carcass)	72	69	70	72
Poultry (carcass)	200	164	139	122
Eggs	114	114	110	108
Milk	118	112	114	115
Total	82	77	77	79

Source: Statistical Office of the Republic of Slovenia and Agricultural Institute of Slovenia

Table 6 - Agricultural trade in Slovenia by volume

Product	Export			Import			
	Units	1992	1994	1996	1992	1994	1996 ^p
Crop Products:		107	107	89	910	846	821
Total grain of which:	000 tonnes	14	21	28	518	553	470
- Wheat	000 tonnes	0	0	2	69	125	65
- Coarse grains	000 tonnes	2	2	2	369	367	336
Oilseeds	000 tonnes	1	0	0	4	2	4
Vegetable oil	000 tonnes	6	3	6	33	31	42
Sugar	000 tonnes	10	2	3	45	59	55
Potatoes	000 tonnes	5	13	4	5	13	15
Wine	mio. litres	28	15	10	58	15	29
Fresh fruit	000 tonnes	10	20	24	63	86	89
Canned fruit	000 tonnes	17	22	8	16	24	17
Fresh vegetables	000 tonnes	6	7	4	159	51	86
Canned vegetables	000 tonnes	7	5	3	8	11	14
Livestock Products:							
Total meat of which:	000 tonnes	79	37	31	52	51	32
- Beef and veal	000 tonnes	13	7	2	16	21	7
- Pig meat	000 tonnes	3	2	2	24	27	21
- Sheep meat	000 tonnes	0	0	0	0	0	0
- Poultry meat	000 tonnes	52	18	15	10	1	3

p = preliminary results.

Source: Statistical Office of the Republic of Slovenia and Agricultural Institute of Slovenia

2.5. Dual structure of Slovene agriculture

In Slovenia, 93 % of all agricultural land (UAA) is privately-owned or leased (Table 8). The privately-owned land is mostly divided between 112,000 small family farms with an average farm size of 4 Ha

UAA. The development of private farming has been hindered throughout the entire post-war period by an agricultural policy which favoured State agricultural enterprises. The Law Concerning the Public Agricultural Land Pool enacted in 1953 settled the maximum holding size to 10 hectares of arable land. Currently, private farms which are larger than the average farm in the European Union (14 Ha UAA) account for less than 5% of all Slovene farms; this category of farms operates on slightly more than 10% of UAA, while the corresponding figure for the EU countries is 75%.

Table 7 - Slovene agricultural trade structure by countries

SMTK-REV3	Export					Import				
	1995	%	1996	%	96/95 (%)	1995	%	1996	%	96/95 (%)
TOTAL	430	100.00	445	0.00	103.46	953	100.00	923	100.00	96.88
OECD countries	193	44.92	170	38.29	88.20	664	69.68	625	67.67	94.09
of which	0	0.00	0	0.00		0	0.00	0	0.00	
EU	164	38.09	143	32.06	87.07	460	48.24	429	46.42	93.22
OECD-CEECs	11	2.62	8	1.91	75.39	127	13.36	115	12.41	89.95
NORTH AMERICA	11	2.49	14	3.06	127.00	35	3.66	43	4.63	122.55
Other OECD countries	7	1.72	6	1.27	76.48	42	4.42	39	4.21	92.47
CEECs	5	1.18	3	0.73	63.53	17	1.77	16	1.78	97.44
NIS	16	3.71	20	4.42	123.13	20	2.12	16	1.79	81.76
FORMER YUGOSLAVIA	207	48.19	247	55.48	119.11	122	12.82	124	13.43	101.47
OTHERS	9	0.00	5	0.00	56.30	130	13.61	142	15.34	109.14

Source: Statistical Office of the Republic of Slovenia

The majority of family farms are orientated towards labour intensive production; this is primarily the case with combined milk and beef cattle production. A considerable share of production is used for home consumption or, at best, for direct sale at home. The production potential of traditional family farms is limited (land and capital) and the average yields fall far behind those of the European Union countries. More than half of the total peasant labour force (i.e., 58% out of 237,000 - data from the population census, 1991) had other jobs or occupations (full-time jobs, housewives, students). Part-time farms prevail in terms of the way in which income is derived (only around 20% of private farms in Slovenia earn their income exclusively from agricultural activities).

