Adaptation of the Czech viniculture to the conditions of the European Union

Adaptace českého vinohradnictví a vinařství na prostředí Evropské unie

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Abstract: In the Czech Republic, the sector of viniculture tried to use the period before the entry into the European Union (1st May 2005) for the maximum development of resources needed for its both quantitative and qualitative advancement. The legislation concerning this sector was changed and harmonised with the legislation of the EU. The total acreage of vineyards was expanded and another 7 thousand hectares were planted. The size of business units changed as well. For the time being, the production potential of this industry is 19.3 thousand ha of vineyards, more than 18 thousand wine growers were registered and there are nearly 600 producers of wine. In this sector, there are approximately 20 thousand jobs and the consumption of wine is gradually increasing and equals 16.5 litres per capita per year. As far as the prices of grapes are concerned, it was found out that they were relatively stable in the period under study and that the price of blue varietals is higher than that of white ones. The Czech wine import is constantly higher than the export, both in volume and financial value.

Key words: wine growing sector, adaptation, analysis, Czech Republic, European Union, producers, resources

Abstrakt: Odvětví vinohradnictví a vinařství využilo období před vstupem do Evropské unie (1. 5. 2004) k maximálně možnému rozvoji zdrojů potřebných pro jeho kvantitativní a kvalitativní rozvoj. Ve vazbě na legislativu unijní se změnila i legislativa pro toto odvětví. Plocha vinic se rozšířila o 7 tisíc hektarů a velikostní struktura podnikatelských subjektů se změnila rovněž. V současnosti tvoří produkční potenciál 19,3 tisíc ha vinic a evidováno je více než 18 tisíc pěstitelů vinné révy a téměř 600 producentů vína. V tomto odvětví byl vytvořen prostor pro cca 20 tisíc pracovních míst a zájem spotřebitelů o konzumaci vína postupně narůstá a dosahuje hranice 16,5 l/obyvatele/rok. Zjišťované ceny hroznů byly za sledované období relativně stabilní s rozdílem mezi bílými a modrými odrůdami ve prospěch modrých. Dovoz vína do České republiky je trvale vyšší než vývoz, a to jak v množství, tak také ve finanční hodnotě.

Klíčová slova: odvětví, adaptace, analýza, vinohradnictví, vinařství, Česká republika, Evropská unie, producenti, zdroje

INTRODUCTION

The sector of viniculture plays an important productive role in some specialised regions of the Czech Republic. This importance has markedly increased particularly after the entry of the Czech Republic into the European Union on 1st May 2004. From the viewpoint of business activities, it was important that not only individuals but also enterprises (i.e. legal bodies as defined in the Commercial Code) took to the maximal possible extent the opportunity of extension of their vineyards and therefore established the greater base for a subsequent production of wine. This opportunity existed for several years of the pre-entry period when not only the Czech government, but also individual ministries, businessmen and managers of wine producing enterprises had to respond to this urgent situation. This process of enlargement of the area of vineyards was influenced by the new legislation concerning viticulture and wine production, which was partly adopted from the EU and partly set up from the legislation national elaborated by the Czech Ministry of Agriculture in 2004. This process took place on the base of several preliminary studies

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(Sedlo, Palička 1998; Sedlo, Jaborek 2000). Because of the importance of this sector, several authors tried to perform the situation analysis of this industry. For example, Škorpíková (2004), Tvrdoň (2004), Cyvínová (2004) and Černíková (2004a) analysed the structure of wine production while Černíková (2004b) and Žufan (2004) studied factors, which influenced the course of changes currently taking place in the Czech viticulture. Lakner, Procházka et al. (2003) wrote about the situation existing in the European wine economy.

Conclusions drawn by authors mentioned above indicate the necessity of a systematic follow-up of the development of wine growing and production, especially with regard to individual, differentiated forces influencing this sector both from outside and from inside. This means that it is necessary to identify important factors/effects as well as to pay attention to the evaluation of the strategic growth of this sector, technological changes, regulatory effects and governmental policy on the one hand and, especially, to the analysis of changes taking place in social priorities, lifestyle of people and attitude of consumers to wine as a cultural beverage on the other. It seems that it is necessary to distinguish between two different tendencies, which could either decrease or increase the consumption of wine. The positive attitude to wine, according to which wine is hold for a beverage supporting human health, should be further explained and supported. Only on the base of this positive approach to wine as a natural product and a result of cultural human activities, it is possible to support and stimulate the development of two connected sectors of this industry, i.e. viticulture and wine production, and of all resources that are used in this field of economic activities.

The aim of this study is a partial analysis of all processes and phenomena that, under the conditions of the Czech Republic, manifest themselves as adaptation tendencies and trends after such an important change as the entry of the Czech national economy into the saturated European wine market with all its links to wine growing, processing of grapes and selling/marketing of the final product. Another goal of this paper is also the analysis of data, which could contribute to the elaboration of the project *Prospects of a further development and the proposal of measures influencing the viticultural policy of the government and the rural development in wine growing region of South Moravia*. The paper was written with the financial support of the project QF 3276 of the Czech Ministry of Agriculture. This project is being solved by the teachers of the Faculty of Business and Economics, MUAF Brno, in a close co-operation with the Union of Wine Growers of the Czech Republic in Velké Bílovice.

MATERIAL AND METHODS

Regarding the fact that the adaptation period of Czech viniculture was relatively short for this traditional industry, the selection of as well as the search for the published data was relatively limited. The analysed data will concern above all the Czech Republic within the period of 2002–2005. This study deals with changes in legislation, wine-growing regions, and enlargement of vineyards acreage, number of wine growers and the acreage of their vineyards. The authors also present data enabling an evaluation of changes taking place in the structure of wine varietals, particularly in new plantations, and enumerate the corresponding costs including both Czech governmental and the EU subsidies. Analysed are also data about the wine market (i.e. characterising exports, imports, and taxes) and about human resources. A partial graphical survey of changes, which took place within the period of adaptation, was elaborated using the Word and Excel software in such a way that enabled the comparison of periods before and after the entry into the European Union. The authors used partly secondary data from commodity studies and partly primary data that were collected in their own investigations. Web pages www.wineofczechrepublic.cz were used as another source of secondary data. This study on the adaptation period should corroborate the hypothesis that the enlargement of the production potential of Czech vineyards was a positive strategic decision, which would support in the long-term the wine industry in the Czech Republic.

