

# Comparison of analyses of winegrowing and wine-production in the Czech Republic, the EU, and South Africa

## *Komparace parciálních analýz vinohradnictví a vinařství ČR, EU a Jihoafrické republiky*

P. TOMŠÍK, H. CHLÁDKOVÁ

*Mendel University of Agriculture and Forestry, Brno, Czech Republic*

**Abstract:** The area of vineyards has increased to 19 261.5 hectares and the number of wine producers to 18.292 by 1 May 2004. This branch needs a long-term study that will lead to the establishment of the new politics for viticulture and wine-growing, related to the needs of the region. The trends are compared to the main European producer – France, and another country from the so called “New World” – the South African Republic. The researches are focused on the consumption of wine by population, share in the gross national product, employment in this branch, areas of vineyards, and number of wine-growers.

**Key words:** politics, branch, viticulture, wine-growing

**Abstrakt:** V České republice došlo k 1. 5. 2004 k nárůstu ploch vinic na 19 261,5 ha a na 18 292 pěstitelů. Odvětví potřebuje dlouhodobou studii, která povede k sestavení nové politiky vinohradnictví a vinařství pro potřeby regionu. Trendy jsou komparovány s hlavním evropským producentem Francií a jednou ze zemí „Nového světa“, Jihoafrickou republikou. Sledování jsou zaměřena na konzumaci vína populací, podíl na hrubém národním produktu, zaměstnanost v odvětví, plochy vinic a počet pěstitelů.

**Klíčová slova:** politika, odvětví, vinohradnictví, vinařství

## INTRODUCTION

During 2003 to 2004, the area of vineyards had been extended in the Czech Republic, which was caused by the effort to extend the areas before the admission of the Czech Republic to the European Union, on 1<sup>st</sup> May 2004. There were 19 261.5 hectares of vineyards and 18 292 wine growers as of 6<sup>th</sup> August 2004. In relation to these data and due to the development of this branch, it is necessary to mention that there were 2 232 wine-tracks (51 710 hectares) on 6<sup>th</sup> August 2004 in the Czech Republic. They are situated on 413 cadastral territories and in 373 wine villages. This situation is going to be changed – it will be influenced by continuous registrations, and within the necessary actions the data must be further specified. There is a significant increase in the area

of vineyards, in comparison with the year 2002 when the register included 12 469 hectares of vineyards and 10 061 wine growers. Due to such a significant increase of vineyards area, it seems to be efficient to elaborate a policy, or more precisely a course of actions, until the year 2020. It will define the needs of this branch. This branch is expected to be influenced significantly by the factors of the external environment. The existing competitors, new wine producers entering the market, processing companies and also producers of traditional substitutional alcoholic drinks and beer – all of them will probably play an important role within this branch. In the framework of the elaboration of the above-mentioned concept, it is necessary to consider the general thesis “think globally, act regionally” applied to the possible strategies within the researched branch.

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During the recent period of time, there have been many researchers who focused on the fields of wine-growing and wine-production, and specifically on the environment in the branch, e.g. Černíková (2003); Žufan (2004); Chládková et al. (2004); Chládková (2004); Tomšík, Lišková (2004); Žufan (2004); Tomšík, Žufan (2004). The research efforts of the above-mentioned researchers lead to the establishment of the concept of winegrowing and wine-production in the South Moravian Region, interconnected with the field of rural development.

## MATERIAL AND METHODOLOGY

The paper was written as a part of solution of the project No. NAZV QF 2376 (financed by the Ministry of Agriculture of the Czech Republic).

In the view of the fact that the Czech Republic became a member of the European Union in 2004, it is purposeful to compare the secondary data describing the situation in the Czech Republic with the data of selected world-known wine producers. The main focus of this paper is position of wine production within the national economy of France (as a representative of the EU), or more precisely the share of vineyards in agricultural land, employment, share in the gross national product, trends within the wine consumption in France and in the Czech Republic. On the other hand, the wine that comes from the so called "New World" has been becoming more and more popular in the European market, and based on the information about South Africa, Czech wine producers should not underestimate these competitors.

