SZENT ISTVÁN UNIVERSITY
GÖDÖLLŐ

ANALYSIS OF WINE TRADE BETWEEN HUNGARY AND THE EUROPEAN UNION WITH SPECIAL EMPHASIS ON COMPETITIVENESS

Thesis of doctoral (PhD) dissertation

by:

Norbert Bozsik

Gödöllő
2005

Doctoral School

description:	**Management and Business Administration Sciences Doctoral School**
scientific field:	**Management and Business Administration Sciences Studies**
the head of the school:	**Dr. István Szűcs** **professor, doctor of Economics** **SZIU, Faculty of Economics and Social Sciences, Department of Economic Analysis and Methodology**
supervisor:	**Dr. Aladár Sipos** **professor, member of Hungarian Academy of Sciences** **Economic Research Institute of Hungarian Academy**

„The French prepare their wine for those who pay high price, while we educate our consumers in order to our taste."
/István Széchenyi: Credit/

1. THE RELEVANCE OF THE TOPIC

The accession negotiations between Hungary and the European Union were finished on the 12-13th of December 2002. Decision has been made about when, with whom and under what circumstances Hungary is going to join the EU. Hungary with nine other nations became a member state with full powers on the 1st of May, 2004. This event has significant consequences on the entire Hungarian agriculture, providing a new competition era in many aspects.

It is an often arising question concerning the accession, what is the effect of this new trading environment on different national producers, people involved in processing and trading as well as consumers. This change has different effects on stakeholders of different sectors, which explains the increasing call for detailed and complex analysis of different sectors and products, with special regard to profitability and competitiveness.

In this study I focus on the trade of wine between Hungary and the European Union, paying special attention to competitiveness. The subject in question has a long time history. Wine has taken a unique place in the history of Hungarian international trade, since the 14th century, during the reign of Károly Róbert it became the major exported good providing important revenue. This traditional role has not changed much in the last seven centuries. The sector – with some smaller-bigger ups-and-downs – was able to reach excess export over the import, resulting positive results in the last decades.

The change of regime has created a new situation for the export of Hungarian wines. After 1990 – losing the traditional 'eastern' trading partners – Hungary tried to orient itself to the western market. However it was not easy as the quantity-based view of that time had to be changed for a quality-based one. The international trade of the sector could and can still be characterized as active. The annual price income is 65-100 million Euros. The sector can make a payment of more than 12 billion Fts to the budget (mostly given by the 25% VAT). The increasing competition however comes together with growing challenges, especially with the importers of the 'third countries'.

The stormy years after the change of regime have created a significant rearrangement in almost all the fields of the domestic grapes and wine industry. The international commercial conditions have changed; just as the consumers' demand. The markets give grounds for the observation of this topic with special emphasis on the characteristics of trading practices and competitiveness. From a commercial point of view by joining the EU and accepting its Common Agricultural Policy a new situation has been created, as since 1 May, 2004 about 80% of our wine products has got into the intra commercial-stream of the EU. On the other hand the new common customs and quotas also influence the changes in our foreign trade. This "rearrangement" of the trading environment causes great excitement among the participants of this sector being directly or indirectly influenced by it.

Goals

I have aimed several goals in this paper:

- I would like to study and evaluate the wine trade between Hungary and the European Union by analysing the structure of the export and import. Special attention is drawn to the changes of stability and the dynamic aspects of export and import.
- In the international integration literature during the 90's increasing number of researches have been focusing studying the adaptation of integration. Joining to the single market changes the international relationships for sure. This raises the question what adaptation price has to be paid or does it create new trading relationships or divert from existing ones, with special regard to the certain case when the integration of other new EU member states are potential trading partners of Hungary. One can identify the horizontal, vertical or one- or two-way nature of trade by unit value indexes and trade-overlapping evaluation. Using these methods can help to identify the character of trade between Hungary and the European Union at the wine market, and find conclusions whether the accession results in significant costs and/or reorganization. This kind of identification of trade is also important from the prospective of competitiveness.
- While working on this study I intended to find out how competitive the Hungarian wines are at the market of the European Union according to their prices. Two further issues have also risen for observation: (1) How much determining is the difference in prices among the highly-processed products (e.g. wine) in their competitiveness at the potential market, and (2) whether the price benefit has remarkable importance in the case of special products (wine) or the explanation for the variations in demand can be found in other factors. As besides the formation of the prices, the quantity of the sold products is not less important. I have tried to link and evaluate together the so-called "quality competitiveness".
- Using competitiveness indices I would like to find out the potential competitiveness of different wine categories on the market of the European Union.

