The Trends of the Agrarian Foreign Trade of CR after Accession to EU, Competitiveness of Commodities

J. Burianová

Czech University of Life Sciences Prague, Faculty of Economics and management, Department of Economics Theories

Abstract

The extent of agricultural foreign trade (AFT) of the Czech Republic (CR) increased markedly after accession to EU. The first part of this article is devoted to the trends during the period of 2004 – 2008. Detailed analysis of the CR AFT has been carried out for all 24 items of the basic food goods during the same period for the assessment of competitiveness of individual commodities. The Balass indicator RCA (Revealed Comparative Advantage) was used for this analysis, as well as the Michaely index that shows the specific measure of specialization for export. The method of logarithmic decomposition, which makes it possible to determine the effect of prices and quantities to net export has also been used. This paper was processed within the framework of the Research Project of MSM 6046070906 "The economics of Czech agricultural resources and their effective use in the frame of multifunctional agri-food systems".

Key words

Agrarian foreign trade, foreign trade, competitiveness, competitive advantage, Balass RCA indicator, Michaely index

Anotace

Po vstupu ČR do EU výrazně vzrostl objem agrárního zahraničního obchodu (AZO). Vývoji v období 2004 – 2008 je věnována první část příspěvku. Pro stejné období je provedena podrobná analýza AZO ČR pro všech 24 kapitol základního potravinového zboží k posouzení konkurenceschopnosti jednotlivých komodit. K analýze byl použit Balassův ukazatel RCA „zjevné konkurenční výhody" (Revealed Comparative Advantage) a také Michaelyův index, který ukazuje na určitou míru specializace na export. Byla také využita metoda logaritmického rozkladu, která umožňuje stanovit vliv cen a množství na čistý export. Příspěvek byl zpracován v rámci VZ MSM 6046070906 „Ekonomika zdrojů českého zemědělství a jejich efektivní využívání v rámci multifunkčních zemědělskopotravinářských systémů".

Klíčová slova

Agrární zahraniční obchod, zahraniční obchod, konkurenceschopnost, konkurenční výhoda, Balassův RCA ukazatel, Michaelyův index

Introduction

The incorporation of the Czech Republic into the European market area following its EU accession has been accompanied by a significant opening of its national economy. Its export is being assisted with a much larger trading area without customs restrictions but it is also exposed to a much tougher competition. These factors that had influenced the agrarian foreign trade during the observed period of 2004 – 2008 are demonstrated by a distinct change in the trade volume but also, gradually, by the change in the net export structure.

Some commodities have become more dominant on the foreign market while others, including the "traditional" ones, have been gradually losing their position. The European agrarian market is developing and the current situation in the CR export is documented by the results of the year 2008. The changes are particularly noticeable in comparison with the results of 2004, i.e. the year of the EU accession.

In recent years, increasingly greater attention has been paid to the issue of competitiveness at both the national and supranational level. The success in the foreign trade activities is one of the standards of success of a given sector as well as of the whole national economy. Assessment of competitiveness for a given commodity usually takes place on the basis of easily determined and quantified data using certain recommended indicators.

Data and methods

Using RCA and MI indicators

Measure of competitiveness of individual commodities of the agrarian foreign trade of the Czech Republic can be provided by the net export of a given commodity in relation to the total turnover of a given commodity or the total turnover of the agrarian trade. It is not possible to statistically determine the whole complex of economic and extraeconomic factors that influence the competitiveness of individual commodities – however, an RCA supplementary indicator (Revealed Comparative Advantage) can be used. To calculate this indicator the following method has been used. The RCA concept was expressed by its author, B. Balassa [1], as follows:

RCAj = (EXj –IMj) / (EXj +IMj) * 100

where EXj and IMj are values of export and import of the agrarian foreign trade of a "j" commodity into a given area. The RCA indices are determined

for a more detailed sector structure of the agrarian production – 24 chapters of food commodities. We can consider as competitive those commodities which reach balanced high positive values of the RCA index during the observed period. The commodities whose RCA values are in high negative figures over a long period are assessed as having a non-competitive standing on the market.