The paper uses some elements of STEP analysis of opportunities and threats in winegrowing and wine-production. As far as the title of the paper mentions 2 branches – production of grapes (winegrowing) and their processing (wine-production), it is aimed on the selected factors of the researched environments within these industries. The main objective is a partial elaboration of the groundwork for development of the policy of winegrowing and wine-production in the South Moravian Region.

## RESULTS AND DISCUSSION

As an introduction to this part, we can start with the basic data on the position of winegrowing in the French national economy. Since 2001 the agricultural land has not amounted to more than one half of landscape in France. During the past 10 years, the

amount of agricultural land has decreased by 2.5% (753 thousand hectares). The forests amount to 30% of the territory, the area of forests has been extended by 2.8% (450 thousand hectares). The area of vineyards as well as other use of land have decreased by 2.4% = 23 thousand hectares, so the vineyards are grown on 1.7% of the French territory.

French vineyards are located in 80 departments. More than 95% of vineyards are in 30 departments with the area of more than 5,000 hectares each. The vineyards cover 3.2% of agricultural land at present. Excluding subsidies, winegrowing represented 14% of agricultural production and 26% of plant production (8.5 billion EUR) in 2001, compared to 9.1 billion EUR in 2000, of which 85% are wines of the highest quality (VQPRD) – 83% in 2000 and 76% in 1990. Winegrowing represents the main effect on the value of farms, in France. In the long-run, wine growing contributes to higher density of population and to structuring of landscape thanks to the grape vine as a permanent crop. There are also other important benefits for France – in the fields of tourism and gastronomy.

Winegrowing is considered to be an employment opportunity for both men and women. It is not easy to clearly quantify the benefits in terms of employment opportunities created by wine-growing. Economists estimate that wine growing employs 188 900 workers including 51 600 full-time employees. Wine trade which is related to winegrowing employs 36 000 people. Farming employs 8 500 full-time workers. There are 5 000 cellar-men, 1 500 of whom are self-employed. Further on it is necessary to add the number of jobs related to wine as a commodity within food distribution and in restaurants.

For the purpose of comparison, there are given some data from the Czech Republic (CR) and other European countries. In the Czech Republic, the share of agriculture in the gross domestic product amounted to 2.9% (the average value in the EU was 1.7%), while the share of inhabitants employed in agriculture in the Czech Republic was 4.1% (the average value in the EU was 5.1%). Agricultural production (which kept decreasing since 1989) has been successfully increased above the level of 1989 only in Slovenia and Romania. In the Czech Republic, the decrease was much more significant than the average value in the states of the Central and Eastern Europe. The result is that since 1994 there has been higher import than export of food in the Czech Republic, and this trend has been becoming even stronger. The amount of subsidies in the field of agriculture (expressed in the recounted value of production subsidies) is considerably lower

in the Central and East European countries than in the EU member countries. The subsidies in the Czech Republic had been decreasing regularly and bar none since 1989, to 26% of the EU value in 1997. The share of wine in total agricultural production in the EU is 6.4%. The share is different in different countries – 3.8% in Germany, 5.4% in Spain, 6.1% in Austria, 7.5% in Luxembourg, 9.8% in Italy, 14.3% in France and 16.8% in Portugal. In several regions, wine production represents up to 30% of the total agricultural production, in some of them it is even higher than 40% (e.g. Rheinland-Pfalz). In 1995 the value of wine production and stump amounted to 1.9 billion EUR, in the EU. In the Czech Republic wine represents less than 2% of the total agricultural production, but in some areas in South Moravia, there are high concentrations of wine production. 48% of all Czech vineyards are in the district of Břeclav. They are cultivated by 55% registered wine growers in the Czech Republic (this number represents 12% of inhabitants of the district in the productive age). In some larger wine-villages, the share of registered wine growers reaches up to 35% of the productive inhabitants of the village.