- Using the CMS model I evaluate the changes of different factors on the performance of wine export. Notably, how can the change of the export of Hungarian wines to the EU market be divided into different components: due to general market changes, structural changes and the competitiveness effect which is often time interpreted as residue term.
- It is also aimed to compare results of different methods. The question here is, whether one can come to a conclusion or make statements based on results of different methods, which help to get a clear view about the competitiveness of the different wine categories.
- While analyzing Hungarian wine trade I find it important to analyse the trading with the other recently joining countries. This is especially important in the light of the fact that these countries were important trading partners before 2004.
- Finally I would like to make recommendations about further steps needed – based on conclusion of the research – in order to increase the competitiveness of Hungarian wines at the “international” market.

2. MATERIAL AND METHOD

The European Union also means customs union, which besides accepting the common external customs ensures the free flow of products and services at the internal market.
The institutional background is the result of the foundation of the Custom Integration Council signed in 1950 and came to force in 1952: "Agreement on the nomenclature of classification of goods". The task of the actual World Institute of Custom Affairs still contains the delivering of the antecedents of the nomenclature and the composition of the recommendations for a common understanding.

The 2658/87/EGK regulation about the custom- and statistical nomenclature, and the Single Custom Tariff was announced on the 23rd of July 1987 and came into force in 1988 (BENCS, 2003).

The Council of the European Community recognized this regulation with regard to the followings:

- The basis of the European Economic Community is a custom union, which includes the use of a common custom tariff.
- The foundation of a Pooled Nomenclature (PN) is needed with the purpose of collecting and exchanging trading, custom and statistical data at Community level.
- Since the Community has signed the Harmonized System (HS) agreement, so the Community's Nomenclature should be based on that.

The Community's Nomenclature contains the following:

- HS-nomenclature
- Subcategories (PN sub numbers) belonging to HS
- Introductory dispositions
- Additional dispositions.

From 1 January 1996 - based on the Harmonized System (HS) - Hungary has also introduced the Pooled Nomenclature (PN), which established a database suitable to deliver more detailed comparison studies which in addition is compatible to the analogous EU database. The international datasets of the investigations are based on the COMEXT database published by the European Commission. This contains data on the traded goods at ten-unit level. For comparison studies currently COMEXT is the most detailed database available, with data on trade inside as well as outside the EU. The database has figures based on quantities as well as values. The advantage of the dataset – beyond its detailed level – is that data are available not only at the country level but also for groups of nations (such as EU 15, NAFTA) or combination of groups and a nation. The aggregation is not only possible for countries but for group of goods as well (this is how I could create wine categories based on quality, colour and package). The COMEXT system can use a quantity filter, by setting the minimum quantity above which data should be included.

Beyond the EU partners the study includes 9 other nations as well. For this the WORM (Web Oriented Request Manager), which is run by the Kopint-Datorg and the Economic Ministry, has given great help.

Problem solving and finding related conclusions were needed during the applied research for the purpose of the analysis and synthesis.

The study is secondary in its kind, which beyond the literature review provides new findings based on documented and published database. The data collection was followed by sorting and personal assessment. In particular, the following methods were used:

- Literature review, which includes national and international sources. Beyond the detailed presentation of the topic the applied methodology is described, with special regard to nature of international trade and marketability.
- Document analysis, which introduces the legal environment of the Hungarian and EU wine market. The GATT and WTO agreements are also documented, which includes the regulation related to trading.

