ENOMETRICS XIX

Coimbra & Viseu, Portugal

May 30 – June 2, 2012

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FedEco-Service
**General Overview**

**Wednesday May 30th 2012**

- 14:00 - 14:30: Registration & Welcome of the participants
- 14:30 - 15:30: Opening & Keynote Speech: Tim HOGG
- 15:30 - 16:00: Coffee Break
- 16:00 - 18:00: S1 - GASTRONOMY & WAY OF LIFE
- 18:00 - 19:15: Cocktail Reception
- 19:15 - 19:30: Transfer to Coimbra University
- 19:30 - 21:00: Visit of Coimbra University + "Fado of Coimbra"
- 21:00 - 22:00: Transfer by bus to VISEU

**Thursday May 31th 2012**

- 08:30 - 09:00: Registration & Welcome of the participants
- 09:00 - 11:00: S2 - COMPETITIVITY, EFFICIENCY & COOPERATION
- 11:00 - 11:30: Coffee Break
- 11:30 - 12:30: S3 - SUSTAINABLE DEVELOPMENT
- 12:30 - 13:30: OPENING & Keynote Speech: Arlindo CUNHA
- 13:30 - 14:30: Lunch
- 14:30 - 16:00: S4 - CONSUMER BEHAVIOR
- 16:00 - 16:30: Coffee Break
- 16:30 - 17:30: S5 - BRANDS, PACKAGING, MARKETING
- 18:00 - 20:00: GENERAL ASSEMBLY of VDQS
- 20:30: Dinner Reception

**Friday June 1st 2012**

- 08:30 - 09:45: S6 - PRODUCTION and SUPPLY CHAIN
- 09:45 - 10:15: Coffee Break
- 10:15 - 11:15: S7 - ECONOMETRICS and EXPERIMENT
- 11:15 - 11:45: Coffee Break
- 11:45 - 13:00: S8 - INDUSTRIAL ORGANIZATION
- 13:00 - 14:00: Lunch
- 14:00 - 16:00: S9 - LOCAL and INTERNATIONAL MARKETS
- 16:00 - 16:30: Coffee Break
- 16:30 - 17:45: S10- RANKING
- 17:45 - 18:45: CLOSING & PERSPECTIVES - BRAVO-URETA
- 18:45 - 20:00: VDQS AWARD & Prizes
- Last Drink (before tomorrow)

**Saturday June 2nd 2012**

- 08:30 - 09:00: Pick up at the hotels
- 20:00: Arrival in Porto

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**How to Use This Booklet of Abstracts?**

You will find in this booklet all the abstracts of the submissions which were accepted by the scientific committee.

At the end of this booklet, you can find a complete alphabetical list of all authors and co-authors with a link to the page where you can find their abstract.

Unfortunately, some speakers have informed us that they will be unable to participate in the conference. However, their abstracts have been included in this booklet.

Please, note also that you can find the full version of those papers (and sometimes also the ppt presentation) on the website of the conference, in the private area reserved for VDQS - EuAWE –SQG members.

www.vdqs.net/2012Coimbra

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Our next Conference will be held 2013, in Talca (Chile).

Expecting this event, please don’t forget to consult our web site regularly, to participate in our facebook groupe (VDQS)and page (EuAWE), to keep in touch via Twitter (EuAWE) and to send your work for publication in Enometrica.
Wednesday May 30th 2012
14:30 – 15:30
Opening & Keynote Speech:
Tim HOGG
Professor at Universidade Católica do Porto:
“R&D for the competitiveness of the Portuguese wine sector; state of the art and future challenges”

Wednesday May 30th 2012
16:00 – 18:00
SESSION 1
GASTRONOMY & WAY OF LIFE
Crisis of the Dominant Model of Gastronomy and Democratisation of Gastronomy
BARRERE Christian, BONNARD Quentin, CHOSSAT Véronique
Université de Reims - FR

Rótulos terapêuticos do vinho do porto
BORGES Inês
CEAUCP/CAM-GEMA; (CUVS), PT

The Impact of Food and Wine Knowledge, Wine Acidity Level, Wine Sweetness. Level, and Wine Tannin on perceived Match with Food
HARRINGTON Robert, KOONES Rebeckah, GOZZI Mario, MCCARTHY Michelle
University of Arkansas- US

