

ORGANIC FOOD MARKET IN THE CZECH REPUBLIC

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Abstract

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The contribution provides partial results of the research focused on organic food, a product from organic farming. The total area of ecologically farmed areas in the Czech Republic permanently increases, however the offer of organic food is insufficient, in particular in view of their structure. Deficiency in organic food is being solved by imports. Distributors play an important role in the organic food market. In the Czech Republic the largest share from them is occupied by retail chains. Their share continues to grow to the detriment of other sales channels. One of the main factors affecting consumers' interest in organic food is its price. The comparison of organic food prices and prices of conventional food in the selected retail chains, Globus Czech Republic, limited partnership, SPAR Czech business company Pte., Tesco Stores CZ JSC, AHOLD Czech Republic JSC, BILLA Pte., and in organic food and healthy nutrition stores showed significantly higher prices. The smallest difference in prices can be monitored in the milk and milk products. On the contrary, the largest difference is in fruits, vegetables, eggs and jams. However, the consumers' awareness of organic food quality is at the same time increasing and the consumers are willing to pay for them a higher price.

organic farming, organic food, organic food sale, organic food price

The organic food is inseparable component of the food market in the Czech Republic. It fulfils the requirements of consumers on quality food, where mineral fertilizers, hormones, GMO's and pesticides are not used during its production, the best before date is not prolonged artificially during its secondary processing and the taste, colour and aroma is not chemically improved (Moudrý, Prugar, 2002).

The consumption of organic food in the Czech Republic is rising as in other countries, although more rapid growth is hindered by many factors, e.g. unfavourable development of the economic situation which leads to stagnation, resp. decrease in income of inhabitants who reduce their expenses and look for less expensive ways of satisfying their needs (Lehmann, 2005). The organic food usually does not fulfil this requirement. The decision process of consumers is connected with the behaviour of traders who consider organic food only suitable extension of offered goods assortment.

The decision process of consumers influences also their awareness of the organic food quality. Although

government, unions and organizations showed a lot of interest in increasing consumer's awareness of the organic food quality, the information can be still considered as insufficient in comparison with some other states (Václavík, 2009).

MATERIALS AND METHODS

The aim of this contribution is to compare organic food and conventional food prices in retail chains and specialized stores. Prices were measured by primary research. Sample stores were selected using stratified random sampling. An equivalent food products were compared in retail chains Globus Czech Republic, limited partnership, SPAR Czech business company Pte., Tesco Stores CZ JSC, AHOLD Czech Republic JSC, BILLA Pte. and specialised stores LUMO natur and U Měnínské brány. The values have been processed in the graphs using Microsoft Excel.

One part of the contribution represents an analysis of organic food supply in the Czech

Republic and ways of selling organic food. Its main attempt is in particular to gain knowledge of the organic food distributors and the structure of distribution channels.

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RESULTS AND DISCUSSION

The development of organic farming in the Czech Republic

The organic food is a product of organic farming. The organic farming is in its principle a very progressive form of economy based on natural cycle and relations in nature without using artificial fertilizers, chemical protection means, sprays, hormones and artificial substances.

Its aim is to avoid pollution in all forms, originating in the agricultural business, produce food and fertilisers both in sufficient quantities and with a high nutritional value, and prepare conditions for farm animals corresponding their behavioural and physiological needs. In addition, the organic farming shall allow economic and social development to business subjects farming in ecosystems, and at the same time contribute to maintain the employment in rural areas (Živělová, Jánský, 2007).

The development of organic farming is encouraged by various states in different ways. However, always the aid should be derived from a rigorous analysis of the existing situation and the experience and knowledge of the states dealing in the long term with the environmental management systems should be taken into account (Živělová, Jánský, 2007).

Organic farming in the Czech Republic has the upward trend. The total area of ecologically cultivated areas increased in 2011 to 483 thousand ha, representing 11.4% of the total agricultural land in the Czech Republic. This year there has been the largest increase in the number of organic farms, reaching 4022 in total. However, the opposite trend is possible to see in terms of the organic farm average size, where from 2001 the decreasing character has been already recorded. In the last years the average area has been reduced to 127 hectares. Despite of it the Czech Republic is exceeding the average of EU-27, which is around 40 hectares on 1 organic farm.