In order to specify the directions of commerce I have used the Greeneway-Hine-Milner-, Fontagne-Freudenberg- and Nilsson-index which are widely accepted methods of commerce-analyses.

Comparing prices is one of the most often used methods to measure international competitiveness. While using this I evaluate the commerce with the item of values of export and import. During the evaluation I used Euro as currency. It was not only a personal decision, but all the data in COMEXT database are given in Euro. I find it important to compare our prices with those of the competing importers and the average prices of the leading countries (Italy, Spain and France) of intracommerce. The later one is important because 60% of the total commerce is given by intra wine-trade (EU-15). I have evaluated the so-called quality competitiveness as the combination of the changes of export price and the changes market share. I tended to find out how determining the price benefit can in getting into the market. I have evaluated the position of Hungarian wines in the EU by analyzing the relative export change and the changes of relative market shares together. I have put the wine categories into a competitiveness matrix, the quality competitiveness of the wines in different quadrants can be easily evaluated.

The measuring of competitiveness is an evaluation by different samples. To evaluate competitiveness besides using SSI (sector specialized index), I have used the widely accepted comparative advantage indexes such as, (relative export advantage index) RXA, (relative import advantage index) RMA, (relative trade-advantage index) RTA and (relative competitiveness index) RC. The samples are the following:

$SSI=(X_{ajn}/X_{aj})(X_{an}/X_a)$

Where:

a= Hungary
n= EU
X_{ajn}=Hungary's export of j food to the EU (euro)
X_{aj}=Hungary's total export of j food to all markets (euro)
X_{an}=The value of Hungary's total export of food to the EU (euro)
X_a=the value of Hungary's total export of food (euro)

The samples of the measuring of the comparative advantage:

$RXA=(X_{ij}/X_{it})(X_{nj}/X_{nt})$

(Where X means export, i is a certain country, j is the given product, t is a group of products and n is a group of countries.)

$RTA=RXA-RMA$, where $RMA=(m_{ij}/m_{it})(m_{nj}/m_{nt})$
(Where m represents import.)

RC=1n RXA-1n RMS

To specify the background reasons for export change there is a well-known and often-used method of CMS (constant market share analyses), I have used it to specify the different components of export change and to differentiate between competitiveness effects, market increase and structural effects. This way it can be easily detected whether the reason for the changes in export can be found in competitiveness or exogen reasons.

For my thesis I have used the my results published in the project titled "The new standpoints of using the production factors" NKFP-2001-4-32/OM-00158/2001. which was part of the 3. sub-program titled "The structural and environmental components of the international competitiveness of the Hungarian agriculture."

3. NEW AND MODERN SCIENTIFIC RESULTS

1. In earlier studies the international competitiveness of wine is analyzed in a quite aggregated way by quantitatively evaluating the competitiveness of the Hungarian wine's foreign trade. In my scientific studies - exceeding the earlier ones- I tried to do my analyzes using such categories which make it possible to draw conclusions in a practical way. My categorization is based on colour, package and quality, according to these eight categories serve as the base of the analyses.

2. The Hungarian-EU wine trade can be characterized as one-directional trade, which obviously determines that wine production basically has a complementary rather than competitive nature, thus the accession did not lead to the deepening of competition.

3. While analyzing the formation of quality competitiveness I declared that only white, quality bottled wines are marketable. Most of the wine categories are neither competitive according to their price (white, regional table wines and white barreled wines) or to quality (red bottled wines and table regional wines). If we cannot change the price position or quality, the international competitiveness will turn to be unfavorable in long term as well.

4. My evaluations according to sector specialized index and RCA indexes about the competitiveness of wines show different results from previous ones. I have come to the conclusion that comparative advantages can be detected just in the case of two categories: white, regional table wines, and white barreled regional table wines which give the biggest share of export. In the case of the other categories although most of the samples of the raw material production make them competitive, due to the less effective processing they lose their advantages.