RESULTS AND DISCUSSION

The following analysis deals with the most important factors, which influence the adaptation process of the Czech Republic in the field of wine growing and production, viz. legislation, acreage of vineyards, human resources in wineries, situation on the wine market, subsidies, product structure and prices of grapes.

Legislation

The *aquis communitaire* were introduced to the Czech Republic in May 2004. This legislation is superior to the national law and is obligatory for all member countries of the European Union. Although the EU legislation in this field is relatively very detailed and consists of tens of different decrees and regulations, it also enables to preserve specific national features and differences because it tolerates those national laws, which implement details defined in the EU directives and regulations. In the Czech Republic, this concerns above all the Act No. 321/2004 Sb. on viticulture and wine production, which links up to the EU Council and Commission directives. In wording of the Act No. 216/2000 Sb, this new act replaces and amends the former Act No. 115/1995 Sb. Of the principal measures, which had to be observed, it is necessary to mention the obligatory registration of vineyards with the acreage larger than 0.03 hectare; these areas had to be registered at the Central Institute for Checking and Control in Agriculture within the period of 1st September 1995–30th June 1996. The Act No. 216/2000 Sb. increased the minimum acreage of vineyards liable to this obligatory registration to 0.1 ha. For the period to follow, the new act of 2004 defined a limiting system of permission of further plantations and their registration. The Act No. 321/2004 Sb. divided wine the growing regions of the Czech Republic into two parts and defined the Moravian and Czech wine growing regions with altogether only six sub-regions (before this change, the number of wine growing regions in the Czech Republic was sixteen). In Moravia, there are four sub-regions (i.e. those of Mikulov, Moravian Slovakia, Velké Pavlovice and Znojmo). In Bohemia, there are only two sub-regions (Mělník and Litoměřice). In this way, it was possible to delimit territories with a specific production potential. From the viewpoint of European Union, Bohemian wine growing regions are registered in the zone „A“ while those of Moravia are classified as the zone „B“. This was done in spite of the fact that the Czech wine growers wanted to classify the whole territory of the CR into the zone "A" because of climatic conditions. Besides the acts mentioned above, it is necessary to study and thereafter also to adopt other related laws that were presented in a material published by the Czech Ministry of Agriculture in 2004 (MZe ČR 2004). Since September 2005, the Czech Parliament has discussed another amendment of the Wine Growing Act but this concerns only minor changes, which harmonise this legal norm to the conditions of practical life.

The new Wine Growing Act 2004 introduced the category of the "Regional Wine", which was defined as the table wine with a geographical denomination (Moravian and Bohemian/Czech) and also the "Predicate Wine" ("Raisin Wine") and the "Wine of Original Certification" (V.O.C.). Until now, however, this wine category was not awarded to any producer but it seems that the first products of this type will be approved within a period of one or two years. Payments to the Viticultural Fund were reduced by 50%; now, they are levied only from producers of home wines and are used exclusively for marketing purposes and not for the plantation of new vineyards as before. The records concerning production of wine were tightened up as well. The discussed amendment of the Wine Growing Act contains also the proposal of new forms for registration of the produced wine; this should enable a quick digital processing of entry data.

Development of vineyard area

The area of vineyards is the most important parameter, which determines the importance of Czech viticulture. Moravian and Bohemian wines can be made only of domestic grapes because in this way it is guaranteed that that they are original within the framework of the EU Common Market Organisation (CMO).

In the Czech Republic, the tradition of intentional wine growing is longer than one thousand years and

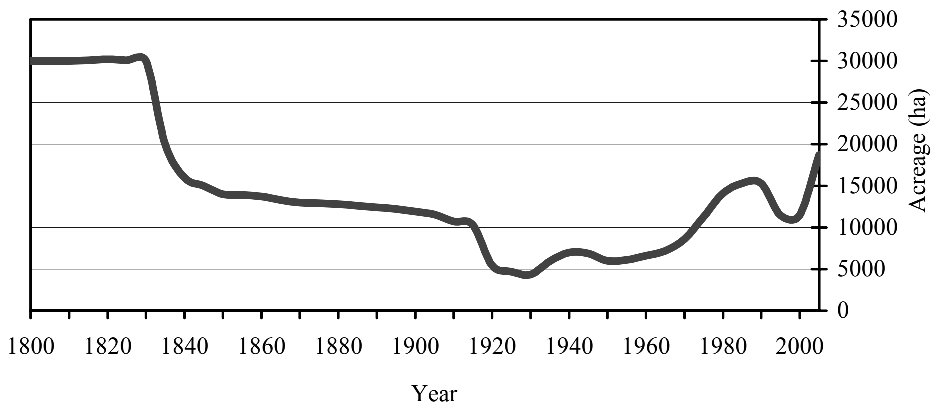

Figure 1. Acreage of vineyards in South Moravia (1800–2005)