In the EU, there are situated 45% of the world vineyards. The largest vineyards are in Spain, their share in the total area of vineyards within the EU amounts to 34%, in France (27%), Italy (25%), Portugal (7%), Germany (3%), and Austria (1%). The area of vineyards in the Czech Republic amounts to 0.35% of the area of vineyards in the EU. In Germany, Austria and Luxembourg, there are vineyards only for production of a high quality wine, while in Italy, Portugal and Greece other vineyards predominate. 75% of German wine growers are specialised exclusively in the field of winegrowing, in Luxembourg it is 97%, 60% in Austria and 80% in France. In the Czech Republic, there is a considerably lower specialisation of companies than in the EU countries. In the EU, 1.7 million companies cultivate wine. In the Czech Republic, there are only 18 thousand such companies, including people working part-time. The average five-year output of wine from one hectare amounts to 6.6 tons per hectare in the EU, while there are significant differences among the states, e.g. in Luxembourg the value is almost 17 tons per hectare, 12 tons in Germany, 9 tons in Italy, 8 tons in France, 6 tons in Austria, 4 tons in Portugal, and 3 tons per hectare in Spain. Czech Republic reaches the average value of the EU, in this factor. The average level of wine consumption per one inhabitant and one year amounts to 34 litres in the EU, and the average value in the Czech Republic is a little more than 16 litres per year and inhabitant.

### **Basic facts about winegrowing and wine-production in the South African Republic**

The South African Republic is the ninth largest producer of wine in the world, with the share of 3.1% in the total world production.

At present, wine is grown on the area of 120 thousand hectares in the South African Republic, while on the area of 11 595 hectares, there are cultivated special grapes (sultans) which are used for production of brandy. The best vineyards are in the surroundings of Cape Town, the area about 100 km long towards Stellenbosch. Even though the climate in the South African Republic is suitable for production of concentrated (full) and rich red wines, in 1990 there were white varieties planted on 84% of the land. It was caused particularly by the fact that the South Africans preferred light white wines to the red ones. The situation has been consequently changing, and the areas of white and red varieties are being balanced. The most important white variety is still Chenin blanc (Steen), in spite of the decrease of the area of this variety. As for blue grapes, the most extended variety is Cinsaut (traditionally), one of the less important South African varieties. The importance of Cabernet, Merlot and Shiraz has been increasing. The white varieties amount to 55% of the area, while the blue varieties amount to 45% of the area. The major newly planted variety of blue grapes is Cabernet.

The present winegrowing and wine-production industries in the South African Republic employ roughly 348 500 workers. Of this amount, there are nearly 48 350 people employed in the field of wine tourism. According to the statistics, winegrowing and wine-production in South Africa contribute to the incomes of the national economy by 14 600 mil. ZAR (981.38 million EUR). 474 538 million EUR is gained from the development of the wine tourism in wine territories.

In 2002, the wine industry in the South African Republic was united – due to the objective of the African wine growers to be competitive on the international level by the means of the common effort. One of the most important roles is played by the change of grapevine categories in vineyards in favour of blue varieties, and further on also modernization of growing and processing activities contributing to higher quality of wine production.

### **Consumption of wine in France**

According to the research results provided by the French organization Onivins, since the sixties of the

20<sup>th</sup> century, wine consumption by the population from the age of 14 years has fallen nearly twice (from 135 litres to 71 litres of wine per year). The decline of wine consumption is not related only to France. It concerns all traditional wine producers – Spain, Italy, and Portugal. Despite this fact, an average Frenchman is still a heavy wine consumer, in comparison with the inhabitants of other countries: French people consume 57 litres per person per year (without the age differentiation), Italians 55 litres per person per year, Germans 24 litres, British 16 litres, American 8 litres, and Japanese 3 litres per person per year.

For the French, wine is the main drink with alcohol-contents; however, within the last decades it has been competing with beer and spirits (whiskey, gin and vodka).

Since the campaign organised from 2001 to 2002, wine consumption has increased again up to 34.2 million hectolitres, when the share of a high quality wine AO (Quality wines) is 49%. The amount is influenced also by consumption of wine by tourists in France, and by purchases of wine realised by foreigners (about 1 million hectolitres of wine is transported across the La Manche).

For better understanding of this decrease in consumption, the INRA Montpellier (Laboratories for Economics and Rural Sociology) and Onivins have been doing public inquiries monitoring the behaviour of French wine consumers. Such continuing inquiry will be necessary to be realised also in the Czech Republic.

The decrease during the period of 1980 to 1990 is explained by lower preference for wine. The number

of non-consumers within the population from the age of 14 up has increased from 24% to 36%, which means the loss of 3 million consumers. This situation is accompanied also by the change in preferences for wine consumption. The regular consumers started to consume wine only occasionally (instead of every day or nearly every day consumption) – once or twice a week or even less frequently. In 1995, this trend was discontinued. The number of non-consumers stabilised on the level of 35% of people from the age of 14 up. From 1990 to 2000 there were about 2 million consumers who decided to start consuming wine again.