5. My results by CMS evaluate quality white bottled wines competitive, while in the case of other categories no positive competitive effect can be detected.

6. The economical analyses of competitiveness is disturbed by the fact that different competitiveness indexes (SSI, RXA, RTA, RC) show contradictory results about the competitive position. So to clarify competitiveness it is needed to qualify the different indexes compared to each other. According to price competitiveness the competitive advantage of Hungarian wine is obvious- except for white, quality, bottled wines and red, table regional, barreled wines- opposed to both foreign competitors and domestic producers. Analyzing by competitiveness indexes SSI, RXA, RTA, RC theoretically in bottled category, white and red, table, regional wines are evaluated as competitive, and the same can be stated in barreled category about white, table, regional ones. As results

of the indexes though highly depend on the foreign market performance and the choice on the target market, the potential competitiveness can be distorted. According to the so-called quality competitiveness only the white, quality, bottled category is competitive, as in spite of the increase in relative export prices it could increase its market shares while the others could not. The CMS model also shows the competitive advantage of Hungarian white, quality, bottled wines in the EU. According to my opinion the competitiveness of wine categories can be evaluated by using the last two method, as they use only domestic data for the evaluation and they are independent from the target market performance.

4. CONCLUSIONS, RECOMMENDATIONS

1. My researches have justified that quality bottled white wines obviously marketable at the EU market. It would be reasonable to form leading types and leading products characteristic to certain regions. Though it is not an easy task from the point of view of the prosperity of the branch it is inevitable.

2. It would be vital in certain regions to produce wine which is cannot produced anywhere else, or which is unique in certain ways such as: the production of biowine or special products which could create significant additional value. Special quality wines must be unique products. To achieve this the certain wine must represents its region, the place where it was produced in permanent volume every year.

3. It is reasonable to decrease the number of types and the growing of the well-tried types during the planting. It has been proven by now the planting boom of the red types (Cabernet Franc, Cabernet Sauvignon etc.) and other new types in the 1990's did not meet the expectations (nowadays it can be detected in both the buying up prices and the quantity of the buying up demand.

4. Vertical coordination is a vitally important considering marketability and effectiveness thus it has special significance on the agricultural sector after joining the EU. Grapes production and the oncoming stages: the motivations and the reasons for the cooperative integration the processing and selling are characteristic of the grapes and wine branch as the atomized producers face the concentrated processing industry, and the high capital demand of wine production is a considerable risk factor. Different types of the cooperative form work effectively in wine industry in the EU, which can be adopted in Hungary. One is the cellar cooperative which members are the producers. Several factors justify this; safe selling possibility, reaching favorable selling price, decreasing price changes, the special marketing strategies used in the cooperation. Due to expertise suitable supply concentration can be created both to the processing and trading partners, and the individual risk of the producer can also be decreased. Besides the cellar cooperation another kind of cooperation can be following the French example- the so-called SICA (societe d'interet collectif agricole) 'common interest agricultural society', which involves non-producers as well. At their assemble agricultural credit-cooperation or cooperation and individuals whose activity (trading) strengthen the aims of the SICA have the right to vote.

5. It is inevitable to create the R+D (Research+Development) system which can develop the whole branch: its creation and use could significantly increase the effectiveness of the branch (collection and distribution of market information).

6. It would be important to establish state support – following Austrian example – besides community supports. It would be justifiable to increase the rate of supports within price income, for example: the possibility of using national sources to strengthen different types of wines belonging to certain regions. It would be important to think over the possibility of export-supports in the case of wine as well. The export-support system of the EU's agricultural policy strictly regulates the support of its products. The radical decrease of the export-supports was a very important decision of the GATT Uruguay treaty, but the financing of export and the question of export-credit were not on agenda. Due to this the member states have strongly started to reorganize their resources into this direction. The countries of the EU have been using this kind of source of support more and more widely. Export financing and ensuring export-credit can decrease enterprise risk and offer financial security to keep up marketability at the market. The regulations are thus not only export-stimulating, but also market-preserving and –creating at the foreign country. Ensuring the export-credit is export-stimulating because different risks (exchange rate risk) can get over and transformed into expense factor. Trading to dangerous markets and large volume exports can be carried out, which would not be possible without insurance security.