The Michaely Index is used in the following form:

MIj= EXj / EX - IMj / IM

where EX and IM are values of total export and import. This index shows measure of specialization towards export or insufficient specialization in specific groups of commodities. For $0 < MI < 1$ the index indicates a certain measure of specialization for a given commodity, while for $-1 < MI < 0$ the index shows an insufficient pro-export specialization for a given commodity.

Logarithmic decomposition

If we designate export as EX, import as IM, net export as $X = EX - IM$, price as P, quantity as Q, with indices E for export and I for import, Δ as a change in the value and the index value (share) as IN, then INEX is an in-between-the years index of the export value, INQE and INPE are in-between-the years indexes of the export quantity and export prices, and the same is valid for import (INIM, INPI, INQI). The synthetic model of the net export analysis by logarithmic decomposition then arises from the following equations:

$$\Delta X = \Delta EX - \Delta IM \quad \text{for} \quad EX = P_E \cdot Q_E \quad IM = P_I \cdot Q_I$$

$$\Delta EX = \Delta EX_{PE} + \Delta EX_{QE} \quad \text{and by analogy for import} \quad \Delta IM = \Delta IM_{PI} + \Delta IM_{QI}$$

and in an aggregate equation

$$\Delta X = \frac{\ln IN_{PE}}{\ln IN_{EX}} \cdot \Delta EX + \frac{\ln IN_{QE}}{\ln IN_{EX}} \cdot \Delta EX - \frac{\ln IN_{PI}}{\ln IN_{IM}} \cdot \Delta IM - \frac{\ln IN_{QI}}{\ln IN_{IM}} \cdot \Delta IM$$

where individual items on the right gradually indicate the impact of the export price and export quantity as well as the import price and quantity on the change in net export. Then logically,

- the term ΔEX_{PE} - ΔIM_{PI} determines the export and import prices impacts on net export and

- the term ΔEX_{QE} - ΔIM_{QI} determines the export and import quantities impacts on net export.

The impacts of individual comparable commodities can be added up into larger aggregates of agricultural as well as food net export. For usage of this method see also [3] and [4].

Results

Development of the Agricultural Foreign Trade (AFT) in Czech Republic

The value of export and import has been summarized in millions of CZK for 24 aggregates

of commodities in accordance with the CN numerical identification, and the balance and turnover were determined for 2004, the year of EU accession. The AFT export in this year was 61,526.1 million CZK, while the 93,543.6 million CZK import greater by 32,017.5 million CZK, and the total turnover exceeded 155 billion CZK.

Table 2. shows the most important items of the AFT export of the Czech Republic in 2004 and their share in the total export. The first two, CN 04 Milk, cream, eggs and CN 17 represent 25 % of export and the 6 listed commodities represent 56.4 % of export.

When we summarize the CR AFT results for 2008 in the same way, we will obtain Table 3.
The results are shown in Table 1.

