Readiness of the Czech agriculture for the EU accession

Připravenost českého zemědělství na vstup do EU

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Abstract: The paper concentrates on analytical findings of the RIAE in the sphere of problems associated with the readiness of Czech agriculture for the EU accession. An analysis of the present situation of Czech agriculture is followed by an assessment of potential impacts of the EU conditions on the economic position of the main agricultural commodities. The predictions are conceived by variants, because the future parameters of the CAP are still under negotiations. The conclusions are oriented on the summary assessment of the readiness of Czech agriculture for the EU accession.

Key words: agriculture, Czech Republic, EU accession

Abstrakt: Příspěvek soustřeďuje analytické a predikční poznatky VÚZE ve vztahu k problematice připravenosti českého zemědělství na vstup do EU. Kromě analýzy současného stavu zemědělství ČR zahrnuje posouzení možných dopadů prostředí EU na ekonomickou pozici hlavních zemědělských komodit. Predikce jsou pojaty variantně, neboť budoucí parametry SZP pro zemědělství ČR jsou stále v procesu vyjednávání. Závěry jsou zaměřeny na souhrnné vyhodnocení připravenosti českého zemědělství na vstup do EU.

Klíčová slova: zemědělství, ČR, vstup do EU

PRESENT SITUATION OF CZECH AGRICULTURE FROM THE POINT OF VIEW OF ITS READINESS FOR THE EU ACCESSION

Main factors influencing the development of Czech agriculture during the reform period

Czech agriculture has developed during the reform period under conditions, which have showed a half of the total supports compared with the EU conditions. Expressed by the Producer Support Estimate (% PSE), the average level of supports for Czech agriculture in 1999–2001 amounted to 19% compared with 36% in the EU (see Figure 1). The difference is also caused by the level of custom tariffs for agricultural products, that in the CR being about 2–2.5 times lower than in the EU.

Beside this, the Czech pre-accession agricultural policy has (particularly since 2001) a structure different from

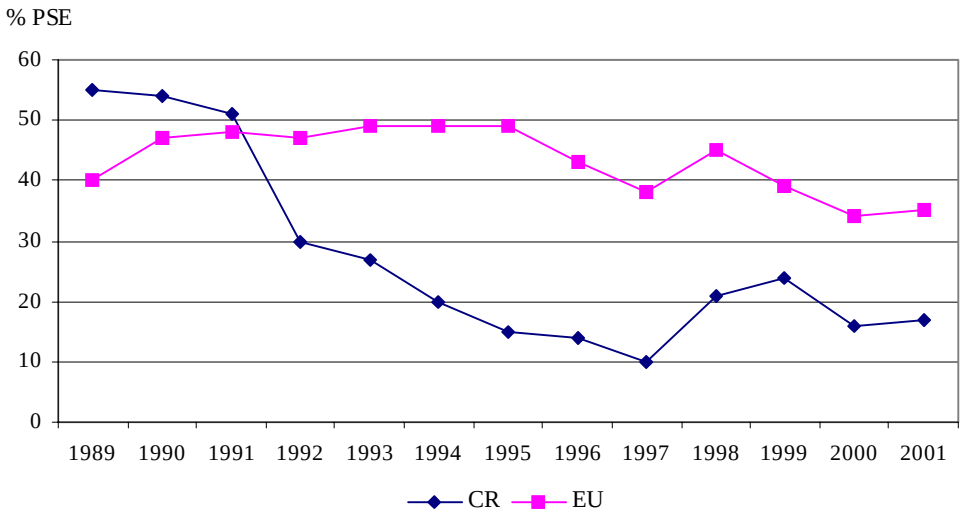

Figure 1. Supports for agriculture in the CR and in the EU in 1989– 2001 (% PSE)

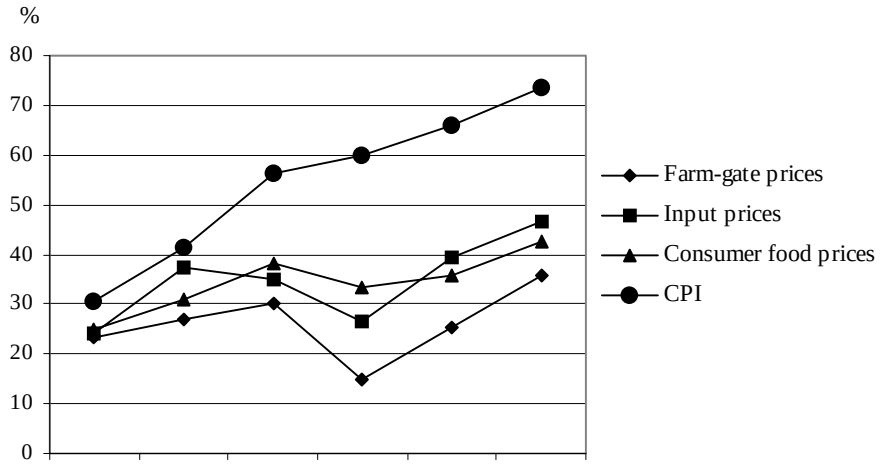

Figure 2. Price developments (1993 = 0)