5. PUBLICATIONS OF THE AUTHOR OF TOPICS CONNECTED THE THESIS

Scientific publications:

Scientific book chapter in Hungarian:

1. Magda S. - Marselek S. (edited) (2004): Észak-Magyarország agrárfejlesztésének lehetőségei, Agroinform Kiadó, Budapest, chapter: 1.3. „Az agrártermelés versenyképessége”, p. 39-54 ISBN 963 502 807 5

Scientific volume chapter in foreign language:

2. L. Hajós - N. Bozsik (2004): Price competetiveness of the Hungarian Wines in the European Union; in: Kapital u poljoprivredi, Institut za ekonomiku poljoprivrede Beograd p. 231-239 ISBN 86- 7233- 097-8

Scientific journal articles:

Scientific journal article in Hungarian:

3. Bozsik N. – Marselek S. – Pummer L. (2003): A szőlő- és bortermelés vizsgálata. Gazdálkodás 7th special edition, p. 41-59. HU ISSN 0046-5518

4. Bozsik N. (2004): Magyarországi agrártermékek versenyképességének vizsgálata. Gazdálkodás 9th special edition, p. 21-34. HU ISSN 0046-5518

5. Bozsik N. (2004): Borászati termékek külkereskedelmének vizsgálata az EU piacán. Gazdálkodás 4th edition p. 52-58. HU ISSN 0046-5518

6. Bozsik N. (2004): A magyarországi borok külkereskedelmi versenyképességének értékelése az EU-piacán, Bulletin of Károly Róbert College 2004, Gyöngyös p. 89-107. ISBN 963 217 163 2

7. Bozsik N. (2005): A szőlő- és bortermelés helyzetének értékelése az Észak-magyarországi Régióban. Kertgazdaság 4th edition p. 64-71 HU ISSN 1419-27 13

8. Bozsik N. (2005): A magyar borok komparatív előnyének és piaci részesedés változásának vizsgálata az EU piacán. Gazdálkodás special edition ( ) HU ISSN 0046-5518

Scientific journal article in foreign languages:

9. Bozsik N. (2005): Investigation of price competitiveness of the Hungarian Wines at the market of European Union. Gazdálkodás 12th special english edition, p. 79-85. HU ISSN 0046-5518

10. Bozsik N.- Hajós L. (2005): Marketability of the Hungarian Wines at the market of the EU. Bulletin of Szent István University p. 205-214

Lectures from scientific conferences published in conference issues:

In Hungarian:

11. Bozsik N. (1998): Hegyközségek működésének tapasztalatairól. In: VI. International Scientific Days, University of Agricultural Sciences College of Agriculture Gyöngyös, 1. volume p. 131-136. ISBN 9638140712

12. Bozsik N. (1998): Borgazdaságunk Európai Uniós kihívásai. In: XVII. Scientific Days, University Mosonmagyaróvár, 2. volume p. 341-346.

13. Bozsik N. (1998): A szaktanácsadás szerepe a hegyközségek munkájában. In: XI. Georgikon Days, University of Agricultural Sciences Keszthely, p. 374-387.

14. Bozsik N. (1999): Borpiacunk lehetséges fejlődési irányai és nemzetközi integrációjának kérdései. In: Scientific Days, University of Agricultural Sciences College Mezőtúr, 3. volume p. 25-31. ISBN 9638140763

15. Bozsik N. (1999): A magyar minőségi borok nemzetközi versenyképességének kérdései. In: XVI. Georgikon Days, „Agrárjövőnk alapja a minőség'', University of Agricultural Sciences Keszthely p. 490-495. ISBN 9639096628

16. Bozsik N. (1999): A magyar borgazdaság helyzete és integrációjának kérdései, in: Tiszántúl Scientific Days, University of Agricultural Sciences Debrecen p. 131-137.