The main areas of organic farming are traditionally less favourable mountain and foothill regions, where about the half of these areas are

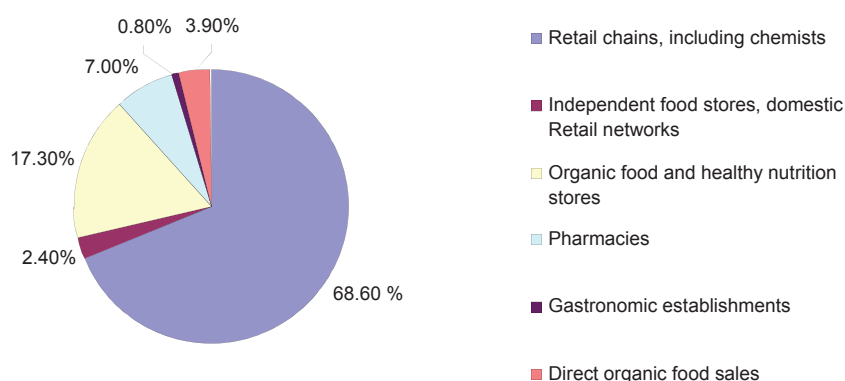
managed in ecological way. The largest areas of ecologically managed land are situated in the border mountainous districts of South Bohemian, Karlovy Vary, Moravian-Silesian and Ústecký region. There are almost 50% of ecologically cultivated areas in these regions and the highest average size of organic farms in the range from 142 ha in the South Bohemian Region to 306 ha in the Karlovy Vary region is also achieved. In contrast, in the Central Bohemian, South Moravian, Pardubice and Vysočina region, where the strong production areas are situated in the arable land, the low occurrence of environmental areas can be observed. The challenge for the future is to extend the organic production also in these areas and balance the share of cultivated arable land and grass crops (EZ *yearbook, Czech Republic* 2010).

In the past years there is a positive trend of arable land and permanent crops stable growth, which should be reflected in the increase of organic products and subsequently organic food production. The y/y increase of arable land area is around 20%, the vineyard and fruit orchards acreage increased too.

The organic food production in the Czech Republic

There is around 1600 items of organic food offered in the Czech Republic, but the majority of them is imported. The supply is insufficient considering its structure. The demand is not satisfied in particular for animal products, and that milk and milk products, poultrymeat and meat and eggs, is missing, however, and Vegetables, fruit, potatoes, bread, and bread and the other. The lack of organic food is solved through the imports, in which cereals, snacks, legumes, beverages and tea prevail in particular. An obstacle to increase the supply is the production structure of organic farms, insufficient processing capacity and little developed distribution channels.

In accordance with the prevailing activities of the Czech producers, we can include among the most frequently processed organic products the processing of meat (slaughter, cutting and packaging), the processing of milk and milk products, fruit, vegetables, and also the production of bakery, confectionery and other floury products. As negative aspect of the Czech organic food market remains a very large share of imported organic materials that are processed, increasing the price of final organic product. From the plant production there are legumes and oilseeds, mostly from the third countries (Turkey, and China), imported in particular to the Czech Republic. There is also a considerable share of mixed fruit, mostly imported because of the demand of some Czech organic yogurt producers. Furthermore, materials difficult to cultivate in the Czech Republic, such as rice, nuts, dried fruit, cocoa, chocolate, sugar cane, coffee, tea, flavourings etc., are imported. On the contrary, there is a smallest share of imported



1: The percentage of distribution points in the Czech Republic
Source: Processed by author

grapes, flour and cereal-based mixtures for bakers. The minimum share of imported animal products represents the beef and beef products category (most of the production comes from Czech organic farms). The situation in pork is different. Less than 55% of the processed materials comes from imports, mostly from Germany. A similar situation is in eggs and milk, where more than half of eggs consumption and around 23% of milk consumption is imported to the Czech Republic from Slovakia. This fact has consequent negative impact on dairy industry in particular. Czech organic farmers are forced to sell part of their production of raw milk for conventional production because of the lower price of imports and inadequate demand for domestic materials. According to the research of ÚZEI, lower price of organic materials abroad is just the second most frequent reason of organic food producers to purchase them outside the Czech Republic. As the main reason is mentioned insufficient quantity or absence of organic product/organic food on the domestic market (this reason was mentioned by 40.9% of producers). Among other obstacles of producers in the purchase of domestic organic materials were included: the existing long-term customer-supplier relations, higher quality of organic food from abroad, better services of foreign suppliers, shorter distance from the producer/supplier.