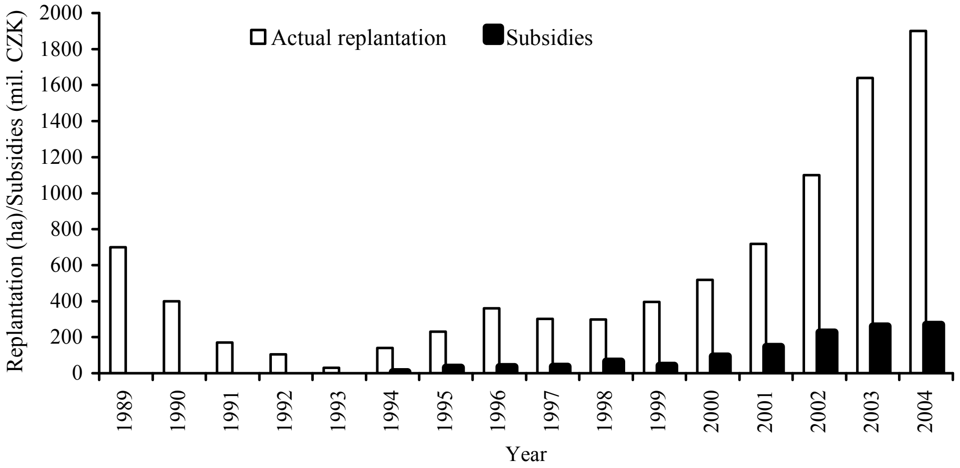

Figure 2. Replantation of vienyards (1989–2004)

the total acreage of vineyards has markedly changed in the course of the several last centuries. The development of the vineyard area in Moravia is illustrated in Figure 1.

In 1994, when it was quite obvious that the total area of vineyards was markedly decreasing, the Ministry of Agriculture of the Czech Republic (MA CR) decided about the introduction of a subsidy that should support the establishment of new vineyards; this measure came in force in 1995. The initial subsidy of 50 thousand CZK/ha was gradually increased to as much as 250 thousand CZK/ha and this financial support influenced markedly the annual increases in the area of new vineyards. Within the period of mere ten years, more than 7 thousand hectares of vineyards (i.e. approximately 40% of the total present acreage) were planted. Within the period of 1995–2004, the government and the Viticultural Fund supported these new plantations with 1.2 billion CZK. These subsidies are presented in Figure 2 together with the acreages of new vineyards.

At present, the total area of vineyards in the Czech Republic is approximately 18.7 thousand hectares and the so-called production potential (which involves also the registered rights to re-plantations) equals 19.3 thousand hectares. If the CMO regulation of wine production through the plantation rights will continue, it cannot be expected that this production potential of the Czech Republic would be markedly changed in the years to come.

In this contex,t it is now not clear, which will be the market price of rights to re-plant the old vineyards but it can be expected that the lower the price, the higher the volume of total sales. Maybe it will be possible to start with sales at the price level of cca 1 thousand CZK/ha, i.e. for prices, which correspond with the price defined in the amended Act on Viticulture as the price of governmental reserves. Although this reserve is not too high, it could be perceived as the first price signal for the newly developing market with agricultural land. In this context, it is also necessary to realise that this means a certain type of virtual property, which results from the EU regulations,

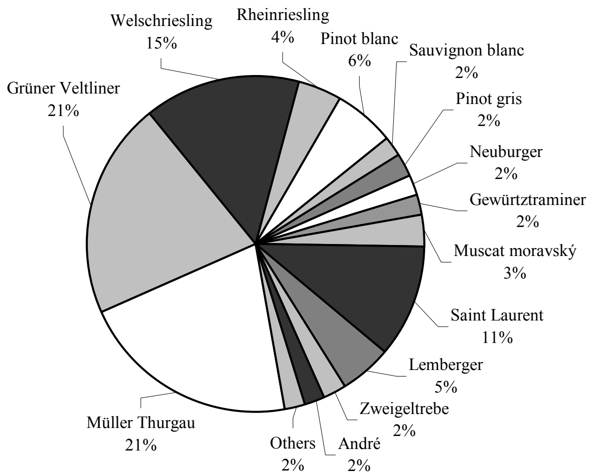

Figure 3. Varietal assortment (1994)

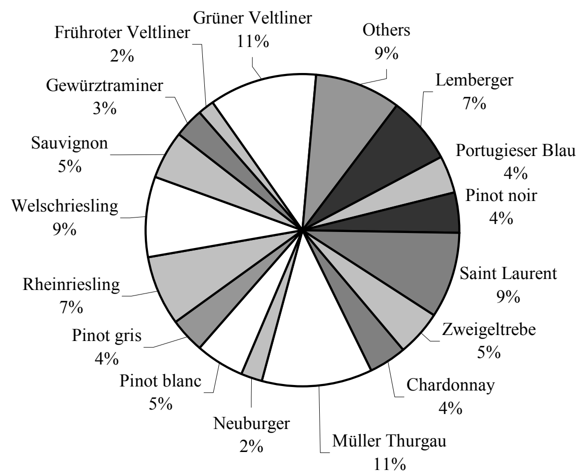

Figure 4. Varietal assortment (2005)