CN	Commodity name	Export	Import	Balance	Turnover
1	Live animals	3 268.2	634.4	2 633.9	3 902.6
2	Meat and consumable chitterlings	2 526.4	7 231.0	-4 704.5	9 757.4
3	Fish, crustaceans, mollusks, and other water	1 240.0	1 510.7	-270.8	2 750.7
4	Milk, eggs, honey, edible products of animal	8 238.7	5 556.0	2 682.7	13 794.6
5	Products of animal origin not shown	617.5	1 026.7	-409.2	1 644.2
6	Live plants and flower products	269.2	2 664.3	-2 395.1	2 933.6
Sou	Vegetables, plants, tubers and edible roots	788.7	6 227.8	-5 439.1	7 016.5
8	Fruits, nuts, edible peelings of citrus fruit and	1 753.1	10 459.4	-8 706.2	12 212.5
9	Coffee, tea, yerba, seasonings	494.5	1 868.5	-1 373.9	2 363.0
10	Cereals	1 670.6	1 296.8	373.9	2 967.4
11	Flour-milling products, malt, starch, inulin,	2 538.5	556.7	1 981.8	3 095.2
12	Oil seeds, fruit, medicinal plants, industrial	3 619.3	2 730.5	888.8	6 349.8
13	Shellac, rubber, resins and other saps, plant	736.8	507.4	229.4	1 244.2
14	Plant materials for knitting and other plant	5.2	48.0	-42.8	53.3
15	Fats, animal and plant oils, edible waxes	1 226.3	3 984.4	-2 758.2	5 210.7
16	Products from meat, fish, crustaceans and	991.4	2 217.4	-1 226.0	3 208.8
17	Sugar and sweets	7 124.7	3 154.9	3 969.9	10 279.6
18	Cocoa and cocoa products	2 722.4	4 880.0	-2 157.6	7 602.4
19	Products from cereals, flour, starch, milk,	2 877.5	6 098.8	-3 221.4	8 976.3
20	Products from vegetables, fruits and nuts	1 719.8	4 389.2	-2 669.4	6 109.0
21	Various food products	5 910.8	7 964.4	-2 053.6	13 875.1
22	Beverages, alcohol liquids, vinegar	6 517.9	6 494.6	23.4	13 012.5
23	Scraps, waste from food industry, fodder	2 135.4	7 831.8	-5 696.4	9 967.3
24	Tobacco, manufactured tobacco substitutes	2 533.0	4 209.9	-1 676.9	6 742.9
	Total	61 526.1	93 543.6	-32 017.5	155 069.8

Source: Research Institute of Agricultural Economics and author's calculations
Table 1. Overall CR AFT in 2004.

CN	Name	%
04	Milk, cream, eggs	13.40
17	Sugar and sweets	11.58
22	Beverages, alcohol liquids	10.60
21	Food products	9.62
12	Oil seeds	5.88
1	Live animals	5.32

Source: Research Institute of Agricultural Economics and author's calculations

Table 2. The most important items of the CR AFT export in 2004 and their proportion in the total export.

CN	Commodity name	Export 2008	Import 2008	Balance (EX-IM)	Turnover (EX+IM)
1	Live animals	5 017.9	1 466.9	3 550.9	6 484.8
2	Meat and consumable chitterlings	4 069.7	1 3752.8	-9 683.2	17 822.5
3	Fish, crustaceans, mollusks, and	1 620.0	2 361.4	-741.4	3 981.5
4	Milk, eggs, honey, edible products	14 483.1	10 001.2	4 481.8	24 484.3
5	Products of animal origin not shown	542.3	1 176.0	-633.6	1 718.3
6	Live plants and flower products	288.4	3 134.0	-2 845.7	3 422.4
7	Vegetables, plants, tubers and edible	2 018.8	8 871.8	-6 853.0	10 890.6
8	Fruits, nuts, edible peelings of citrus	2 373.0	11 458.0	-9 085.0	13 831.0
9	Coffee, tea, yerba, seasonings	1 330.6	3 296.6	-1 966.0	4 627.2
10	Cereals	7 612.1	2 425.0	5 187.1	10 037.1
11	Flour-milling products, malt, starch,	3 241.0	1 124.8	2 116.2	4 365.9
12	Oil seeds, fruit, medicinal plants,	8 265.4	2 770.0	5 495.4	11 035.3
13	Shellac, rubber, resins and other	7 66.7	1 034.9	-268.2	1 801.6
14	Plant materials for knitting and other	4.9	33.6	-28.7	38.5
15	Fats, animal and plant oils, edible	3 664.3	5 141.2	-1 476.8	8 805.5
16	Products from meat, fish,	2 740.8	4 228.7	-1 487.9	6 969.5
17	Sugar and sweets	5 698.9	3 784.3	1 914.6	9 483.2
18	Cocoa and cocoa products	4 033.0	6 101.6	-2 068.6	10 134.7
19	Products from cereals, flour, starch,	5 632.1	8 725.8	-3 093.7	14 357.9
20	Products from vegetables, fruits and	2 269.2	6 541.4	-4 272.2	8 810.6
21	Various food products	8 874.6	10 515.2	-1 640.5	19 389.8
22	Beverages, alcohol liquids, vinegar	10 303.9	9 757.1	546.8	20 061.0
23	Scraps, waste from food industry,	4 749.3	8 799.6	-4 050.2	13 548.9
24	Tobacco, manufactured tobacco	7 012.5	3 406.9	3 605.6	10 419.4
	Total	**106612.5**	**129908.8**	**-23296.3**	**236521.3**