Agricultural enterprises evolved from what were formerly "social" agricultural estates. In 1990, the public farm sector operated on a mere 7% of all agricultural land in Slovenia, but contributed 31% to gross agricultural output. Two major characteristics of the newly emerging enterprises are their much higher production potential and the ability to exploit available production factors more effectively than is the case, on average, with the private farm sector. Land and labour productivity levels achieved by these farms approach those of western European agriculture. Their "long-term" economic performance is, however, uncertain because of their vague legislative and ownership status; according to the Law Concerning Denationalisation, all previously confiscated farm land now belongs to the original owners. It is estimated that agricultural enterprises will have to return around 40% of their farm land. Thus some production orientation in Slovene agriculture may be endangered, in particular plant production.

The privatisation of former agricultural estates is progressing in accordance with the law. Most of the shares belong to the employees. Nevertheless, only a few estates have already been completely privatised. Most of the former social farms and estates are subject to restitution measures; the general model of privatisation is not valid in the case of their land. According to the Law on Agricultural Land and Forests Funds (1993), funds were established and land has passed to the ownership of the State under the administration of the Fund which collects the rents. The managers of some agricultural enterprises voiced their opposition and did not wish to assign land to the funds. At the end of 1996, the problem has not been resolved and the Fund cannot operate according to the law.

Table 8 - Agricultural resources and farm structures in Slovenia, 1991

	Agricultural			
	Family farms*	Enterprises**	Others***	Total
Farms	111,951	203		
UAA (Ha)	463,944	61,518	336,972	862,434
% of total UAA	53.8%	7.1%	39.1%	100.0%
average farm size (Ha)	4.1	303.0		
Arable land (Ha)	165,675	29,300	50,457	245,432
% of total Arable land	67.5%	11.9%	20.6%	100.0%
wheat yield (t/Ha)	3.88	5.92		
Meadows (Ha)	184,954	12,745	149,321	347,020
% of total meadows	53.3%	3.7%	43.0%	100.0%
Permanent pastures (Ha)	94,469	13,216	103,274	210,959
% of total pastures	44.8%	6.3%	49.0%	100.0%
Cattle (no.)	434,385	43,163		477,548
% of cattle	91.0%	9.0%		100.0%
Dairy cow (no.)	205,214	6,464		211,678
% of dairy cows	96.9%	3.1%		100.0%
Milk production (x 1,000 l)****	492,642	40,387		533,029
% of Milk production	92.4%	7.6%		100.0%
milk yield per cow	2,401	6,248		
Pigs	350,600	240,914		591,514
% Pig production	59.3%	40.7%		100.0%
Sheep	18,804	717		19,521
% Sheep population	96.3%	3.7%		100.0%
Poultry	1,206,000	9,386,000		10,592,000
% Poultry	11.4%	88.6%		100.0%
Eggs (x 1,000)	130,589	202,318		332,907
% Eggs	39.2%	60.8%		100.0%

* Family farms according to the EUROSTAT definition of agricultural holdings

** Enterprises and cooperatives on social, cooperative and mixed property.

*** Land ownership through other holdings, alpine pastures, etc.

**** Without milk suckled by calves.

Source: Statistical Office of the Republic of Slovenia (the latest data available, 1991-1994)

2.6. Agricultural cooperatives and the food industry

Agricultural farmers' cooperatives were well developed before the Second World War and were not abolished after it. The cooperatives were of a general type, supplying agricultural inputs to and purchasing agricultural outputs from, the peasant farmers. The transformation and reorganisation of these agricultural cooperatives were carried out according to the Law on Cooperatives, under which traditional cooperative principles have again been put into force. The agricultural cooperatives mostly completed their formal transformation by 1993. Some new, more specialised cooperatives were also established. In actual fact, agricultural farmer cooperatives are encountering considerable economic difficulties. There are several reasons for this, extending from the lack of economic interest on the part of cooperative members to liquidity problems and an inability to compete with the new private retailing sector with regard to the purchase of farm inputs and the sales of agricultural products. New legislation enables a cooperative to participate as a legal shareholder in the "State-owned" capital in the food processing industry. According to the Law on Cooperatives, 45 % of the ownership of food processing enterprises can be privatised in favour of cooperatives.