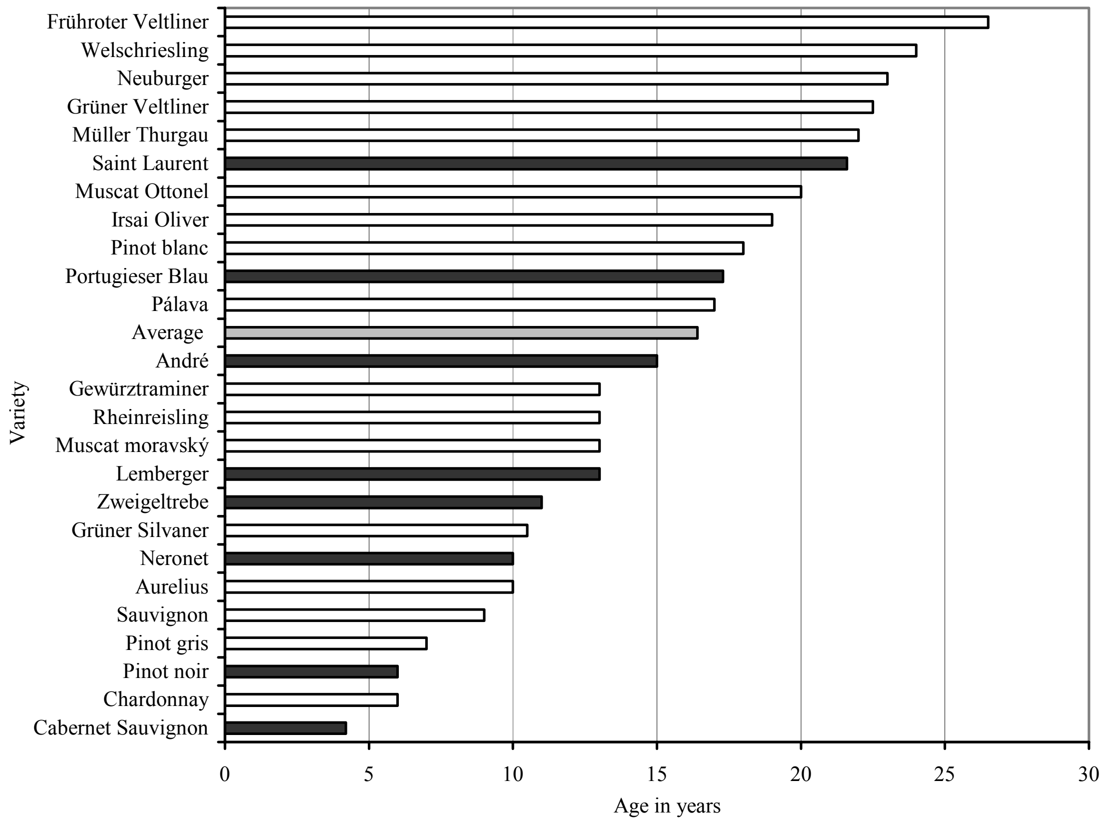

Figure 5. Average age of individual varieties (2004)

and that people who became its owners due to the introduction of these regulations can easily lose it from year to year provided that this forced regulation of the area of vineyards will be cancelled within the framework of the expected CMO reform, which should take place in the year 2006.

As far as the structure of wine varieties is concerned, there was a marked change in favour of less yielding but superior cultivars. This change resulted not only from the preparation of the Czech Republic to the entry into the European Union but also because of the introduction of the Act on Viticulture in 1995. The differences in the varietal structure are illustrated in Figures 3 and 4. The fate of individual varieties can be deduced on the base of data about the average age of the present stands in Bohemian and Moravian vineyards (Figure 5). The variety 'Malvasier' comes to an end and the varieties 'Welschriesling', 'Neuburger' and 'Grüner Veltliner' are in a very similar situation; of the red varieties, the plantations of 'Sankt Laurent' are also declining (although its area in the Czech Republic is the largest in the whole world).

Human resources

The present acreage of 19.3 thousand ha of vineyards creates, together with processing of grapes for wine, full-time jobs for nearly 20 thousand people directly in the industry, i.e. without suppliers of all other necessary products and without jobs required for the finalisation of the imported wine. Only the number of registered wine growers is higher than 18 thousand; however, it is necessary to admit that the majority of them are the so-called hobby growers or part-time producers. These people are concentrated in less than 100 of wine-growing villages in South Moravia and contribute to the creation of a very specific character of this part of the Czech Republic. The average value of harvested grapes equals approximately 1 billion CZK and another billion results from processing of grapes to wine. Besides, the total value of wine imports to the CR equals approximately 2.5 billion CZK.

This means that in spite of the fact that the area of vineyards is nearly negligible as far as the total area of agricultural land in the Czech Republic is concerned, the numbers of workers and the volume of produced goods are significant and give different evidence, particularly in the region under study.

The distribution of wine growers according to the size of cultivated land in the Czech Republic, Germany and Austria is presented in Figure 6. As one can see in this figure, the average size of individual wineries is greater and the production is more concentrated in

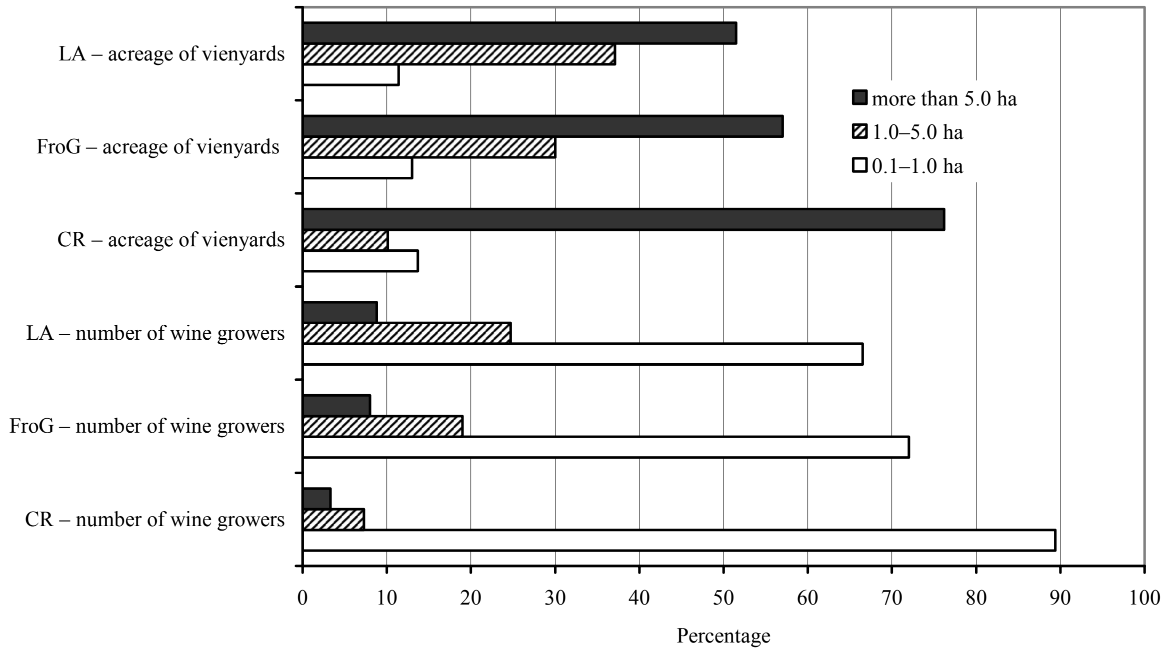

Figure 6. Comparison of vineyard acreages in Lower Austria (LA), Federal Republic of Germany (FRoG) and the Czech Republic (CR), year 2004