In 2010, the total turnover of companies involved in the production of organic food, including import, was approximately 2.1 billion CZK. The average annual consumption per capita remains below 200 CZK and the share of organic food from the total consumption of food and drinks is stagnating around 0.7% (Hrabalová, 2012).

Organic food sale in the Czech Republic

The distributors play an important role on the organic food market. They are considered to be all subjects introducing organic food or organic products into circulation, including imports and exports without any subsequent processing. At the end of 2010, the number of all registered distributors increased to 186 establishments, with

47 who ended its activities this year and 51 subjects who on the contrary newly entered the market. There is also a large number of retail stores (i.e. retail chains, healthy nutrition shops, etc.). The organic food is currently offered by all transnational retail chains, with the exception of Lidl stores, by some Czech cooperative stores COOP, independent sales networks Brněnka and Hruška, the most of healthy nutrition stores and pharmacies that also represent an important marketing place for organic food (Crhová, 2012).

Fig. 1 shows the structure of distribution channels in the Czech Republic in 2009. There are many ways used to sell organic food. As it is clear from the graph, the most used place for organic food sale are retail chains, specialised shops and healthy nutrition stores. There is a significant increase of sales in pharmacies. On the contrary the smallest share of distribution produce gastronomic establishments.

Retail chains

Retail chains, including chemists, have dominant position on the organic food market in the Czech Republic. Their total sales turnover of organic food in 2009 reached more than 68%, and in the previous year 74% of all organic food purchases has undergone this distribution networks. Market share of the retailers is steadily rising each year at the expense of other sales channels. It is mainly caused by the price, which is clearly the smallest in chains from all organic food sellers, and also by the range of assortment they offer. The price is one of the most important factors affecting consumers' behaviour. Large multinational companies are well aware of their strong bargaining position in comparison with the producers. Thanks to it they are able to complete very advantageous supplier-customer contracts, which allow them to sell at a lower price required by consumers. In the last 5 years a significant extension of organic food assortment in particular chains has occurred. It is mainly caused by introducing of their retail brands into circulation.

The comparison of organic food and conventional food was carried out in the selected retail chains. Among selected retail chains were Globus Czech

Republic, limited partnership, SPAR Czech Business Company Pte., Tesco Stores Czech Republic JSC, AHOLD Czech Republic JSC and BILLA Pte.

Similar comparison was made also in specialized organic food and healthy nutrition stores.

Globus Czech Republic limited partnership

From all retail chains the Globus hypermarket stands at this moment at the top of organic food market. In 2011 this retail chain offered 432 different items of organic food in total. Globus became the seller with the widest offer of food coming from the ecological production in the Czech Republic. Most domestic products can be found in the milk and milk products category, in the fruit and vegetables, and also in chicken meat. The offer includes products as yoghurt, milk and cheese from the producers LACRUM Velké Meziříčí Pte., OLMA JSC Valašské Meziříčí or organic meat from the Biopark Pte.

The percentage difference in organic food and conventional food price in the year 2012 is clear from the Fig. 2.

Till 2011 there was the largest difference in price of eggs from organic farming and eggs produced conventionally. After the hens breeding transition which in 2012 shifted to the system of enriched cages there has been a very significant increase in the price of conventionally produced eggs, and it