the present CAP: whilst almost 90% of the EU financial sources for agriculture are devoted to market price and production supports and only 10% of the sources are oriented on structural supports, the Czech agricultural policy invests to market and production supports only about 70% of the domestic sources and more than 30% of the sources are oriented on the structural development of agriculture.

Price relations in the Czech agrarian market have developed in two phases. During the first phase in 1990–1992, the price liberalisation and the abolition of consumers' subsidies for food were realised. New price relations substituted "non-market" prices from the pre-reform period, with an extreme squeeze of the "price scissors" between prices of inputs and farm-gate prices (FGP). The second phase after 1992 has been characterised by only a mild squeezing of the "price scissors": price index 2001/1993 for agricultural inputs is 146.8% and for FGP 135.8%[1] (Figure 2).

In addition to the mentioned factors, the process of the property transformation of agricultural capital has strongly influenced the development of Czech agriculture. The property transformation – being also a process of the initial allocation of agricultural assets – was (and still continues to be) realised according to transformation laws in the following forms:

– Restitution of agricultural assets, which has two sides: restitution of ownership rights (suppressed in the previous regime) and restitution of ownership titles (for the previously expropriated assets). Main part of (primary and secondary) restitution was realised in 1991–1993 and based on it, especially individual (family) farms emerged.
– Transformation of co-operatives as the case of a specific restitution and as the process of the establishment of new succession farms. The transformation of co-operatives was realised in 1992–1993. The assets of co-operatives (without land and the original deposits of members) were distributed among entitled persons according to invested land, other assets and labour. A part of assets of the entitled persons, who did not decide to be members of the succession farms, was left in the farms in the form of the so-called transformation shares as a future debt towards the mentioned entitled persons.
– Privatisation of agricultural non-land assets, which occurred in 1994–1995, including combinations of restitution and privatisation.

Present situation of Czech agriculture as a consequence of the past dependencies and reform processes – is the reform of Czech agriculture completed?

The initial allocation of capital in farms and the emergence of a new farm structure were consequences of the property transformation during 1991–1995. About 75% of agricultural land was left in usage in large co-operatives and companies (i.e. in collective farming) and about 25% of agricultural land was used by individual farms of various size (from 1 ha up to 3 000 ha). This farms structure has remained unchanged since 1995, only inside the category of farms as legal entities, the number of companies increased to the detriment of co-operatives (see Figure 3). The driving force of these changes has been an effort of co-operatives to avoid the settlement of the transformation shares to non-members and to enhance the flexibility of agricultural capital.

The new farm structure shows a marked dual character (see Figure 4). From the total number of 37 thousands farms (with land), only 5.2% of farms use 76.4% of agricultural land. To the contrary, the share of farms up to 10 ha amounts to 58.2%, but these farms use only 1.9% of agricultural land. The share of individual farms with more than 100 ha reaches to more than 60% of agricultural land

[1] It is not without interest that price index 2001/1993 for consumer food prices reaches 142.5%, whilst the CPI has increased by 173.7%.

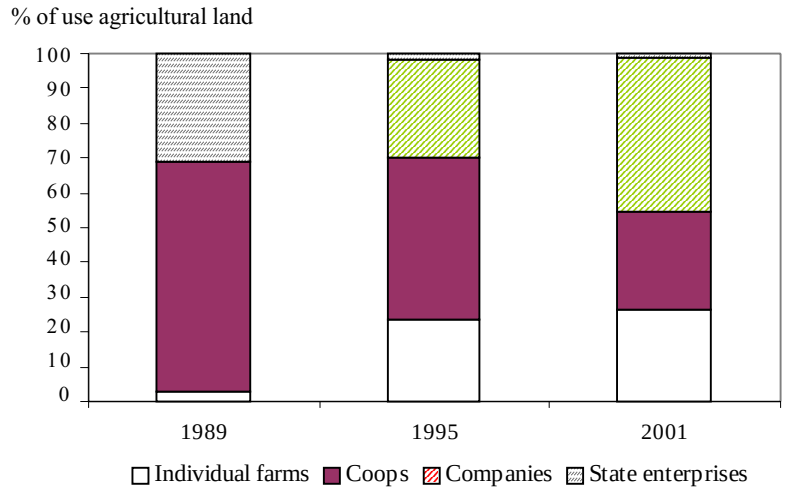

Figure 3. Farm structure development 1989–2001

in the given farm category. As a consequence of the applied transformation laws, the large majority of land in farms is leased (92% in average) from landowners, that is from private persons and the state, partly from municipalities.