Despite this fact the number of regular wine consumers has been decreasing (in relation to the number of irregular consumers). In 1980, there were 61 regular and 39 irregular consumers in the total number of 100 consumers. During the next 20 years, the relation had been converted to 37 regular and 63 irregular consumers. It is necessary to know that a regular consumer consumes 5 to 6 times more wine than an occasional one. It explains the fact that termination in the increase of non-consumers of wine has not created a higher wine consumption.

Changes of frequency of wine consumption have to be seen in comparison with the age of consumers. In 1980–1990, the number of the young (20–24 age) non-consumers almost doubled from 30% to 56%. From 1995, this share has been stabilized. Nowadays, we can say that none of young Frenchmen (younger than 25 years) are regular consumers. Young Frenchmen that start to consume wine stay to be only occasional consumers, but the older ones change to the regular

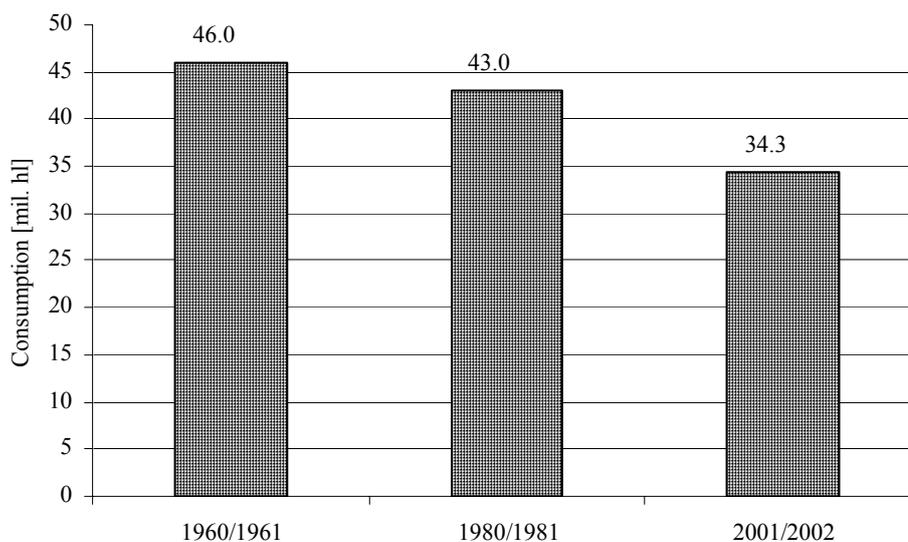


Figure 1. Consumption of A.O. (appellation d'origine) wine in France (1960/1961 – 10% A.O., 1980/1981 – 20% A.O., 2001/2002 – 49% A.O.)

Source: ONIVINS DGI – DGDDI (2002)

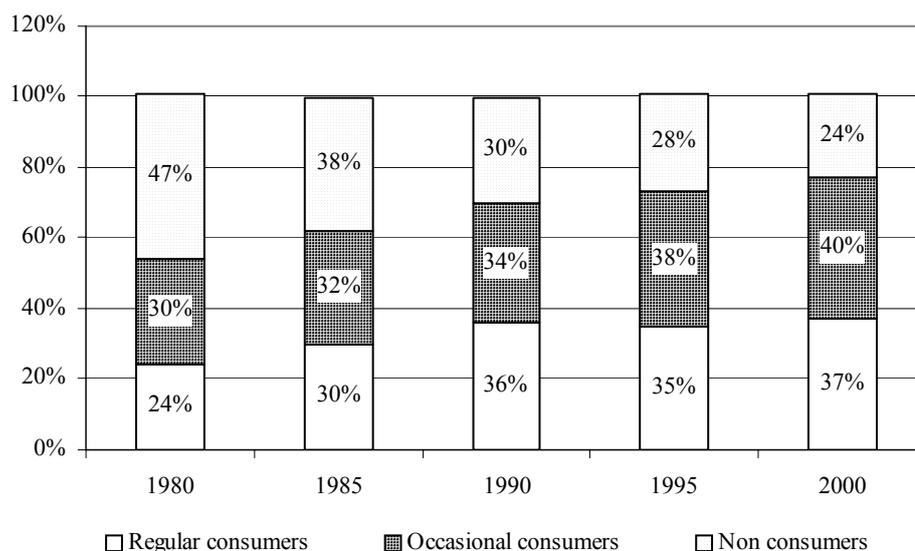


Figure 2. Wine consumption in France – the leap in 1995

Source: INRA – ONIVINS (2002)