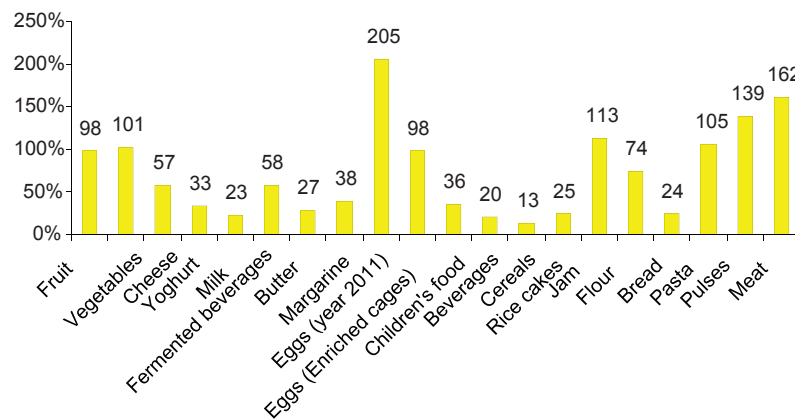
approximated the price of eggs from conventional production to the organic eggs price. The percentage difference between these two commodities decreased by more than 100%. Currently the largest percentage difference is in the price of meat, leguminous, vegetables, jam, pasta, fruit and vegetables. On the contrary the smallest difference is in cereals and beverages.

SPAR Czech Business Company Pte.

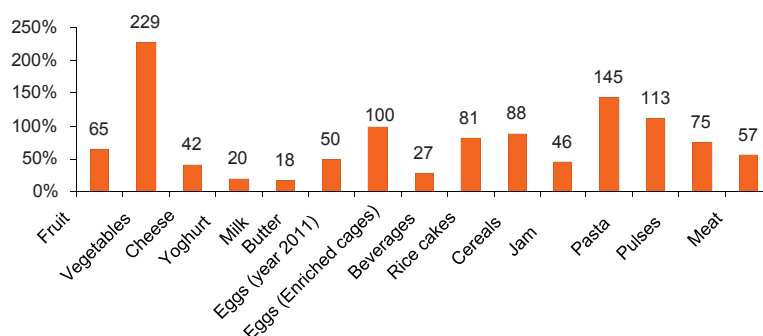
Interspar is the second hypermarket in the Czech Republic with the widest offer of organic food after Globus. On its list there are 304 organic food items total. Interspar has one of the widest organic meat assortments in the Czech Republic (organic beef in particular).

The percentage difference in organic food and conventional food price in the year 2012 is clear from the Fig. 3.

From the data in figure n. 3 is clear that the largest percentage difference is in the price of vegetables, pasta and marmalade. In comparison with Globus, where the difference in the meat categories was 162%, there is only 57%. This is above all due to a fact that the monitored meat in Interspar consists in 100% from beef, which is the cheapest of all types of organic meat (the offer from previous retail constituted organic chicken and turkey meat). The



2: The percentage difference in organic food and conventional food price in the Globus retail
Source: Processed by author



3: The percentage difference in organic food and conventional food price in the SPAR retail
Source: Processed by author

minimum percentage difference in price we are picking up for the category milk and milk products, where the average difference is 27% (milk 18%, yoghurt 20%, and cheese 42%). The same percentage (27%) has also the eggs from enriched cages category.

Tesco Stores CZ JSC

Tesco retail chain is one of the sellers using its private brand in the market. "Tesco Organic." This brand was introduced into the Czech market in 2007, when it offered 108 items (of the total 245), including fresh vegetables and fruit (15 items). The Tesco chain was one of the first hypermarkets introducing its private organic food brand into the local market. Part of the offered products is imported from abroad, the rest comes from the Czech suppliers and producers (Greenmarketing, 2009). The majority of organic items can be found in the milk and milk products category, and also in the infant and organic children's food category.

The percentage difference in organic food and conventional food price in the year 2012 is clear from the Fig. 4.

The differences in prices in this retail are similar in some values to previously mentioned retails. A similar situation occurred with eggs thanks to the directive of European Commission 1999/74/EC and helped to approximate the price of organic and conventional production. Among organic food with the largest price difference is jam, fruit and vegetables, children's food and pasta. The minimum

percentage difference is between fermented beverages and cheeses. Organic rice cakes had even had the same price as rice cakes of conventional nature.