Geographical Indications in the Olive Oil Market: does Social Identity matter?
PANZONE Luca, BORLA Stefania, Di VITA Giuseppe, D’AMICO Mario
Univ. of Manchester, UK & Univ. of Catania, IT

Strange Brew: European Lagers Not So Distinct?
GOLDSTEIN Robin, ALMENBERG Johan, CAMPBELL Seamus, DREBER Anna
Culinary Institute of America, US

Consumer Preferences and Certifications of Origin: the Case of dry-cured Ham
GARAVAGLIA Christian, MARIANI Paolo
University of Milano--Bicocca, IT
Crisis of the Dominant Model of Gastronomy and Democratisation of Gastronomy

BARRERE Christian, BONNARD Quentin, CHOSSAT Véronique

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Gastronomy does not reach mass production but the demand for gastronomic services is highly growing and chefs and gastronomy became a mass topic. In the more developed countries newspapers develop gastronomic columns; magazines covers on Ferran Adrià all around the world are numerous. TV programmes show luxury restaurants, interview famous chefs, give recipes; sometimes channels are dedicated to cooking and gastronomy. Recipe books and gastronomic guides are available in an increasing number on the publishing market. These different discourses on gastronomy are turned towards millions of potential consumers and not towards restricted elite. Conversely, the prices of the famous restaurants become incredible: in Paris as in London, Tokyo and New York, having dinner in a three Michelin stars restaurant implies to give a lot of money, more than €500 (GBP 422; USD 682) for a couple, but you generally have to book one month or more in advance. At the same time, financial and luxury groups invest in restaurants. Parisian palaces recruit high-level chefs to win Michelin stars. Nevertheless very different changes are occurring.

If some very expansive establishments which deal with the extra-ordinary made a lot of money, exported their restaurants all over the world (Joël Robuchon owns 13 restaurants with a total of 18 Michelin stars and Paul Bocuse 17) and built profitable groups (as the Ducasse group), others encountered difficulties to maintain a financial equilibrium. An increasing number of gastronomic restaurants do not practice the elitist way of cooking and on the contrary tend to go back to ‘the roots of gastronomy’. Thus the extra-ordinary ways of cooking, of receiving clients... became through time debatable. Slow Food, Fooding and other movements looking for a return to commensalism, healthy preparations, old products, authenticity and cheap bills joined this movement.

This evolution apparently linked to the consecration of creativity and to the “democratisation” of luxury, allows the cohabitation and the competition of different forms of gastronomy. When some famous chefs as Senderens give back their Michelin stars the hegemony of the old model of elitist gastronomy is questioned. As Paris is traditionally considered as the capital of elitist gastronomy and as it was the place where this model emerged, it is interesting to observe the evolution of Parisian gastronomy. If the core of the model is affected, then things are serious. So, the aim of this paper is to answer the question: when democratisation is coming is it a crisis in the organisation of gastronomy?

For that, we use the following method: thank to history, we begin by building an economic lecture of the organisation of gastronomy; after, we study the present empirical data to observe the changes; and we connect the two of them to interpret the present evolution of gastronomy. More precisely, in the point 2 we consider the building of the French gastronomic model, in the point 3 its worldwide exportation. The point 4 is dedicated to a statistic analysis of the empirical changes occurring in the Parisian gastronomy on a significant period of sixty years and the five one uses MCA (Multiple Correspondence Analysis) to observe the evolution of the segmentation of the Parisian gastronomic market. The point 6 exposes our interpretation of the process of evolution.

Our main results:

The original dataset, taken from the French Michelin guidebook, includes all the establishments (restaurants and public restaurant in hotels) located in Paris and selected by the Guide Rouge Michelin between 1934 and 2010. Our descriptive statistical analysis shows that the 1990s constitute a very decisive turning point between a trend of more and more elitist gastronomy and a new trend of enlarging the field of legitimated gastronomy by including less sophisticated cuisine and setting. In order to precise and consolidate this analysis, we compared the profiles of the Parisian restaurants in 1960 and 2010. The MCA confirms the evolution of the segmentation of Parisian gastronomy from an old to a new one. The segmentation in the Parisian gastronomy changed by the appearance of a new “low-cost” category, which takes an active part in the “democratisation” and the “mass-consumption” of the French Grande Cuisine, that confirms the importance of the turning point of the 1990’s.