consumers. We can see that the young consumers are learning, now. In 1980 the regular consumers prevailed from the category of 30 years old people, in 1990 it was from 45 years old, and from 2000 we can most probably expect the change from occasional to regular consumers at 60 years of age.

The number (40%) of occasional consumers is the same for men and women (confirmed by the research in 2000). But at the category of regular consumers who drink wine daily or several times a week, it was identified that there are about 32% of men and only 15% women. Non-consumers, on the other hand, include 45% of women, and 28% of men.

The change of wine-consumption is explained by the retreat of wine as a traditional part of a meal.

In the last decade, as opposed to the tradition when wine consumption with a meal was a rule (wine as a nourishing drink), people transferred to an occasional consumption, where drinking wine is more “festive”. Thus, wine does not have the position as a drink which accompanies meal, as it were in the past. In

47% of families, though, wine is on the table at every meal. Today, wine is considered a more social drink, and therefore 82% of French state that wine is never missing in friendly gatherings and festive occasions (Figure 1 and 2).

#### Changes of production, consumption and exports of wine in the South African Republic

Table 1 documents the development of production and consumption of wine in 1998–2004. The growth of production in 2003 was about 31%, in comparison with 1998. There also grew the consumption of wine, which have increased by 22%. The biggest growth, though, have been recorded in the case of the total stock of wine (42%, 2003/1998). According to the estimations for 2004, the growth of stock should amount for round 68%.

Comparing the years 1998 and 2003, production grew by 31% and consumption by 22%. In the last

Table 1. Production, sales, and stock of wine in the SAR in 1998–2004 in million litres

	1998	1999	2000	2001	2002	2003	Estimation 2004
Wine production	544.4	595.9	540.2	530.4	567.2	712.7	707.2
Wine consumption	351.4	362.0	363.6	419.2	439.0	429.2	–
Total sales*	488.2	503.1	530.6	564.1	590.0	567.4	621.9
Total stock	250.2	315.6	290.5	242.3	214.3	356.8	420.6

\*including exports

Source: SAWIS (2004)

Table 2 Total exports of wine from the South African Republic in 1992–2003

Year	Litres	Trend
1992	21 995 782	95
1994	50 691 808	206
1996	99 900 000	140
1998	116 766 480	108
2000	138 381 955	108
2001	176 091 533	126
2002	215 766 287	123
2003	237 332 451	110

Source: SAWIS (2004)

three years, though, wine-consumption basically stagnates. Current average wine consumption oscillates around 9 l per person per year. Most of the South-African population drinks more beer than wine. Wine consumption is slightly increased by tourists, because the Cape Town belongs to the most visited cities of the world.

The total exports of wine from South African Republic records a significantly growing trend. Table 2 and Figure 3 document the significant trend of growth of exports from South Africa. In 1992, the exports were only about 22 million litres, whereas in 2003, the exports were about 237 million litres, which is more than tenfold growth.

Half of the exports of wine from South Africa (50%) is directed to the Great Britain, where South-African amounts for about 10% of total wine consumption.

Another 19% of exports go to the Netherlands, and 7% to Germany. The biggest growth was recorded in the case of exports to Sweden (by 133%).