AHOLD Czech Republic JSC

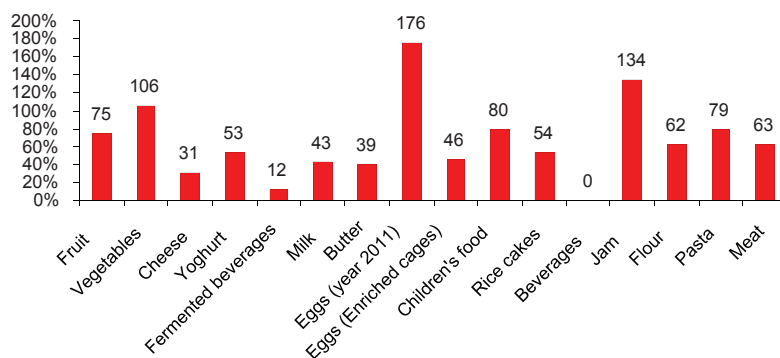
AHOLD Czech Republic JSC is running hyper/supermarkets Albert in the Czech Republic and it introduced its own organic food brand a year later than Tesco hypermarket. AHOLD company occupies the second place in the number of its own organic food products in the Czech market, with a share of 46%.

The percentage difference in organic food and conventional food price in the year 2012 is clear from the Fig. 5.

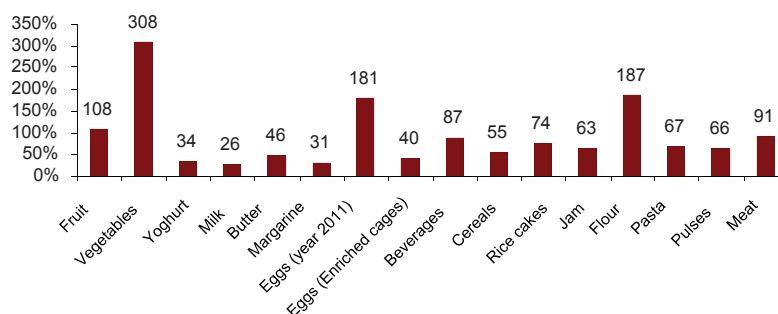
In the Fig. 5, a big percentage difference in organic vegetables (up to 308%) is mainly caused by such items as potatoes and onion, where the difference in price for potatoes shall be 30 CZK, and for onion even 43.90 CZK. Other foodstuffs with a high price difference between are the flour and fruit. On the contrary the smallest percentage difference in the price can be recognized in the milk and milk products category.

BILLA Pte.

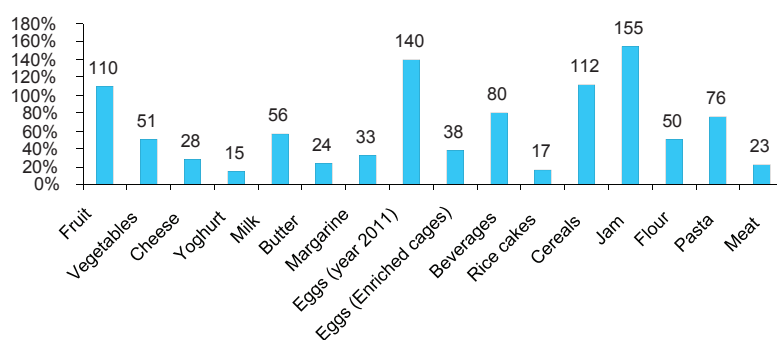
The BILLA Company introduced in the market its own organic products brand called "Naše bio" in 2009. At the time this brand contained only 18 products, all of them mostly from the Czech



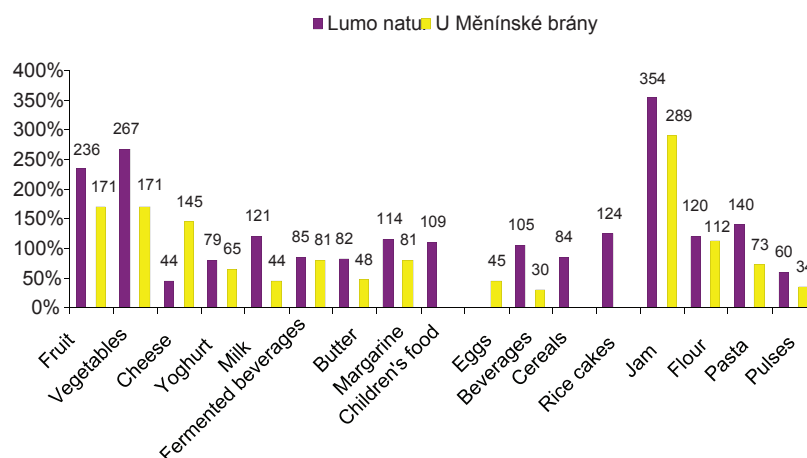
4: The percentage difference in organic food and conventional food price in the Tesco retail
Source: Processed by author