Source: Research Institute of Agricultural Economics and author's calculations

Table 3 The total CR AFT in 2008.

The CR AFT export for 2008 was worth 106,612.5 billion CZK, while import of 129,908.8 billion CZK was by 23,296.3 billion CZK greater and the total turnover exceeded 236.5 billion CZK. This means that since the 2004 accession to EU the AFT export in 2008 increased by 73.28%, the import by 38.87 %, the balance decreased by 27.24 % and the total turnover increased by 52.53 %.

When we observe the most significant items of the CR AFT export in 2008 and their proportion in the total export, the first two CN 04 Milk, cream and eggs, and CN 22 Beverages, alcohol liquids, represent 25 % of export and the 6 listed commodities represent 53.06 % of export.

CN	Name	%
04	**Milk. cream. eggs**	**13.59**
22	**Beverages. alcohol liquids**	**9.67**
21	**Food products**	**8.33**
12	**Oil seeds**	**7.75**
10	**Cereals**	**7.14**
24	**Tobacco. products**	**6.58**

Source: Research Institute of Agricultural Economics and author's calculations

Table 4. The most important items of the CR AFT export in 2008 and their proportion in the total export.

Using RCA and MI indicators

In line with the definition, the RCA indicator measures the net export (balance) for a given commodity by the attained total turnover for that commodity. The commodities which had reached balanced high positive values of the RCA index during the observed period can be considered to have been successful in export.

The RCA values from 2004 till 2008 have been calculated for all 24 groups of commodities. The results are summarized in Table 5.

In long term, only 8 aggregates of the commodities from the total of 24 have reached positive values of the indicator. These commodities are markedly more successful in the agrarian market export. When we line up the order of the first six of these commodities for the years under observation, we will obtain the Table 6.

CN	Commodity name	RCA	RCA	RCA	RCA	RCA
1	Live animals	67.49	57.20	59.31	61.58	54.76
2	Meat and consumable chitterlings	-48.21	-56.29	-60.03	-55.80	-54.33
3	Fish, crustaceans, mollusks, and other water	-9.84	-17.88	-17.56	12.52	-18.62
4	Milk, eggs, honey, edible products of animal	19.45	17.44	19.21	20.15	18.30
5	Products of animal origin not shown elsewhere	-24.89	-37.67	-32.96	-39.34	-36.88
6	Live plants and flower products	-81.65	-77.77	-77.45	-75.88	-83.15
7	Vegetables, plants, tubers and edible roots	-77.52	-67.25	-63.95	-63.77	-62.93
8	Fruits, nuts, edible peelings of citrus fruit and	-71.29	-56.07	-67.30	-64.36	-65.69
9	Coffee, tea, yerba, seasonings	-58.14	-47.77	-41.41	-40.92	-42.49
10	Cereals	12.60	70.91	41.37	47.08	51.68
11	Flour-milling products, malt, starch, inulin,	64.03	49.86	51.56	37.99	48.47
12	Oil seeds, fruit, medicinal plants, industrial	14.00	30.36	11.13	55.72	49.80
13	Shellac, rubber, resins and other saps, plant	18.43	18.04	11.54	-11.42	-14.89
14	Plant materials for knitting and other plant	-80.30	-73.22	-70.64	-81.38	-74.72
15	Fats, animal and plant oils, edible waxes	-52.93	-28.46	-23.99	-9.30	-16.77
16	Products from meat, fish, crustaceans and other	-38.21	-22.44	-27.79	-27.32	-21.35
17	Sugar and sweets	38.62	37.06	27.48	0.32	20.19
18	Cocoa and Cocoa products	-28.38	-29.97	-26.95	-25.57	-20.41
19	Products from cereals, flour, starch, milk, pastry	-35.89	-33.12	-29.60	-26.38	-21.55
20	Products from vegetables, fruits and nuts	-43.70	-40.23	-41.85	-42.27	-48.49
21	Various food products	-14.80	-16.74	-17.85	-12.33	-8.46
22	Beverages, alcohol liquids, vinegar	0.18	1.71	2.56	5.90	2.73
23	Scraps, waste from food industry, fodder	-57.15	-41.80	-38.73	-31.19	-29.89
24	Tobacco, manufactured tobacco substitutes	-24.87	-15.97	-34.52	-15.74	34.6