the Czech Republic than in Germany and/or Lower Austria. Contrary to the of neighbouring countries, the group of farms with the area of 1 to 5 hectares is quite insignificant in the CR. This can be evaluated as a positive phenomenon because in the countries mentioned above, the number of enterprises of this size is decreasing and they have more and more problems to earn enough money for living and/or survival. From the viewpoint of growers, the percentage of wine growers with the vineyard area below 1 hectare is higher and this shows a negative effect on their economic results. However, this concerns above all the smallest producers who run their businesses as a hobby and/or as a source of additional income. Their numbers are important because they contribute to the preservation of regional specialisation, culture and habits and also due to the fact that they have a strong feeling of local patriotism and for that reason maintain and/or restore old viticultural traditions.

In the Czech Republic, there are approximately 600 subjects who live, at least partly, on this type of business activities. This group involves both legal entities and natural persons who sell yearly more than one thousand litres of wine and who produce annually the total volume of approximately 40 million litres of wine.

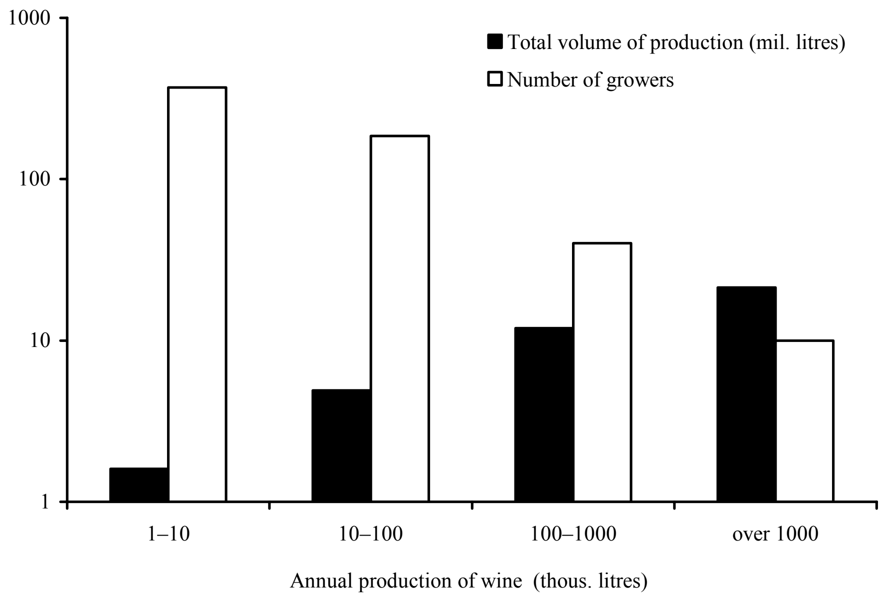

Figure 7. Structure of wine growing enterprises (volume of production and numbers), year 2004

The structure of annual sales of produced wine is presented in Figure 7. More than one half of domestic wine is produced in only ten wineries. The remaining 590 legal bodies and natural persons produce a minor part but significantly contribute to the width of the assortment of different final products, which are offered to consumers.

Wine market in the Czech Republic and the European Union

Among the new member countries of the EU, the Czech Republic is the most important importer of wine. As far as the overall rank of net importers is concerned, the CR occupies the fifth and the second position among the EU members and the EU wine-producing countries (behind Germany). The rank and the position of the individual EU member countries according to their net imports and/or exports of wine are presented in Figure 8.

The remaining 14 member countries that are not mentioned in this graph occupy a position somewhere between Portugal and the Czech Republic.

The position of the Czech Republic in the European wine market is illustrated also by data presented in Table 1.

In the European Union, the process of globalisation resulted in a negative trend because this historically always-exporting region gradually changed into an importer of wine. If the wine CMO is not be changed, the European Union will become a net importer as early as by the end of this decade. The recent devel-

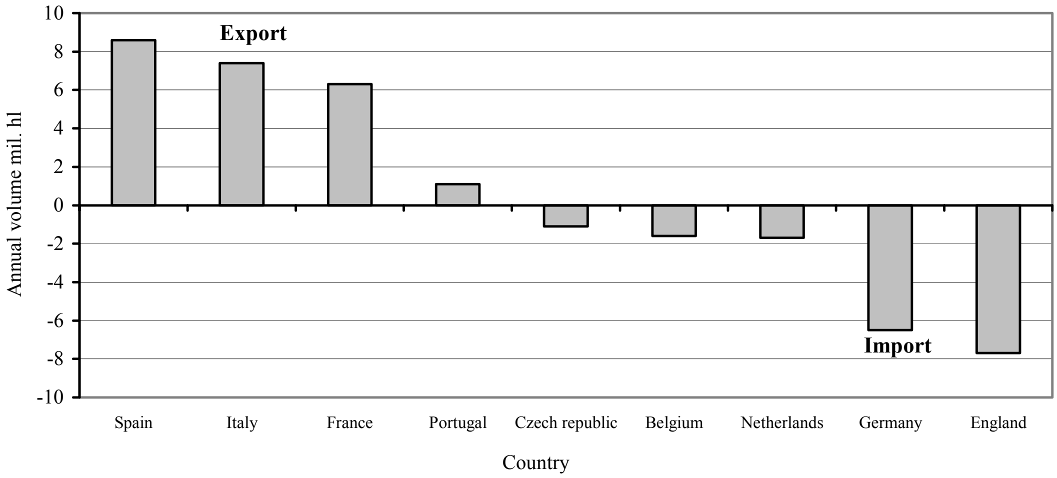

Figure 8. Wine market in some EU countries (2003)