Since 1990, there have been some quite dynamic changes in Slovene upstream and downstream industries. Former quasi-market structures are being dismantled, the former socially-owned estates

are taking on new roles and some new, privately-run agricultural enterprises are emerging. Wholesale and retail sales in the market have expanded significantly after the political changes. In terms of their technology, downstream industries are relatively well-developed and have drawn profit from the establishment of the market economy. Economically, they have survived the loss of the Yugoslav market on both the input and output sides. Besides the former State enterprises some new industrial plants have emerged, based on former production plants (e.g. in the slaughtering industry). There are no foreign owners among the new owners of upstream and downstream industries, with the exception of one Slovene sugar refinery in which 20 % of shares have been purchased by a Dutch cooperative organisation.

3. Agricultural policy

3.1. Policy objectives

Having become an independent country, Slovenia found itself in a position to design its own agricultural policy. In the spring of 1993, Parliament enacted the "Strategy of Agricultural Development in Slovenia" (Ministry of Agriculture and Forestry, 1992), where the main policy objectives are laid down as (i) the stable production of reasonably-priced, quality food in Slovenia, (ii) the preservation of population density, cultural regions and agricultural land (preservation of production potential), and protection of agricultural land and water from pollution and misuse, (iii) a permanent increase in competitiveness and (iv) guaranteed parity income for "above-average" producers.

These policy goals do not differ from those already set by the countries of the European Union. Generally speaking, Slovenia decided to adopt the Western European-style of protectionist agricultural policy. In short new Slovene agricultural policy - the so-called "eco-social policy" - is primarily aimed at increasing farm incomes and simultaneously enhancing the existing efficiency and productivity levels. A special emphasis is also placed on promoting the "external function of Slovene agriculture" (settlement issues - regional policies, ecological aspects, social welfare). As such, the document does not define the status of either type of farm production unit (private family farm / agricultural enterprise), nor does it clarify the current ambiguity surrounding the issue of agricultural privatisation in Slovenia.

3.2. Agricultural market and price policy

After a general fall in agricultural producer prices in the first half of 1993, the Government has introduced import levies which now constitute the basic market price policy and also the general agricultural policy mechanism in Slovenia. In addition to the existing customs duties, variable import levies for live animals, meat, milk products, eggs and wine were introduced. Their level is determined by the Government on the basis of prevailing market conditions and inflationary events. They are subject to continuous change and the Government sets their levels several times per year. In the period 1994-1995, the Slovene Government increased variable import levies for cattle and pigs, which eventually led to a relatively more favourable price situation where beef fattening is concerned.

The mechanism of protection in foreign trade does not embrace all products; only staple farm products are included and the protection of processed agro-food products has not yet been regulated. Price policy on the domestic market and intervention measures contribute, however, to unstable agricultural markets. The levels of protection in foreign trade are defined by the GATT/WTO agreement which determines tariff rates and the extent of variable import levy support in trade with the CEFTA, EFTA and the EU. The GATT "arrangement" for Slovenia considers the tariff equivalent as a ceiling below which policy makers are allowed to apply variable levies. The existing tariffs and

levies in force for all the staple farm products in Slovenia are below the maximum allowed by the GATT. For Slovenia, the GATT agreement determines the import quotas for cereals with the low level of tariffs. The tariff quotas imposed do not facilitate establishment of a protectionist trade policy for cereals. Slovenia expresses its Aggregate Measures of Support (AMS) in ECU; the initial AMS value amounts to 159 million ECU, with a final AMS of 131 million ECU (in the year 2000). So far, the AMS does not appear to be a particularly effective policy constraint.

Table 9 illustrates the extent of tariffs and levies in Slovene agriculture. It is very clear that the existing tariffs and levies in force for all the staple farm products in Slovenia are below the maximum allowed by the GATT, the only exception being the case of poultry. The GATT Agreement for Slovenia considers the tariff equivalent as a ceiling below which policy makers are allowed to apply variable levies. In the first half of 1995, the ceiling was not binding for beef, pork and wheat.