Czech agriculture has to some extent adjusted to the reform economic conditions during 1989–2001. Compared with 1989, gross agricultural output declined by 30% (crop production by 23%, livestock production by 35%) and the number of workers dropped by more than 70%. Labour productivity has increased 2.4 times, the share of primary agriculture in the total GDP decreased to about 2% and the share of agricultural employment to about 3.4%. The yields in livestock production have outstandingly increased (in milk production by more than 40%), whilst yields in crop production – except sugar beet and some other commodities – have declined (in cereals by nearly 10%, in oilseeds by more than 11%).

It all brings into consideration a question, whether the reform of Czech agriculture is already finished. If we consider the reform as a parallel process of the property transformation (and the initial allocation of capital) and as a process of restructuring of farms in the sense of their basic adjustment to new conditions and a significant improvement of their efficiency, the answer to the question is still negative.

Speaking about the property transformation and about the capital allocation , there are more external factors, which can significantly interfere with the present farm structure in the near future. It is a question especially of:

– Completion of the agricultural assets restitution: about 3% from the total number of restitution claims are not still settled. Besides it, there are large land claims of the church still politically unresolved.
– Privatisation of the state land: according to the law from 1999, about 500 thousands ha of agricultural land shall be privatised (from the total acreage of 770 thousands ha of agricultural land in the ownership of the state). However, only about 10 thousands ha has been privatised by the end of 2001. The criteria for privatisation can

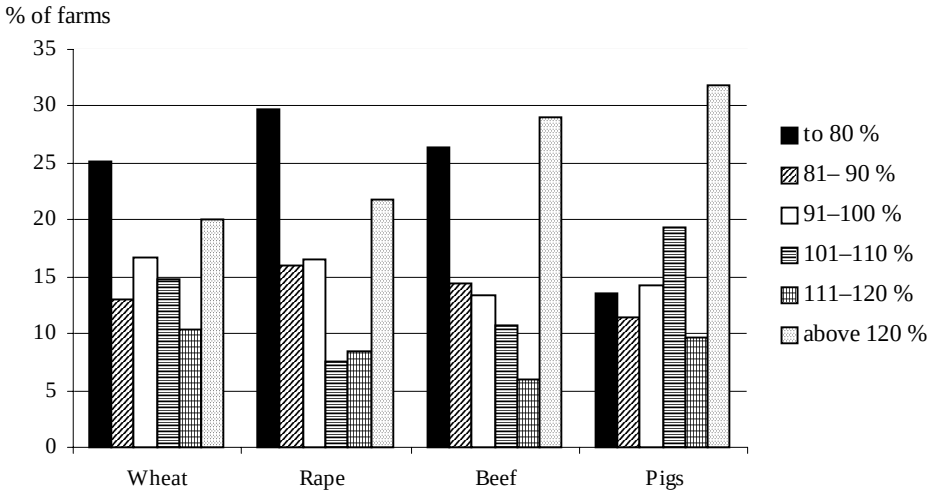

Figure 4. Frequency distribution of farms by their level of unit costs (2000; average = 100%)

essentially intervene in some farm categories[2]. Only Czech physical persons are eligible to buy the state land under it.

– A solution of the high indebtedness of farms. Farms have accumulated three generations of debts during the reform period: old pre-reform debts to the state, the so-called transformation debts (transformation shares of co-operatives, interest- free state loans for starting farming, debts for the privatised assets) and new bank credits (supported by the state as usual) on modernisation. The state already intervened in the transformation debts and tried (still without success) to change the transformation law to solve transformation debts of succession farms of the former co-operatives. Those farms owe to private persons (including individual farmers) about 13 bill. CZK and utilise the adequate capital free of charge. The initial allocation of capital in agriculture is thus still encumbered by inequity. It is most probable that the state will intervene in writing-off the debts still in the pre-accession period, in spite of the risk of a "moral hazard".
– Penetration of foreign capital into agriculture sharpening the competition for land lease. Foreign capital, much stronger than the domestic one, intrudes into the present farm structure and land usage. Nevertheless, the land market development and the disclosure of land market prices are positive effects.