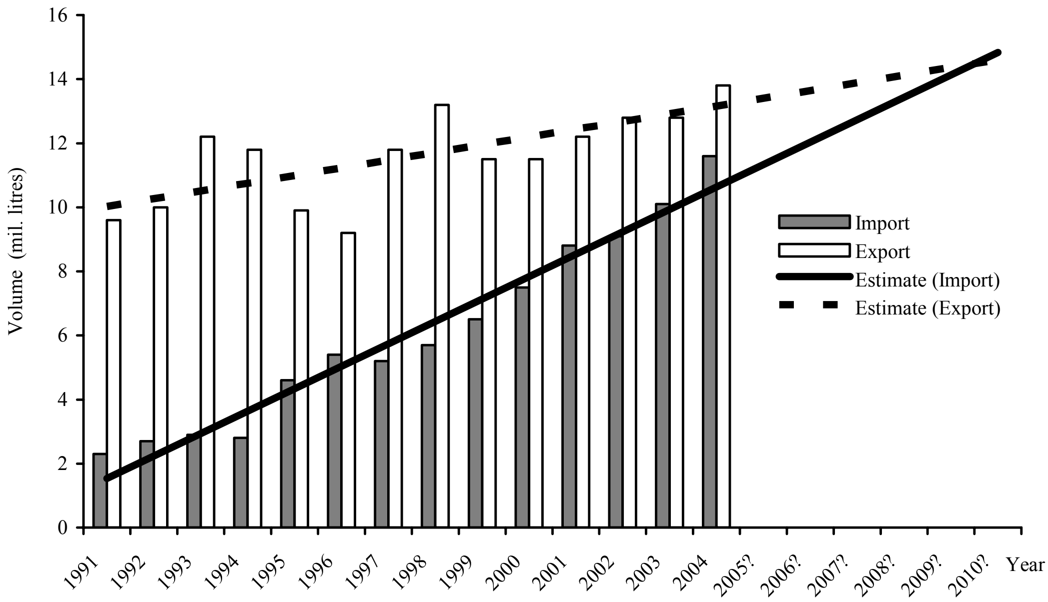

Figure 9. Changes in wine exports and imports within the EU (1991–2010)

Table 1. Comparison of the CR and the EU in production and consumption of wine (2004)

	EU	CR	Percentage of the CR in EU
Population (million)	450	10.3	2.3
Acreage (thousand ha)	3 650	19.3	0.5
Wine production (million hl/year)	180	0.6	0.3
Wine consumption (million hl/year)	140	1.7	1.2
Per capita wine consumption (l/year)	34	16.5	49.0

opment and the prospects for the next five years are illustrated in Figure 9.

After the entry of the Czech Republic into the EU, the annual increase in the value of imported wine equalled 1 billion CZK (from 1.56 to 2.58 billion CZK), i.e. by 65% (Figure 10). Besides the increase in the volume of imported wine (by 42%), there was also an increase in the average price of one litre of imported wine (from 17.0 to 20.0 CZK).

It was also expected that after the entry into the EU there would be a steep increase in wine imports, which would be followed by a slightly less steep decrease. In fact, however, this increase was much slower and at present it is expected that it will slowly decrease. The final volume of total imports will be a little higher than before (see Figure 11) but it seems that this will not jeopardize the existence of Czech wine growers mainly due to a continuously increasing consumption of this noble beverage.

The difference in the financial value of wine consumed one year before and one year after the entry of the Czech Republic into the European Union is illustrated in Table 2.

After the entry, approximately 90% of imported wine originated from the EU-member countries while one year earlier this figure was only 70%; the difference resulted mainly from the fact that the former candidate countries became members of the EU. The volume of Czech wine exports is, however, still insignificant (Table 3).

The export of wine from the Czech Republic equals 2% of the total volume and 5% of the financial value of imports. The entry into the EU caused a principal change in the wine trade because the customs duties were not calculated on the base of the declared prices

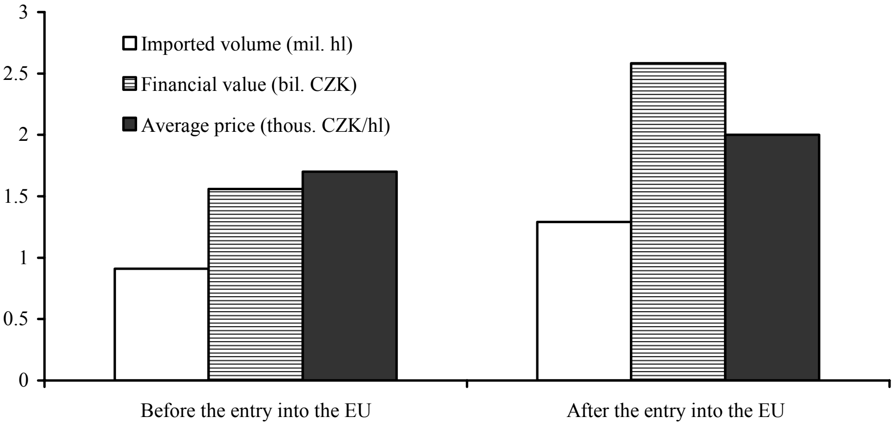

Figure 10. Annual imports of wine into the Czech Republic (2004–2005)

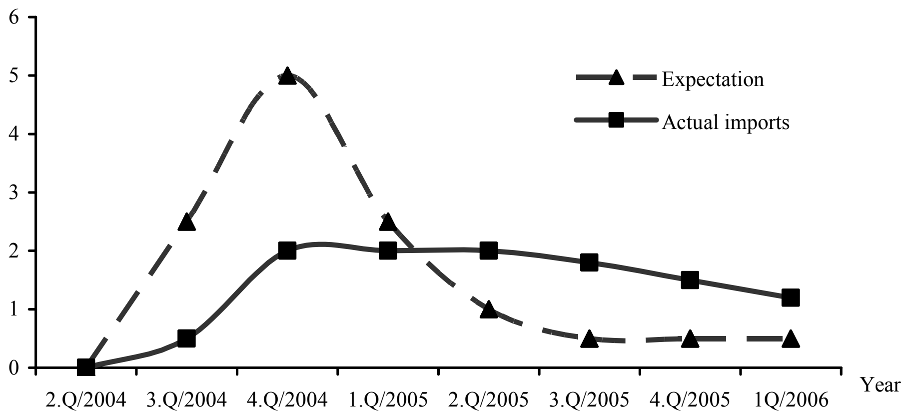

Figure 11. Expected development of wine imports into the CR

Table 2. Value of wine consumption one year before and one year after the entry of the Czech Republic into the EU (billion CZK)