17. Bozsik N. (2000): Az Európai Unió borpiaci szabályozása és hatása a spanyol és portugál borgazdaságra. In: VII. Interational Scientific Days, Szent István University, College of Agriculture Gyöngyös, 1th volume p. 155-161. ISBN 9639256102

18. Bozsik N. (2000): Az informatika szerepe a hegyközségek munkájában. VII. Interational Scientific Days, Szent István University, College of Agriculture Gyöngyös, 1th volume p. 161-166. ISBN 9639256102

19. Bozsik N. (2002): A CAP borpiaci szabályozásának átvételéből adódó versenyképességi hatások elemzése. In: VIII. Interational Scientific Days, Szent István University, College of Agriculture Gyöngyös, 1. volume p. 142-149. ISBN 963 9256 75

20. Bozsik N. (2004): A borászati termékek külkereskedelmének vizsgálata. IX. Interational Scientific Days, Károly Róbert College, Gyöngyös, Summary proceedings, p. 174. és CD kiadvány ISBN 963 214 313 2

In foreign languages:

21. N. Bozsik. – K. Tóth – A. Szemjanyinov (1998): The role of counselling in the activities of wine communities. In: Medzinárodné vedecké dni ’98, Sekcia Agrárny manazment, marketing a obchodná politika, Slovenska pol’nohospodárska univerzita v Nitre, University of Nitra p. 274-279. ISBN 8071374792

22. N. Bozsik (1999): Thoughts about the Hungarian wine market before joining to the European Union. Miskolc University, Ph.D. conference, p. 31-35. ISBN 963661377x

23. N. Bozsik (1999): Development of the Hungarian wine market after the transition. In: „Europäische Union in Blickpunkt'', Tagungsband des Thüringisch - Ungarischen Symposiums, Jena p. 19-23. ISBN 3932886011

24. N. Bozsik (1999): Die Rolle der Informatik in der Arbeit der Weinberggenossenschaften. In: „Europäische Union in Blickpunkt'' Tagungsband des Thüringisch - Ungarischen Symposiums, Jena p. 24-33. ISBN 3932886011

25. N. Bozsik (1999): Determinant factors of international competitive superiority of the Hungarian wines. In: Medzidnarodne vedecke dni 1999, Sekcia Manazment a marketing , Slovenska pol'nohospodárska univerzita v Nitre, University of Nitra p. 262-266 ISBN 8071376531

26. N. Bozsik (2000): Time series analyses of the Hungarian wine production. In.: Medzidnarodne vedecke dni 2000, Sekcie Rozvoj vidieka a regiónov, Slovenska pol'nohospodárska univerzita v Nitre, University of Nitra p. 306-310. ISBN 807137718X

27. N. Bozsik (2001): Profitability and optimal farm size of wine culture in the area of Mátra Wine district. In: Medzinárodná Vedecká Konferencia 2001, „factory podnikovej uspesnosti”, medzidnarodna vedecka conference, University of Nitra p. 261-266. ISBN 8071379727

Other printed publications:

Note chapters in Hungarian:

28. Sipos A .- Dedák I. - Bozsik N. (2001): International economics. Textbook, Szent István University, College of Agriculture Gyöngyös, chapter 1-2 p. 1-40.

29. Bozsik N. – Dedák I. – Lőkös L.- Magda R. (2001): Macroeconomics Textbook, Szent István University, College of Agriculture Gyöngyös, IV. chapter 4 p. 65-89.

Other publications**:**

30. Bozsik N. (2003): Zöldség- és gyümölcstermelés helyzete az Európai Unióban. Eurofarmer p. 6-10.

31. Bozsik N. (2004): Szüret a Mátraalján. Magyar Mezőgazdaság. p. 27 ISSN 0025-018X