Even restructuring of Czech agriculture is not completed yet. During the reform, the allocation, orientation and dimension of production in farms have changed and farms have adjusted themselves to certain extent to price relations for labour, land and capital. However, their restructuring – especially from the point of view of future conditions – has to continue particularly in the following ways:

– Simplification of the internal farm structure: Co-operatives and joint stock companies, representing the decisive categories of farms in Czech agriculture, battle with extremely intricate internal relations, with conflicts of interests among working (self-employed) and non-working owners, hired workers, hundreds of land owners and owners of other capital (e.g. owners of transformation shares). Their management works through the conflicts particularly with self-employed owners. However, the share of these workers has been declining year by year and the "manoeuvring room" for management has been thus growing[3]. It should be considered that the distribution of value added generated in farms (including supports) is realised through these intricate relations [4].
– Improvement of farm efficiency: the present Czech agriculture is characterised not only by its dual farm structure, but also by an extreme dichotomy in farm efficiency. There is a large number of very efficient farms (especi-

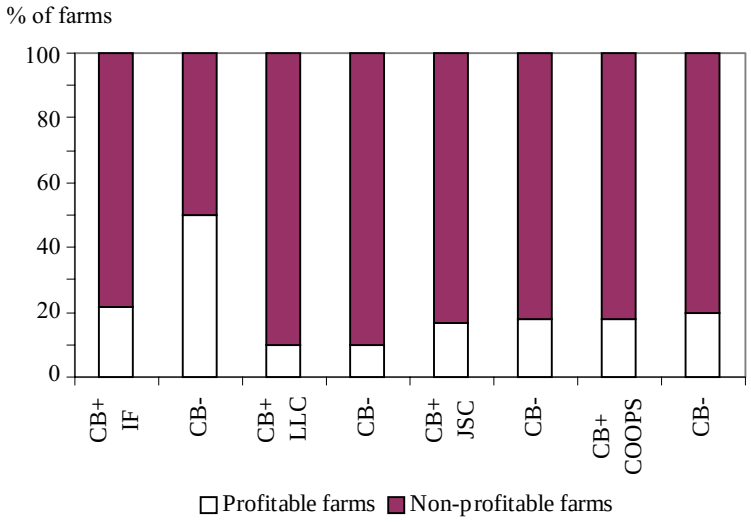

Figure 5. Frequency distribution of farms by their profitability in 1999 (IDARA project)
CB+ = costs/revenues - subsidies + opportunity costs
CB– = costs/revenues + subsidies - opportunity costs

[2] Particularly farms which privatised agricultural non-land assets in 1994–1995. According to the law, these farms have a prior claim to gain 50 % of their leased state land, but only 300 ha as a maximum. However, the privatised farms are often farming 1 000 and more hectares and they privatised other agricultural assets adequate to the acreage.

[3] According to the RIAE survey (Mathijs 2001), the average number of owners – members of co-operatives ranges about 200 persons and in case of joint stock companies nearly 500 persons.. The share of working owners in the total number of owners – members of coops amounts to 30%, in case of joint stock companies 15%, but in case of limited liability companies, it overreaches 90%. The share of working owners in the total number of workers in co-operatives reaches up to 70%, in joint stock companies up to 60%, but in limited liability companies to only about 20%.

[4] It is useful to remind in this context, that a large majority of landowners do not work in agriculture or do not live in rural areas.