	One year before the entry 1st May 2003–1st May 2004	One year after the entry 1st May 2004–1st May 2005
Domestic production	2.0	2.0
Import of bulk wine	0.7	1.0
Import of bottled wine	0.8	1.5

Table 3. Export of wine from the Czech Republic (2004)

	One year before the entry	One year after the entry
Volume of exported wine (thousand hl)	21	31
Financial value of exported wine (million CZK)	108	126
Trade balance (billion CZK)	–1.45	–2.45

of wine and were levied as fixed tariffs per volume units. This resulted also in a change in the reported value of imported wine because it did not influence the calculation of customs tariffs. Besides, after the entry into the EU, custom duties are levied only in approximately 10% of the total volume of imported wine; the majority of imports originates from the EU-member countries and is, therefore, duty-free.

Financial support of wine growing and production

Before the entry of the Czech Republic into the European Union, subsidies of the Ministry of Agriculture and contributions from the Viticultural Fund for regeneration of vineyards were the most important sources of financial support. After the entry, however, this support is not possible. For that reason, the Czech Republic participated actively in the programme of re-structuralisation of vineyards within the framework of the CMO. However, the received financial support and the number of subsidised wine growers were not very high (15 million CZK for 36 wine growers, resp.). Since 2005, the wine

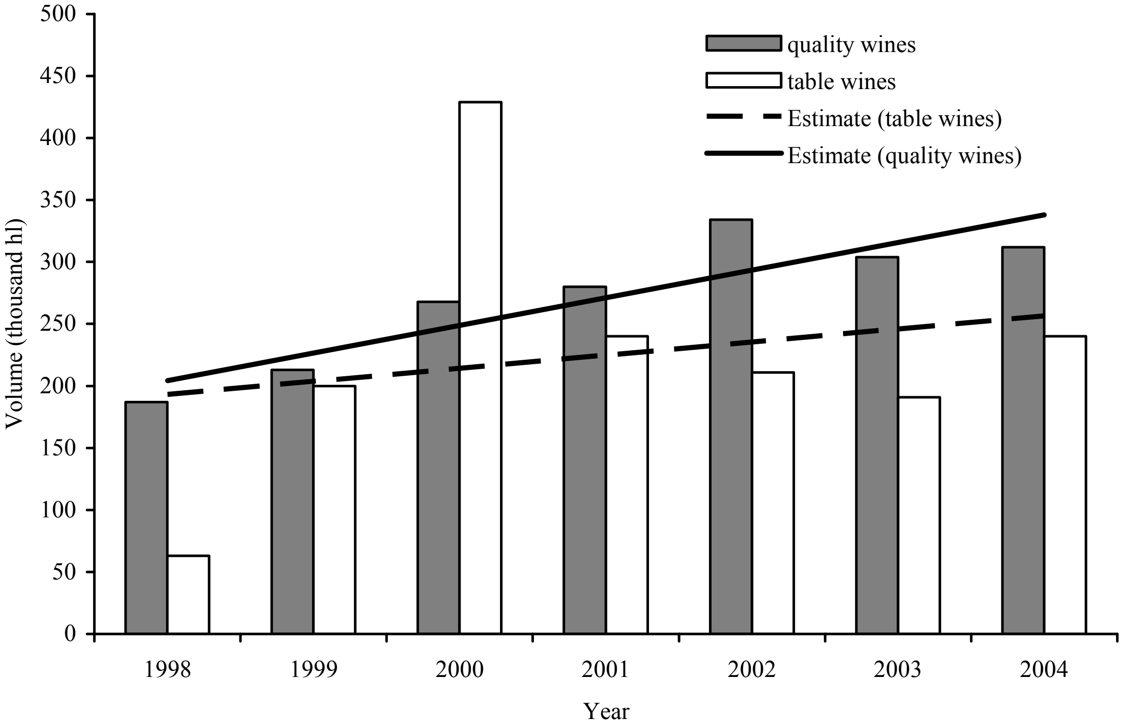

Figure 12. Changes in production of quality and table wine

growers can apply for subsidies granted by both the European Union and the Czech government within the framework of a sub-programme of integrated production of grapes, which is a part of the programme called the Horizontal Rural Development Plan (HRDP). The grapevine breeders and selectionists are subsidised in a similar manner as all other farmers. In recent years, irrigation of vineyards is being subsidised as well. The Viticultural Fund is now prepared to provide a general support of wine marketing but during the first year it was necessary to wait for an approval.

Structure of wine production

A marked shift towards the production of better wines took place ten years ago, i. e. after the passing of the Act on Viticulture (No. 115/1995 Sb.), which distinguished between table and quality wine and introduced also a new category of wine with the predicate as a group of wines of the top quality. Since that time, the share of table wine was continuously decreasing and the preferences of quality wine and wine with the predicate grew up (Figure 12).

The qualitative improvement was manifested also in an increase in the overall consumption of wine (Figure 13). So, for example, in the vintage of 2003, the share of domestic wines with predicate was nearly 20% and more than a half of them were declared as the late harvest (Figure 14).

Grape prices

Within the last three years, the prices of wine grapes were relatively stable and ranged from 13.0 to 15.0 CZK/kg. The price of grapes is derived from the variety and the sugar content. The fluctuation of average prices of grapes results in full from the changes in the content of sugars.