Source: Research Institute of Agricultural Economics and author's calculations

Table 5. The values of the RCA indicator for CR for individual aggregates of commodities during the period of 2004 – 2008 (the CN numerical identification).

Order of the		1	2	3	4	5	6
	2004	CN 1	CN 11	CN 17	CN 4	CN 13	CN 12
	2005	CN 10	CN 1	CN 11	CN 17	CN 12	CN 13
Total AFT	2006	CN 1	CN 11	CN 10	CN 17	CN 4	CN 13
	2007	CN 1	CN 12	CN 10	CN 11	CN 4	CN 3
	2008	CN 1	CN 10	CN 12	CN 11	CN 24	CN 17

Source: Research Institute of Agricultural Economics and author's calculations

Table 6. The order of the highest RCA values in the CR AFT for the 2004 – 2008 period.

From the viewpoint of the predominance of export over import during the listed years, the most successful were the aggregates of the following commodities: CN 1 (Live animals), CN 11 (Flour-milling products…), CN 12 (Oil seeds), CN 10 (Cereals), previously also CN 17 (Sugar, sweets), and in long term the CN 4 (Milk…).

For the MI indicator it is crucial that the proportion of a given commodity export in the total export is greater than the proportion of import of this commodity in the total import. We then obtain a positive MI value and the index shows a certain measure of export specialization.

The Michaely Index MI has been calculated for all 24 groups of the agrarian aggregates of commodities. The results are shown in Table 7.