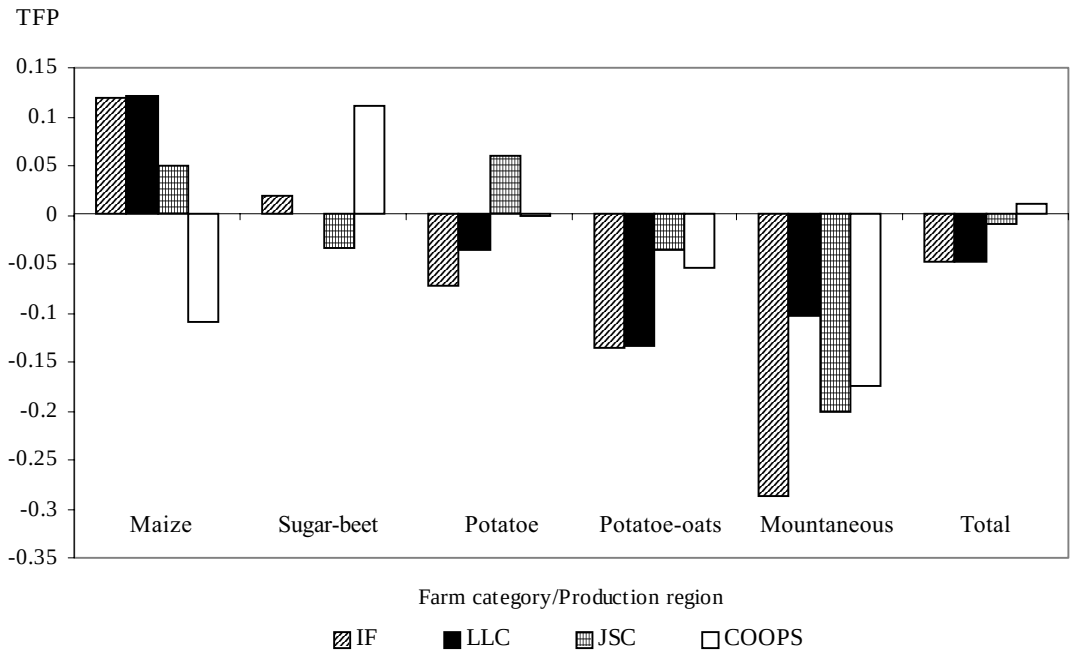

Figure 6. Total factor productivity (TFP)[1] by farm categories and production regions (1998–1999, IDARA project)

[1]Thornqvist-Theil index: Input output ratio (see Capalbo, Antle 1998)

ally larger individual farms and some well managed companies), but approximately the same number of inefficient and non-profitable farms survives (Novák 2002; Matthews 1999; Mathijs 2001; Davidova, Ratinger 2002). For example, the range of unit costs of agricultural products is extremely large (see Figure 4): one fifth to one quarter of farms showed unit costs lower than 80% of the average unit costs in 2000 and almost the same number of farms presented unit costs higher by 20% than the average). A similar picture is viewed regarding farm profitability (see Figure 5). Larger farms (particularly those located in better natural conditions) show, due to their economy of scale, better total factor productivity (see Figure 6).

– Increase of the economic (financial) stability of farms: Czech farms are heavily indebted (see transformation). The ratio of debts to equity (leverage) amounts to 0.8 in average (in Hungary, it is 0.4), the ratio of debts to the total assets amounts to 0.44 in average (in Hungary 0.16).
– Substantial improvement of co-operation and organisation of farms in their interaction with the up- and downstream firms, or in their penetration into the up- and downstream sectors, respectively. The present Czech agriculture shows a fragmentation of interests, the background of which are conflicts of interests in economic matters (the uncompleted property transformation) and also political aspects. Marketing organisations of farmers, established with the state support, suffer from low discipline of their members, which reduces their market power towards e.g. processors (milk, meat, fruits, vegetables).

Other aspects of restructuring can be coped with by a gradual adjustment of farms to economic and market conditions. There is the question for example of:

– improvement of the production allocation in compliance with natural and market conditions (the share of arable land in the total agricultural area is still inadequately high, about 72%);
– changes in production orientation of farms, e. g. orientation on non-food use, on bio-products and regional products, diversification to non-agricultural activities, etc.;
– improvement of marketing orientation of farmers in the fields of quality and food safety, animal welfare and production of public goods.

It should be added that restructuring shall go ahead also in the state administration, particularly in building and proper functioning of institutions with links to the CAP and structural policy.

Causes of lower efficiency of Czech agriculture and barriers for restructuring

The mentioned transformation laws and agricultural policy, in 1995–2000 oriented on income supports and on stabilisation of the farm structure, belong to the most influential external factors. Among internal factors and causes, there belong especially:

– Lower technological efficiency, that is:
  – lower yields, which are – according to commodities – by 20% lower in average than in the EU; especially the yields of forage crops are lower (in case of grassland by about 50% than in the EU), with increasing demands for land needed for livestock production;
  – lower labour productivity, which amounts – in spite of the exodus of labour during the reform – to about 50% of the EU level.;

– higher unit consumption of variable inputs (feeds, fuel, etc.) and higher fixed costs and usually also inadequate overhead costs.

The level of input usage corresponds to certain extent with price relations of inputs (especially between prices of labour and capital including land). The input usage is also dependent on the way of the initial capital allocation and issuing from this, on the possibilities of farm management adjustment[5].

– Lower quality of farm management: especially younger workers and workers with the economic education left farms during the reform. New farm management recruited often from the original middle-level management specialised on machinery, zoo- and agro-technology, without any economic and marketing education.
– Lower level of the co-operation and solidarity among farmers, that being a barrier for the formation of common and effective marketing organisations.