Table 9 - Foreign trade protection of some staple Slovene agricultural products

	Tariff (01.01.1995) (%)	Base rate of Duty* (%)	Variable levies (01.01.1995) ECU/t	Tariff equivalent (year 1995) ECU/t	Tariff equivalent (year 2000) ECU/t
Beef - carcass	12	14	432	1,998	1,443
Pig - carcass	15	17	150	418	356
Poultry meat	15	17	629	237	201
Fresh milk	10	12	257	253	215
Eggs	5	7	332	274	233
Durum wheat	5	5	0	0	0
Other wheat	5	7	24	102	87
Maize	11	13	0	94	81
Raw sugar	17	19	304	405	344
Quality wine	25	27	503	513	436

* According to the GATT schedule

Source: Official Gazette of the Republic of Slovenia

The system of export subsidies has not been clearly defined. Following Slovene accession to the GATT and the WTO, their implementation is subject to various restrictions. Slovene agricultural policy makers intend rather to use the low amount of the agricultural budget allocated to them for other purposes (e.g. the finance of marketing and promotion of activities in domestic markets). Exporters of milk, meat, fruit, hops and wine were assured of these subsidies. In 1995, about 11 million US\$ were allocated, which represented 3.5 % of exports of agro-food products.

The prices of agricultural products are market-determined except in the case of wheat and rye, sugar beet and milk. The prices of wheat, rye and sugar beet are established within market organisations, while special regulations apply to the prices of milk. The Government plans to form market organisations for some staple agricultural products even though the concept of market organisations is not yet clear. The existing market organisations for wheat and sugar beet determine the purchase price only. The State is the sole buyer of domestic and imported wheat. Slovenia has only one sugar refinery in which the State has the most important share. For all other agricultural products protection in foreign trade is the only measure of market price policy and is designed in the same way as in the EU. Nevertheless, it is less defined and leads to highly disproportionate prices between the various agricultural products (e.g. the low price of fodder wheat in comparison to that of bread wheat).

Deficiency or compensation payments are not applied in Slovenia. Price aid for milk produced in disadvantageous areas was applied until 1995. Supplementary price payments for the breeding of milking cows and small ruminants still apply but they represent only 6 % of all budget interventions in agriculture.

3.3. Trade agreements

Slovenia has signed several trade agreements, among them the free trade agreement with the EFTA countries, though this will not affect agriculture. In 1995, Slovenia entered the multilateral trade agreement known as CEFTA (Hungary, Poland, Czech Republic, and Slovakia). On June 10th, 1996, Slovenia signed the Association Agreement with the European Union, which is actually in the process of ratification. The economic part of the agreement comes into force on 1st January 1997. Both parties to the agreement are sensitive where agriculture, food products and fishery are concerned; hence free trade principles cannot be accepted. The European Union used the same rules in its negotiations with Slovenia as with other CEEC countries. The bases of trade advantages were the trade relations achieved between the EU countries (including Austria, Sweden and Finland) and Slovenia (1993 and 1994). The advantages which applied from the Cooperation Agreement between the EU countries and Yugoslavia were observed. Both parties settled import quotas for traditional agricultural products and fish, and simultaneously reduced customs duties and import levies for those products. Neither of the parties can introduce additional foreign trade protection or increase the existing protection after the enforcement of the agreement. Both parties can introduce protectionist measures in the case of dumping, i.e. the introduction of unreasonably low prices on the domestic market.

Towards the end of 1995 and during 1996, the domestic agricultural policy makers discussed the consequences of the CEFTA Agreement for Slovenia. In 1995, the founder-members agreed that they would liberalise agricultural trade. Slovenia did not consent before entering the agreement because the differences between prices in Slovenia and other countries would bring about the fall of prices and a decline in farm incomes. It is not surprising, therefore, that bilateral arrangements of trade flows among countries are still in force. Limited import quotas have been settled for some products which enable development of agricultural trade. In 1996, after several negotiations, the CEFTA countries agreed that trade will be liberalised after 1998. This has not yet been realised but it will influence the further development of the CEFTA Agreement. There are also some bilateral trade agreements in force (with FYR Macedonia, the Baltic States, Bulgaria). Negotiations are also being carried on with some other CEEC countries (Croatia, Romania). The international trade agreements signed up till now have not yet affected Slovene agriculture.

3.4. The agricultural price level

The existing import protection regulations keep agricultural prices at a high level. After an initial fall in 1993, agricultural producer prices have been increasing faster than general retail prices (Table 10). There are large price oscillations between various products (Table 11).