CN	Commodity name	MI 2004	MI 2005	MI 2006	MI 2007	MI
1	Live animals	0.0463	0.0388	0.0407	0.0327	0.0358
2	Meat and consumable chitterlings	-0.0362	-0.0624	-0.0620	-0.0620	-0.0677
3	Fish, crustaceans, mollusks, and other water	0.0040	-0.0014	0.0001	0.0051	-0.0030
4	Milk, eggs, honey, edible products of animal origin	0.0745	0.0624	0.0837	0.0777	0.0589
5	Products of animal origin not shown elsewhere	-0.0009	-0.0037	-0.0026	-0.0039	-0.0040
6	Live plants and flower products	-0.0241	-0.0211	-0.0188	-0.0120	-0.0214
7	Vegetables, plants, tubers and edible roots	-0.0538	-0.0493	-0.0540	-0.0549	-0.0494
8	Fruits, nuts, edible peelings of citrus fruit and melons	-0.0833	-0.0702	-0.0688	-0.0636	-0.0659
9	Coffee, tea, yerba, seasonings	-0.0119	-0.0120	-0.0099	-0.0119	-0.0129
10	Cereals	0.0133	0.0755	0.0512	0.0550	0.0527
11	Flour-milling products, malt, starch, inulin, wheat	0.0353	0.0187	0.0206	0.0165	0.0217
12	Oil seeds, fruit, medicinal plants, industrial straw, etc.	0.0296	0.0348	0.0189	0.0574	0.0562
13	Shellac, rubber, resins and other saps, plant extracts	0.0066	0.0045	0.0033	0.0001	-0.0008
14	Plant materials for knitting and other plant products	-0.0004	-0.0002	-0.0002	-0.0002	-0.0002
15	Fats, animal and plant oils, edible waxes	-0.0227	-0.0094	-0.0046	0.0021	-0.0052
16	Products from meat, fish, crustaceans and other water	-0.0076	-0.0042	-0.0053	-0.0087	-0.0068
17	Sugar and sweets	0.0821	0.0672	0.0516	0.0120	0.0243
18	Cocoa and cocoa products	-0.0079	-0.0140	-0.0088	-0.0117	-0.0091
19	Products from cereals, flour, starch, milk, pastry	-0.0184	-0.0210	-0.0136	-0.0160	-0.0143
20	Products from vegetables, fruits and nuts	-0.0190	-0.0200	-0.0197	-0.0241	-0.0291
21	Various food products	0.0109	-0.0049	-0.0001	0.0004	0.0023
22	Beverages, alcohol liquids, vinegar	0.0365	0.0250	0.0356	0.0333	0.0215
23	Scraps, waste from food industry, fodder	-0.0490	-0.0311	-0.0230	-0.0200	-0.0232
24	Tobacco, manufactured tobacco substitutes	-0.0038	-0.0020	-0.0142	-0.0033	0.0396

Source: Research Institute of Agricultural Economics and author's calculations

Table 7. The MI Indicator value of the Agrarian Foreign Trade (AFT) of the Czech Republic during the period of 2004 – 2008.

Only ten aggregates of commodities out of 24 shows long term positive values of the MI index. his is an indication of a certain pro-export specialization of these commodities. Table 8 outlines the order of the highest positive values. From the viewpoint of the MI index the most successful during the years listed in Table 8 were the aggregates of the following commodities: CN 4 (Milk ...), CN 17 (Sugar and sweets) CN 12 (Oil seeds) and CN 10 (Cereals). To a certain extent also CN 22 (Beverages) and CN 1 (Live animals). It is interesting to note how distinctly poor is the standing of the long term aggregate commodity CN 2 (Meat). This is apparently due to the significant, growing import, particularly of pork.

Logarithmic decomposition

The use of the logarithmic decomposition method is demonstrated for the beer commodity in the in-between-the-years decomposition of the changes in the net export during 2005 and 2006, and in the decomposition of the changes in the net export during a three-year period between 2004, i.e. the year of accession to EU and the year of 2007. It is interesting to observe into what extent the changes in the quantity of export and import have an effect on the total changes and into what extent they are affected by the changes in prices.

For the beer commodity during 2005 – 2006 the net export grew by 458.81 million CZK. Contribution to this growth was made primarily by the growth of export by 449.04 million CZK and, in a positive way, also by the drop in import (9.78 million CZK). Above all, the value of export grew due to the increase in the exported quantity (559.41 million CZK), though a small decrease in the price of export reduced the balance of net export by 110.37 million CZK. A smaller quantity of import also contributed positively to the overall balance (19.14 milion CZK), while the higher prices for import had a negative effect (-9,36 million CZK). The overall effect of quantity on the total balance was positive (578.55 million CZK), and the overall effect of prices was negative (-119.73 million CZK).