Among the most serious barriers for restructuring, there belong especially:

– insufficiently developed institutional infrastructure of the society, e.g. weak enforcement of contracts for farmers;
– insufficiently developed land market, to a large extent blocked by the slow progress in the land consolidation in cadastres: only 203 cadastres from the total number of 13 000 have finished a complex land consolidation after 10 reform years;
– discrepancies between land ownership and land usage (92% of land is leased on farms), creating impediments for long-term investments, for gaining (mortgage) credits and for a new land usage (e.g. the conversion of arable land into grassland);
– already mentioned extremely intricate structure of interest groups especially in large farms (co-operatives and joint- stock companies);
– barriers in labour market: on the one hand, there is a problem of the protection of jobs for owners of farms (but the weight of self-employed owners has been wading out, as was already mentioned), on the other hand, there is a shortage of skilled and specialised workers, including the succession generation for many family farms;
– economic and political fragmentation of farmers.

The shortage of financial sources for modernisation and for some variable inputs (fertilizers, etc.) can be also ranged among the barriers. It is the reality, however, that more than 60 bill. CZK of credits, largely used on modernisation, have been pumped with the state support into agriculture during 1994–2001. Rather than a shortage of machinery and technologies, there is the question of efficient utilisation of the new inputs. Above it, the purchase of machinery is not sometimes accompanied by the adequate reduction of labour, with the consequence of labour and capital intensive way of production.

POSSIBLE IMPACTS OF THE EU ACCESSION ON THE ECONOMY OF MAIN AGRICULTURAL COMMODITIES

Prerequisites of predictions

The RIAE has been predicting and assessing the possible impacts of the EU accession on the economic position of Czech farm sector for a longer time. For this, it uses simpler structural models and the non-linear optimising model AGRO-3 created by the RIAE. The impacts are oriented to the horizon of 2004–2005 (short-term impacts), or to the horizon after 2005 (long-term impacts). The baseline (comparative) period is the 2000 average (real data) and 2001 (preliminary data). The predictions are further based on the following suppositions:

– development of macro-economic variables for the CR and the EU (exchange rates, inflation, price of labour – preserving 75% parity towards agriculture) from the models of the Czech Statistical Office, the Czech National Bank, etc. (Vintrová 2002);
– future farm-gate prices in the EU from the OECD predictions (OECD 2001);
– growth of intensity in Czech agriculture (only as a consequence of the general progress – roughly 1.5% per year);
– direct (commodity) payments in 2004–2006 by variants (0%, 25–35%, 100%), and the LFA supports 2004–2006 on the level and with the orientation as in the CR in 2001 (supports for grassland and for cattle breeding on pastures).

The production costs maintain the structure of the baseline. Investments on *acquis* in the field of food safety, animal welfare and nitrate directives are included into depreciations.

Limiting conditions are represented by the production limits according to the proposal of the European Commission (European Commission 2002), or according to the Czech proposals (Position Document of the CR 1999).

Results of predictions

Possible impacts on the economy of main agricultural commodities are gathered in Table 1. Under the given suppositions, it is possible to interpret Table 1 by commodities as follows:

Wheat, barley, rape seed

– All given commodities show a high level of the total profitability at present. The profitability ranges from 17% (rape seed) to more than 21% (wheat).
– At the same time, all given commodities show negative values of % PSE in the last 4 years. It is caused particu-

[5] The "bottom-up" approach, usual particularly in individual farms, enables to form a better structure of capital than the "top-down" approach, usual in collective farms. These farms – also on behalf of the guarantee of employment for their members, preserved a higher portion of the much more labour demanding livestock production.

Table 1. Economic position and competitiveness of the main agricultural commodities

Commodity	Farm-gate prices index 2004–6/2000–1			% PSE average 1998–2001		P average 2000–1		P – average 2004–6			
								CR			EU[1)]
	CR	EU (CZK)	EU (EUR)	CR	EU	CR	EU	100%	supports reduced	0%	
Crop production											
Wheat	104.30	93.86	108.69	–4	48	0.21	100	0.47	0.10	–0.05	–4.29
Barley	97.33	92.45	107.03	–13	57	0.18	100	0.52	0.08	–0.10	–7.84
Rape seed	102.33	103.51	119.78	–12	35	0.17	100	0.35	0.05	–0.08	–7.46
Sugar beet	145.21	86.43	100.00	21	52	0.21	100	0.43	0.43	0.43	–9.43
Livestock production											
Milk – ARL	122.62	81.65	94.47	30	47	–0.09	100	–0.01	–0.03	–0.04	–12.08
Milk – GSL	122.62	81.65	94.47	30	47	0.01	100	0.12	0.10	0.09	–12.08
Beef – ARL	111.82	73.32	84.89	31	82	–0.15	100	0.02	–0.15	–0.22	–14.85
Beef – GSL	111.82	73.32	84.89	31	82	0.21	100	0.68	0.41	0.29	–14.85
Suckler cows	111.82	73.32	84.89	31	82	0.15	100	0.45	–0.02	–0.23	–5.48
Pigs	77.86	86.82	100.53	21	22	0.22	100	–0.10	–0.10	–0.10	–8.95
Poultry	89.98	84.19	97.44	42	35	–0.02	100	–0.17	–0.17	–0.17	–11.76