There is also a stable difference between the price of red and white grape varietals and the price of red ones is still by 3 CZK/kg higher (Figure 15).

The opening of the Czech wine market, which took place after the entry of the Czech Republic into the EU, did not cause a decrease in grape prices because

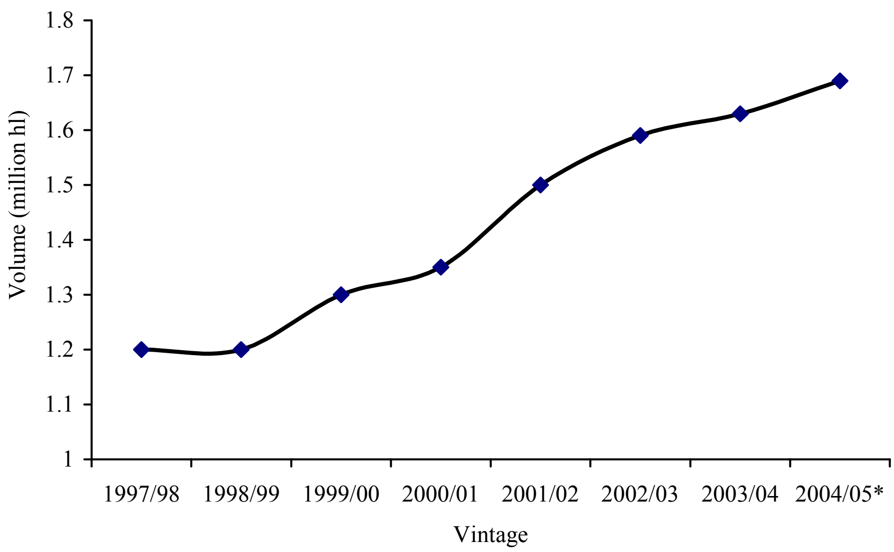

Figure 13. Wine consumption in the Czech Republic

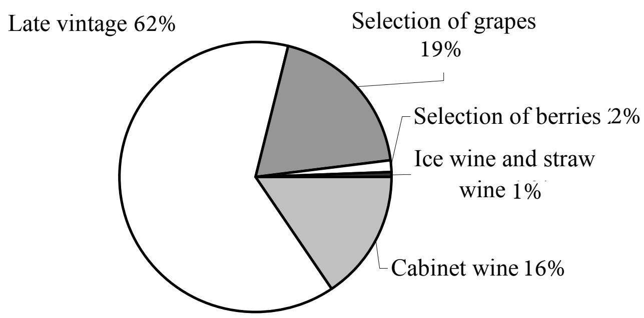

Figure 14. Percentages of individual subcategories of predicate wine, year 2004 (total 94 thousand hl, vintage 2003]

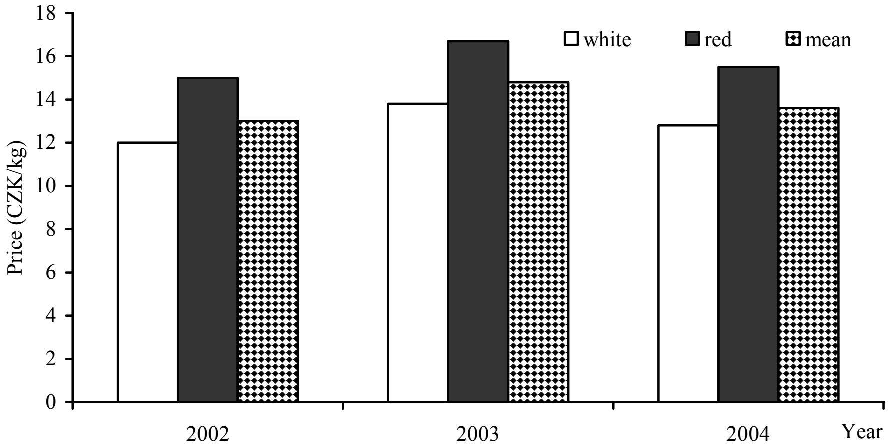

Figure 15. Prices of juice grapes in the Czech Republic

the domestic quality and predicate wines can be made only from grapes produced in the Czech Republic. Grapes imported from the EU member countries may be used only for the production of table wines. In the year 2005, however, the price of grapes could be negatively influenced by the annual increase in wine imports.

CONCLUSIONS

Thanks to the managerial efforts of wine growers, interest groups, and the Czech government, the viticulture and wine making became a dynamically developing branch of industry. The period before the entry into the EU on 1st May 2004 was characterised by significantly positive legislative changes that markedly contributed to the qualitative improvement of the final product, i.e. of wine. From the oenological point of view, the wine growing regions of the Czech Republic were classified into two zones: Bohemia into the zone „A" and Moravia into the zone „B". These two wine-growing regions were legislatively divided into six sub-regions (instead of the original 16) and the system of wine production recording was tightened up. Within the last decade before the entry into the EU, the acreage of vineyards increased due to the new plantations and the related subsidies, which ranged from 50 to 250 thousand CZK/ha. In 2005, the production potential of Czech vineyards was 19.3 thousand of hectares. As far as the acreage, production of grapes and making of wine are concerned, this industry is relatively important and offers nearly 20 thousand of jobs. Numbers of the registered wine growers and wine producers are 18 thousand and less than 600, respectively. In spite of the positive extent of the basic production resource (i.e. the area of vineyards), the Czech Republic is still the most important importer of wine among the new EU member countries. The Czech export equals only to 2% of its import volume. The purchasing prices of grapes are relatively stable as well as the price difference between red and white wine varietals. These positive trends should be stabilised thanks to joint efforts of businesses and their management and it is also necessary to use the possibilities and resources resulting from the entry into the markedly enlarged market of the European Union and its linkage with other parts of the world. The development of viticulture and wine production represents an important strategic decision because this concerns a period of at least 30 years, which should be considered within the context of not only the European Union but also countries of the New World and also with regard to opportunities and threats requiring the application of methods of the strategic analysis.

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