### Wine consumption in the Czech Republic

Wine consumption in the Czech Republic grows annually from 1994, and its actual level is about 16 litres per capita per year. The reasons of growing consumption of wine include the modern lifestyle, which is bound with a drift from spirits, and also beer. Czech Republic experiences a growing popularity of wine and its consumption becomes an important social phenomenon. People also consider wine being a healthy drink. Czech consumers are starting to learn what wine is, what occasions it is good for, and when it should be drunk. There are a growing number of special wine-shops, sommeliers, people are more inquiring, pay more attention to the choice, care about their health, and especially, become more gourmets. According to the GfK agency, the expenses of Czech households for wine have grown within the last years' first 10 months by 7%. Sales of wine in the retail chains grew by 11%, according to the AC Nielsen agency. Thanks to the more significant preference of higher-quality goods, the sales of wine in "stable" stores are growing. Retail chains are already taking the sales from the small retailers, wine-vaults, and pitchers. Thanks to the apparent shift of consumers towards quality, there was the highest growth in the case of quality variety-wines. Concerning the stable wines in 2004, people have most often bought the vintage wines in higher price-categories of 70–90 CZK per an 0.75 l bottle, which is about 20–40 CZK more

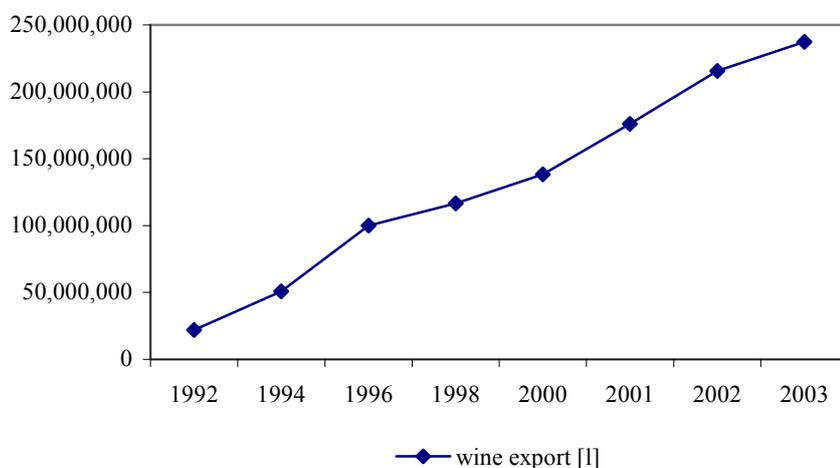


Figure 3. Exports of wine from the South African Republic

Source: SAWIS (2004)

than they were willing to pay three years ago. This year's sales will probably be mostly influenced by the purchasing power of inhabitants, and the increase of consumer-tax in spirits. Similar results were also achieved in our research. Most of the respondents answered, that they buy wine in super- or hyper-markets, and then in special wine-shops. The research have also proven a high sensitivity of respondents to the price of wine, but an acceptable price of wine was most often considered 100 CZK per bottle of 0.7 litres. When purchasing wine, respondents are also substantially influenced by own experience, i.e. when a respondent is satisfied with the wine, then the given type, kind, and producer has very probably gained a stable customer.

Owing to the significant growth of the area of vineyards in the Czech Republic, it is necessary to pay attention to the trends of this industry, and to compare the findings with the countries, which are the main European producers, not forgetting the development trends happening in the countries of the so called New world. This knowledge can help to formulate the resulting policy of winegrowing and wine-production in the Czech Republic. These findings are described by the researchers mentioned in the introductory part of this paper. Both examined industries are really global industries with an impact on specialized regions of particular wine-producing countries, including the regions of the Czech Republic.

## CONCLUSION

Winegrowing and wine-production industries are (similarly to France) traditional specialization industries of plant production in the Czech Republic. But due to the growth of the vineyards area to 2004, and incorporation of grapes and wine-producers into the EU, their production and processing are put into different conditions of competitive environment, which has to be examined from short-term and strategic viewpoints, in order to keep at least their regional development importance. This was assisted by the overall growth of production potential of vineyards in Moravia (18 511.9 ha) and in the whole Czech Republic 19 261.5 ha with the possibility to be further increased by 2% (385 ha) agreed within the pre-accession agreements with the EU.

Besides the growth of wine consumption, there also appears the trend to consumption of quality wines, in the Czech Republic (similarly to France).

Improving position of the South-African wine production in the particular European markets points out that Czech and Moravian winegrowers should not underestimate the competition from other countries, especially from the countries from the "New world" of winegrowing.

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### Contact address:

Doc. Ing. Pavel Tomšík, CSc., Ing. Helena Chládková, Mendelova zemědělská a lesnická univerzita v Brně, Zemědělská 1, 613 00 Brno, Česká republika, e-mail: [chlad@mendelu.cz](mailto:chlad@mendelu.cz)

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