1) Relative change to 2000–1
PSE = Producer Support Estimate
P = total profitability = ((Farm-gate Price incl. Commodity Supports/ Unit Costs) – 1)
ARL = category of cattle outside LFA and with forage area on arable land
GSL = category of cattle in LFA and with forage area on grassland (2000–1 incl. pastures)
Suckler cows: with calves to 280 kg lw transferred to store cattle

larly by the agricultural policy measures in export (the licence policy limiting exports). To the contrary, EU producers are heavily subsidised (see barley – 57% PSE) by the CAP market price supports (tariffs, export subsidies), and by the CAP direct payments.
– Under the CAP conditions in 2004–2006 and compared with the baseline, very mild nominal growths of prices for wheat and rape-seed are expected.
– After the accession, no scenarios with direct payments would generate losses in production. However, lower payments could worsen the economic position compared with the present situation. All considered commodities could generate losses under the CAP without direct payments.
– As a summary, it is possible to expect that production of the considered commodities shall preserve a growing tendency, limited by the so-called basic acreage (including set-aside) and by the basic yields. Czech agriculture could develop as an important net exporter of the given commodities (especially if we consider a possible parallel decline in livestock production in the CR).

Sugar beet – sugar

– The producers of sugar beet and sugar in the CR and in the EU are functioning under the similar market organisations at present. Under the given organisations, sugar beet production is profitable in both regions (21% total profitability in the CR).
– Relatively high domestic farm-gate prices correspond with the high level of supports for domestic producers (21% PSE in the CR and 52% PSE in the EU as the average of 1998–2001).
– After the entry, it is possible to expect more than 45% increase of farm-gate prices. In all scenarios, the production of sugar beet would remain highly profitable (43%) and the production of sugar beet and sugar would be preserved up to the level of the negotiated national quota.

Milk

– Milk production is basically provided by two technologies: in sheds with forage feed mainly from arable land, and on pastures with forage feeds mainly from grassland in the LFAs The present Czech agricultural policy additionally supports cows on grassland and in the LFAs. It is why milk production is divided into two commodities differing by the level of supports – milk from cows on arable land (ARL) with minimum supports and milk from cows on grassland (GSL) with maximum supports, including the LFA supports linked with grassland.
– Particularly in "stable fattening" technologies, additional investments to comply with the nitrate directive should be considered, apart from higher labour inputs linked with these technologies.
– Milk belongs among commodities with limited production through individual quotas in the CR and in the EU. It also belongs among commodities with the highest

supports (30% PSE in the CR and 47% PSE in the EU, as the average in 1998–2001). In spite of this, milk production in the ARL category of cows is not profitable in average; the production in the GSL category of cows shows a moderate total profitability (1.2%).
– Compared with the baseline, milk farm-gate prices would increase by nearly 23% after the entry. However, the ARL category of cows may not be profitable even under 100% of direct payments and only producers with lower than average costs would realise a profit. The GSL category of cows with the expected higher LFA supports would probably be profitable under all scenarios.
– Under the expected conditions, milk production in the CR would have good chances to survive and to develop, particularly if more production than at present is provided by the GSL category of cows. From this point of view, the national quota according to the EC proposals appears to be limiting both the actual and possible production potentials of Czech producers.

Beef

– As in the milk sector, there are two commodities differing by feeding technologies – ARL and GSL. Besides this, there is a category of suckler cows with a specific importance linked with multi-funtionality and with higher level of supports.
– Beef production is heavily supported in the CR and in the EU (30% PSE in the ČR and even 82% PSE in the EU, as in the 1998–2001 average). In spite of this, beef production in the CR is not profitable in average.
– After the entry, a slight increase of farm gate prices is expected (by about 11.8% compared with the Czech baseline). Under the reduced direct payments, the ARL category of beef, and under all scenarios, the category of suckler cows would have problems with profitability. The future of suckler cows is connected with higher farm-gate prices for beef of higher quality, or with permanent and above-standard supports, respectively.
– Nevertheless, with a better utilisation of acreage for forage and feeds, beef production could develop and fill the negotiated national limits for individual categories of cattle. However, the national quota for milk or the contingent capping of supports (e.g. only for 90–120 animals per farm) could limit beef production, provided now mainly in large-scale units.