Table 10 - Price index of agricultural producer prices (I-XII/I-XII, previous year = 100)

Retail Prices	1992	1993	1994	1995	1996
	301.3	132.3	119.8	112.6	109.7
Agricultural Producer Prices	313.6	118.7	124.8	113.3	110.8
- crop production	302.7	139.9	118.0	107.8	121.1
- fruit production	215.7	95.8	140.4	132.6	114.6
- livestock production	328.1	118.2	124.0	111.3	108.6

Source: Statistical Office of the Republic of Slovenia

Generally speaking, the levels of agricultural producer prices in Slovenia are much higher than those prevailing on the world markets and those existing in most CEEC countries, and they are already approaching the existing farm producer price levels in the EU market. There are, however, considerable differences between various agricultural products (Figure 1).

Farm product prices approach the corresponding price levels in EU. An observation of average price

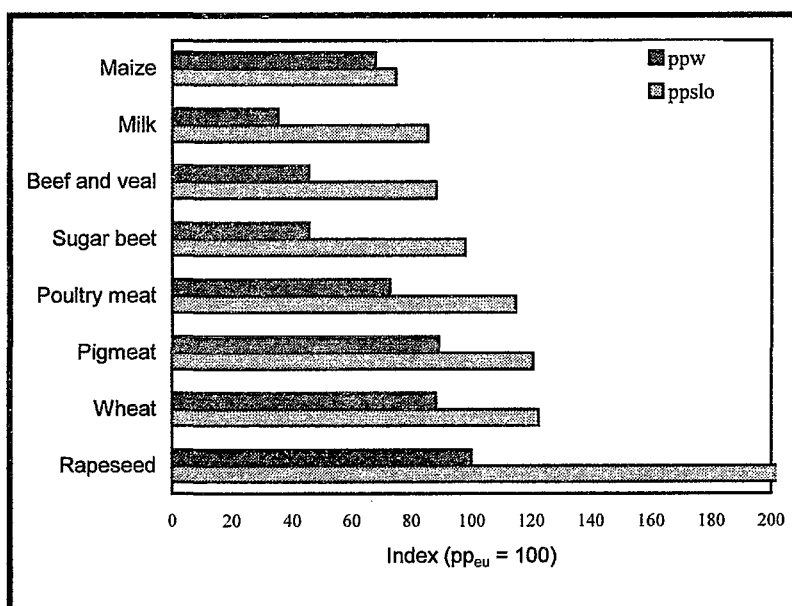
levels from 1992 to 1996 reveals that two groups of agricultural products can in fact be distinguished. The first group includes all those products with prices below the level of product prices in the European Union (food cereals, beef and milk). The second group is represented by farm products with prices which do not differ significantly from the prices in the European Union (sugar beet) or even reach above the corresponding EU price levels (pigs for slaughter, wheat, rapeseed, poultry meat).

Table 11 - Producer prices of some staple Slovene agricultural products

Product	ECU	1992	1993	1994	1995	1996
Wheat	per t	164	173	175	173	183
Barley	per t	144	164	144	123	134
Maize	per t	126	129	123	117	115
Sugar-beet	per t	35	49	39	49	48
Potatoes	per t	137	172	127	117	112
Beef (live animals)	per t LW	1,227	1,249	1,389	1,658	1,518
Pigs (live animals)	per t LW	1,435	1,188	1,218	1,316	1,297
Poultry	per t LW	919	833	839	867	926
Sheep	per t LW	2,064	2,028	2,073	2,653	2,236
Eggs	per 1,000	77	67	72	79	86
Milk	per t	267	271	311	349	328
Exchange rate	SIT/ECU	105.3	132.7	151.2	153.2	169.5

Source: Statistical Office of Republic of Slovenia

Figure 1 - Agricultural producer prices (pp) in Slovenia (SLO), the European Union (EU) and the World Market (w) in 1995 (EU=100)



Source: OECD, KIS

3.5. Agricultural budget support

After the transition there were some significant changes in the amount and the structure of the agricultural budget in Slovenia. The budget of the Ministry of Agriculture, Forestry and Food amounted to 67,000,000 US\$ in 1993 and 124,000,000 US\$ in 1995.¹⁴ An important share of the

¹⁴ Even when comparisons are made at constant prices, the changes in the budget follow the same direction. Differences are lower if they are expressed in US\$. In particular there was a difference between the exchange rate for US\$ and the inflation rate in 1995 when there was an appreciation of the exchange rate from 128.8 SIT/US\$ (1994) to

budget of the Ministry of Agriculture, Forestry and Food is dedicated to forestry and other non-agricultural activities (Table 12). Only 62% of the budget was used for agricultural supports in 1995. On the other hand, the budget resources of some other Ministries contribute to the total of agricultural budget support.