5: The percentage difference in organic food and conventional food price in the AHOLD retail
Source: Processed by author



6: The percentage difference in organic food and conventional food price in the BILLA retail
Source: Processed by author



7: The percentage difference in organic food and conventional food price in specialized stores
Source: Processed by author

producers and suppliers. The only exception made yoghurt, which is still produced for them by the Austrian dairy Pinzgau. In addition, it still offers organic yoghurt under the brand called Ja! Natürlich from the parent company BILLA Austria (Greenmarketing, 2009). At present, BILLA has the biggest offer of organic food under the private brand. The number of organic food items is 113 from 161 total.

The percentage difference in organic food and conventional food price in the year 2012 is clear from the Fig. 6.

From the Fig. 6 is clear that in a BILLA supermarket are the smallest differences in prices of observed commodities. Among organic food with the largest percentage price difference are jam, rice cakes and fruit. The smallest difference in price show yoghurt, cereals and meat. The meat category in the figure includes only organic beef, and therefore the percentage difference in price is not so big. However, in comparison with the Interspar retail chain, where there is also only organic beef in its figure, BILLA remains cheaper.

Organic food and healthy nutrition stores

Organic food and healthy nutrition stores are for the consumers the second most popular place to

purchase organic food. Thanks to them there had been organic food in total value of 305 million CZK sold in 2009, it means 17.3 % of the total turnover. The main sold categories were "Other processed food" (36 % of the share), followed by a "Bakery, confectionery and other flour products" (17 %), and then with a small share "Mill and starch products" and "Fruit and vegetables" (11 %). The share of specialized stores in the total market turnover each falls slightly year in the Czech Republic. This is because of the still increasing number of organic food purchases in retail chains, which could better respond to the large increase in demand for organic food. A number of these outlets is not also able to compete with services, and in particular prices, which retailers offer their customers (Greenmarketing, 2009). However, providing of above-standard services is a competitive advantage for specialised stores and there should be still more emphasis put on them. In the hypermarkets the range of organic assortment increases every year. It has resulted in reducing of the need for organic food purchase in these stores.

For the price comparison there were two stores in Brno selected, „U Měnínské brány“ and „Lumo natur“.

The percentage difference in organic food and conventional food price in the year 2012 is clear from the Fig. 7.

Both stores have a wide offer of organic assortment, covering not only the large selection of pasta, bread, confectionery, leguminous, vegetables, drinks, fruit, vegetables, etc., but also natural cosmetics, environmental, and environmental friendly cleaning products.

From data in the figure is evident that smaller percentage difference in the organic food price is in

the "U Měnínské brány" store (the average difference is 99 %). In comparison with the other store it has lower prices in all categories, with the exception of cheeses. In "Lumo natur" the difference in price of organic and conventional food reaches on average 133%. It is given above all by significantly more expensive fruit and vegetables from imports. The competitive store is exclusively buying them from the Czech suppliers.

SUMMARY

The organic food market is growing each year on a global scale. Changes in consumer behaviour made the market to respond to these incentives. They allowed the participation of new units in the food commodities line and encouraged the development of domestic and foreign trade. In comparison with another Central European and Eastern European countries the Czech organic food market can be described as developed. The differences can be seen mainly in the tender size, amount of consumption, the structure of produced and offered commodities, in their availability and prices. It is the price which is the most important market influencing factor in the Czech Republic. In the majority of countries the average difference in price between organic and conventional food reaches 20–30%. This difference is in the Czech Republic up to four times larger. Czech market is not so big, customer segment is relatively tight, the purchasing power is low, more than a half of organic food production comes from imports and the cooperation among individual units of commodity line is still less than the appropriate level. Under these conditions the greater reduction of organic food price is not possible.

The growing demand for organic food may be a great opportunity for many farmers, producers, distributors and sellers. Interest of consumers in domestic production, where there is a lack of it, is rising. However, for the further development of the market is important to monitor trends, innovations, get inspired by foreign markets, analyse market structures in the whole line, to strengthen the promotion and take care about the wishes and needs of customers.

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