Pigs

– Under the present high farm-gate prices, pig production in the CR shows the outstanding profitability (22% in average), even without any direct supports. High farm-gate prices in the CR and in the EU issue in a relatively high level of supports (21% PSE in the CR, 22% in the EU, as the average 1998–2001).
– Pig production is not directly supported in the EU. According to the OECD predictions, the EU farm-gate prices in 2004–2006. It would cause a decline of the prices in nominal terms by more than 22% (compared with the baseline) for Czech producers after the accession. Above it, Czech producers would have to invest to comply with the nitrate directives, animal welfare standards, etc.
– Under the expected conditions and without lowering production costs, the economic position and competitiveness of the average Czech producers would worsen (up to by 26%) and the production would not be even profitable (profitability –10%).
– The future position of average Czech producers under the EU conditions can be assessed as a risk position. Nevertheless, producers with under-average unit costs (especially some larger specialised enterprises without land, providing today about 60–65% of the marketed production) shall be able to overcome the risks, with a contingent utilisation of further (foreign) investments and other measures leading to the reduction of unit costs.

Poultry

– As in pig production, the majority of marketed poultry production is provided by large specialised enterprises without land. According to the RIAE surveys and in spite of high farm-gate prices, poultry production is slightly non-profitable (–0.02) at present. The level of supports is extremely high in the CR, overriding even the level of the EU supports (42% PSE in the CR compared with 35% PSE in the EU, as in the 1998–2001 average).
– After the entry, more than 10% decrease of the farm-gate prices (compared with the baseline) is predicted. Czech poultry production could be profitable only with a significant suppression of average unit costs (by 17% at minimum). Above it, also this sector requires higher investments to fulfil the *acquis*.
– Under the expected EU conditions, Czech poultry production shows a risk position, with possible impacts on producers as in the case of pig production.

CONCLUSIONS

Czech agriculture has to finish its transformation and to continue in its restructuring, regardless of the EU accession. However, the entry should form a driving force and an accelerator of necessary changes. It is certain that the macroeconomic and other conditions will change the relations among input prices significantly. Particularly prices of labour and land should outstandingly increase in the future[6]. With the expectation of an only mild growth of farm-gate prices farms with a mean effectiveness, farmers will have to significantly reduce their unit costs or to exit from the market. At the same time, a solution of the

[6] It is expected that labour prices would increase by 63% during 2000–2006 and land prices (rents) even by 50%, whilst prices of other inputs only by 33%.

present dichotomy in farm efficiency represents a considerable potential for a future position of Czech agriculture in the EU. Besides this and in spite of the expected marked growth of prices for labour and land, the prices of both factors will not reach the average EU price level in 2004–2006[7]. However, a shift from the present labour intensive to a capital more intensive agriculture need not be accompanied necessarily by larger investments on many farms. Anyway, farm investments will be necessary to comply with the *acquis*.

Based on the presented commodity views, it is possible, with respect to the EU accession, to conclude:

– Czech agriculture preserves higher competitiveness for a longer time, particularly in commodities, which do not require a higher level of labour quality and a higher level of technologies (e.g. cereals, oil seeds) and vice versa (e.g. livestock production).
– Under the expected EU conditions, especially crop commodities on the basic area of arable land would have better opportunities to develop. The GSL categories of cattle would also have good prospects for their development, but with some risks for suckler cows. However, this category forms a background of the multifunctional agriculture in unfavourable regions (i.e. on about 60% of the Czech agricultural area). Pig and poultry production seem to be risk sectors in all scenarios for 2004–2006.
– The zero level of supports with unreduced unit costs would lead to a serious jeopardy of Czech producers, except for sugar beet and the GSL category of dairy cows. The reduced level of supports would bring a sufficient profitability to commodities on arable land, but still jeopardising the average pig and poultry producers and the ARL cattle categories. The full level of supports could markedly shift the structure of agricultural production to the benefit of crops in the basic area (cereals, oilseeds, pulses). Czech agriculture would thus be more oriented on crop production with the lower value added. With a possible reduction in pig and poultry production, a larger part of feed grains would have to be exported (including exports to the EU countries).
– However, natural and climatic conditions on the prevailing part of Czech agricultural area predestine Czech agriculture to a substantially more intensive production of public goods in the framework of the European Model of Agriculture.

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[7] Price level of all goods in the CR shall reach about 55% of the EU average price level in 2006. Wages in industry in nominal terms shall reach to about one third of the wages level in the German industry.

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