During the 2004 – 2007 period the net export of beer increased by 884.04 million CZK. Export itself increased by 963.72 million CZK, and import also increased moderately by 79.69 million CZK. The greater exported quantity (1121.27 million CZK) had a marked effect on the change in the net export. The attained export price decreased moderately,

Order of the		1	2	3	4	5	6
AFT total	2004	CN 17	CN 4	CN 1	CN 22	CN 11	CN 12
	2005	CN 10	CN 17	CN 4	CN 1	CN 12	CN 22
	2006	CN 4	CN 17	CN 10	CN 1	CN 22	CN 11
	2007	CN 4	CN 12	CN 10	CN 22	CN 1	CN 11
	2008	CN 4	CN 12	CN 10	CN 24	CN 1	CN 17

Source: Research Institute of Agricultural Economics and author's calculations
Table 8. The order of the highest MI values in the CR AFT for the 2004 – 2008 period.

Initial data							
	Value of	Quantity	Price of	Value of	Quantity	Price of	Net
	mil. CZK	t	CZK/t	mil. CZK	t	CZK/t	mil. CZK
2005	3 655.82	3141214.	1 163.82	288.38	215	1 337.46	3 367.44
2006	4 104.86	3628925.	1 131.15	278.61	201	1 382.37	3 826.25
Results of the breakdown (in millions of CZK)							
	Change	Change	Change	Effect of	Effect of	Effect of	Effect of
	ΔX	ΔEX	ΔIM	ΔQ_E na X	ΔP_E na X	ΔQ_I na X	ΔP_I na X
2005, 2006	458.81	449.04	-9.78	559.41	-110.37	-19.14	9.36

Source: Research Institute of Agricultural Economics and author's calculations
Table 9. In-between-the-years decomposition of the net export of beer for 2005 – 2006.

Initial data							
	Value	Quantity	Price of	Value of	Quantity	Price of	Net
	mil.	t	CZK/t	mil. CZK	T	CZK/t	mil. CZK
2004	3	2850418.6	1 249	243.09	326	744	3 318.43
2007	4	3766326.7	1 202	322.78	246	1 307	4 202.47
Results of the breakdown (in millions of CZK)							
	Change	Change	Change	Effect of	Effect of	Effect of	Effect of
	ΔX	ΔEX	ΔIM	ΔQ_E na X	ΔP_E na X	ΔQ_I na	ΔP_I na X
2004-	884.04	963.72	79.69	1 121.27	-157.55	-78.73	158.41

Source: Research Institute of Agricultural Economics and author's calculations

Table 10. The breakdown of net export for the beer commodity during the 2004 – 2007 period.

which showed in the total balance negatively (decrease by 157.55 million CZK). The decreased quantity of import had a positive effect of 78.73 million CZK, but due to the fact that import in 2007 was realized for distinctly higher prices, this price effect showed in the total balance as a loss of 158.41 million CZK. The total effect of quantity on the total balance was positive (1200 million CZK), and the total effect of prices was negative (-315.96 million CZK).

Conclusion

The extent of agricultural foreign trade of the Czech Republic has increased markedly following the country's accession to EU.

During the period of 2004-2008 the export of agrarian commodities increased by 73 %, import increased by 38.87 %, the balance decreased by 27.24 % and the total turnover increased by 52.53 %. This statistics indicates that the Czech agrarian products can be successful in the demanding market. The structure of exported commodities has also changed.

Through the use of the RCA indicators and MI indices it is possible to select commodities which have proved to be competitive on the EU market and were successful due to a certain measure of their specialization.

The method of logarithmic analyses the attained in-between-the-years results of export, and shows to what extent they had been achieved through the changes in the quantity and through price effects

Using concrete results of the CR agrarian export it has been demonstrated that the selected indicators can serve as suitable tools for the analysis of net export. The analyses can also provide useful information for the managers of agrarian enterprises about the success potential of specific commodities of the agrarian production on the foreign markets.

Corresponding authors:
Ing. Jaroslava Burianová
Czech University of Life Sciences Prague, Department of Economics Theories
Kamycká 129, Prague- Suchdol, Czech Republic
Phone: tel: +420 224 382 333, e-mail: burianova@pef.czu.cz

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