The greatest part of budget support is used for financing services in agriculture (nearly a third), while more than 15% constitutes supplementary payments for aggravated production conditions and for input subsidies, social insurance support and export subsidies. Most of the input subsidies pertain to interest rate subsidies, followed by the purchase of breeding animals and seeds. Supports can be acquired for credits that are used to finance production (only for certain agricultural products) and for investment credits. Direct investment supports are given only for the renewal of plantations and modernisation of infrastructure (seed centres, centres for breeding animals). The Government also supports around 50% of the social insurance payments for farmers.

Some important changes are currently being made with the adoption of the mechanism of agricultural policy interventions in Slovenia. In the years 1993-1996, as compared to 1992, there were more budget funds given to reduce the costs of production in areas with aggravated production conditions and fewer budget allocations for input subsidies. There is a steady increase in the proportion of budget expenditure allocated to finance the activities of general services. This is due to the fact that several agriculture-related activities which have so far been financed by the local communities (veterinary services, all sorts of administrative work, etc.) are now financed through the State budget system.

Table 12 - Agricultural budget support in Slovenia (1992-95)

	mio US\$			
	1992	1993	1994	1995
Budget MAFF	93,067	76,917	83,960	123,966
- from this for non-agricultural use	30,330	18,341	21,445	45,875
Agricultural Budget Support MAFF	62,734	58,575	62,515	78,091
Agricultural Budget Support - other Ministries	19,042	9,222	8,751	12,607
Total Agricultural Budget Support	81,779	67,797	71,265	90,698
The structure of TABS by purpose	%	%	%	%
Direct payments	4.9	5.5	3.8	6.2
Input supports (incl. subsidy on interest rate)	19.4	13.9	12.7	11.7
Farm Investment support	8.0	8.1	5.1	3.2
Other structural measures from this:	41.6	57.1	63.0	62.2
Agriculture in disadvantaged areas	7.4	11.6	14.2	17.1
General services in agriculture	19.5	26.3	28.4	24.3
Social insurance support for farmers	7.5	11.4	12.2	13.9
Agrarian operations	6.3	6.0	6.0	5.3
Others	0.9	1.8	2.2	1.6
Rural development programme	1.4	1.2	1.4	1.3
Export policy measures	13.7	12.1	12.1	12.8
Others	11.0	2.1	1.9	2.6
TOTAL	100.00	100.00	100.00	100.00

MAFF = Ministry for Agriculture, Forestry and Food

Source: Agricultural Institute of Slovenia

118.5 SIT/US\$ (1995). Meanwhile the inflation rate was 13% (average upon average). This fact should be considered whenever prices are quoted in US\$.

3.6. Farm income

Currently, quite a moderately-sized body of information (farm panel data) is available as a basis upon which to evaluate the income situation in Slovene agricultural production. The Agricultural Institute of Slovenia applies model calculations to estimate farm income levels attained through individual farm products (Table 13), using the physical volume of production as weights. On the revenue side, the average yearly farm producer prices are adjusted by the value of direct budget support, which is expressed per unit of output. On the cost side, farm costs are estimated by means of model calculation and the accounting is made for the individual farm good. All aggregate computations refer to net agricultural production only.

Farm income estimates (measured with Net Value Added - NVA) suggest that the income situation in Slovene agriculture has improved after 1993. The major factors contributing to this situation were the positive growth of the physical volume of agricultural production, farm product price increases and the proportionally slower pace of price increases in farm inputs. Likewise, budget support has risen, though it did not, however, have a significant effect on the levels of farm income achieved. Especially large shifts in the volume of production took place in the case of field crops, which were also followed by substantial price increases. Livestock producers have experienced modest growth in the volume of production and prices; considerable positive changes, however, emerged with the budget support policy. This is the result of significantly higher budget supports given to beef and lamb breeders.

Table 13 - The evolution of farm income in Slovene agriculture, 1992-1995

	Million ECU				Index (previous year=100)		
	1992	1993	1994	1995	1993	1994	1995
Physical volume of production 1)	632	620	663	704	98.0	107.0	106.1
The value of production (current prices)	640	592	653	778	92.5	110.3	119.2
Direct budget support	30	22	21	27	74.3	96.1	125.7
REVENUE	670	614	674	805	91.7	109.8	119.4
- Material costs and devaluation	481	455	470	517	94.5	103.5	110.0
Farm income earned (NVA)	188	159	204	288	84.7	128.0	141.0
Real (parity) NVA	195	216	260	313	110.6	120.6	120.2
Parity income (% NVA)	96.4	73.9	78.4	92.0	76.6	106.1	117.3

1) The volume of production evaluated on the basis of average prices from 1993-95 (in ECU)

Source: Agricultural Institute of Slovenia

An additional appraisal of farm income levels attained is made through the estimation of parity income. This parameter also points towards the improvement of farm income levels in Slovene agriculture after 1993. In 1995, the average real farm income has increased by some 17% as compared to that of the previous year. Despite a considerable improvement in the farm income situation of Slovene agriculture in 1995, not even the most efficient agricultural producers have met parity farm income levels. There are, however, large differences between individual farm commodities. The biggest discrepancies in parity income levels in 1995 emerged in the case of coarse grains, hops and grapes; less than 85% of the parity income levels were achieved in cattle production. Farm income levels higher than corresponding parity income levels were enjoyed only by "above-average producers" involved in vegetable, poultry and pig production.

4. Concluding remarks and prospects

Slovenia is a net importer of agricultural and food products. It is realized that agricultural production plays an important role in the transitional period of the Slovene economy through the mitigation of the burden of social problems (unemployment and low income earned in the industrial sector). The Slovene economy has suffered great difficulties due to the loss of the former Yugoslav market; this has also been reflected in the agricultural food industry. With the restructuring of production and the re-orientation towards European markets, however, the situation is slowly returning to normal. Some agricultural markets are undergoing dynamic changes, production is growing and the specialisation process is proceeding unhindered. The process of increasing the average size of farms is still at its initial stages. A new class of "professional-type" private farms is emerging. However, the farms are mainly organised as part-time farms because of the shortage of available production and financial resources.

With the more rapid development of the whole Slovene economy and the creation of new jobs, we can also foresee a more important shift concerning farm structure, even though very rapid changes (as will be the case with production) cannot be expected. The key elements (physical constraints) which preclude a significant increase in the number of professional farms in Slovenia are the prevailing conditions of production and the environment, the immobility of the main production resources (land, labour), and the deficiencies in land markets, etc. Peasant farmers with no real (economic) alternatives will try to keep their land and in so doing will quite possibly hinder the development of viable farms in the Slovene private sector. If the unemployment level remains high, it is expected that the structural changes will probably be hampered. Therefore, it is really crucial that the Slovene Government initiate the process of positive structural changes in the private farm sector.

An increase in specialisation and the volume of production is expected in the near future; in the next 5 to 10 years, Slovene agriculture might achieve physical yields similar to those of the farms in adjacent Alpine regions. Self-sufficiency is expected to increase, but Slovenia will remain a net importer of agricultural and food products. Some agricultural markets (milk, poultry) will be characterised by surpluses which will, in turn, have a marked effect on the price movements of these staple Slovene farm commodities.

The current agricultural policy attempts to create a system of market policy similar to that prevailing in the European Union. Import levies have been introduced and now represent the most important market price policy measure. The Government has taken a strong monopolistic position in the wheat, dairy and sugar markets. Producer prices are higher than those prevailing on the world market, and are approaching the existing farm producer price levels in the EU market. Direct payments as income support for farmers are being introduced gradually. The adopted mechanism of agricultural policy interventions is based on price supports (foreign trade protectionism and other measures on the domestic market). Under such conditions, agricultural policies cannot be successful in the long run. As it is a small country, Slovenia should eventually open itself up; it has already embarked upon this process.

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