The explanation of the evolution refers to the limits of the elitist paradigm of luxury, which governed the French model of gastronomy, when the democratisation of gastronomy is spreading.
Rótulos terapêuticos do vinho do porto

BORGES Inês

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Experts have generated several “rules” to act as guidelines when pairing wine and food. These rules have strayed from the old suggestion of “red wine with meat, white wine with fish” to take into consideration the many factors influencing a food and wine match such as gastronomy and the important elements of food and wine components, textures and flavors.

The overall goal of this study was to evaluate a variety of sensory relationships in the interaction of wine and food when tasted sequentially and then together. Primarily, the direct effect of certain wine component and texture elements was examined to determine their impact on perception of match. Secondary purposes included exploring if individual differences driven by expertise/experience had an effect on the perception of match, and if the interactions between the wine elements and experience effected the perception of match. Specifically, this study tests the effects of wine sweetness levels, acidity levels, and tannin levels on level of perceived match with cheese, salami and chocolate. Further, we test the direct and moderating effects of level of food and wine expertise on food and wine match perceptions. These relationships drive the hypotheses of this study.

There are numerous publications in the mainstream press exploring food and wine pairing combinations, but the views projected are mainly subjective and merely offer guiding principles for pairing (Harrington, 2008). Also, previously published articles in scholarly publications researching food and wine have generally used trained or expert panelists (Harrington & Hammond, 2005, 2006; Harrington et al., 2010; King & Cliff, 2005; Madrigal-Galan & Heymann, 2006; Nygren et al., 2001; Nygren et al., 2002, 2003a, 2003b) or a small sample size with the largest sample size being 76 participants (Bastian et al., 2010).

In addition to earlier studies using limited sample size, the variety of foods used in these studies have been restricted. For example, Most food and wine pairing studies have used only cheeses when exploring match perception to presumably provide greatly consistency in regards to acidity, fat and salt levels (e.g., Bastian et al., 2009, 2010; Harrington & Hammond, 2005; Harrington et al., 2010; King & Cliff, 2005; Madrigal-Galan & Heymann, 2006; Nygren et al., 2002, 2003a, 2003b). Therefore, a key purpose of this study is to determine what key food and wine elements create the perception of an ideal match using a larger sample size (248) consisting of individuals ranging from novices to experts in food and wine pairing. Further, this study adds other types of foods in addition to cheeses. As Meilgaard, Civille and Carr (2007) point out there is an enormous range shown by earlier research for thresholds for different compounds and substantial differences across individuals (p. 16). Therefore, this study utilized a larger sample to increase the validity of its findings for the general population. The sample was a convenience sample of culinary and wine students at a large North American college. The participants ranged in expertise and in industry experience outside of this training program. The study was part of a semester long course on food and wine pairing. The resulting sample of 248 participants included 91 females and 157 males.
The participants evaluated four wines, four food items and the level of match among the wines and foods.

The instrument was adapted from previous food and drink research (Bastian, et al., 2009; Harrington, et al., 2010). The instrument included five sections and included: 1) tasting instructions, 2) wine and food expertise self-evaluation, 3) value bands and food/wine level descriptions, 4) evaluation of wine sweetness, acidity and tannin levels, and 5) food and wine level of match. The wines included in this study included a Sauvignon Blanc, Chardonnay, Cabernet Sauvignon and Port. These were selected because each represented a distinctly different wine style with implications on food pairing relationships. The foods were evaluated in the following order: 1) chèrve (fresh goat’s milk cheese), 2) brie (soft cow’s milk cheese), 3) spicy Italian salami, and 4) milk chocolate. Wines were evaluated with each food with lightest to fullest style (Sauvignon Blanc, Chardonnay, Cabernet Sauvignon, and Port). Participants were asked to cleanse their palate with water, crackers and were given a short break between pairings. SPSS was used to test all direct and moderating effects of interest utilizing hierarchical regression. Because the line scales used in this are assumed to provide equally spaced numerical values, parametric t-tests and regression are appropriate for analysis (Meilgaard, et al., 2007: 57). First, paired t-tests were completed to assess if significant differences existed among perceived level of match with each food item across the four wines used in this study. To test the direct effects of wine elements on match perceptions as well as the direct effect of food and wine expertise and extent to which the interaction of food and wine expertise moderates the relationship between wine elements and level of perceived match, we performed moderated hierarchical regression analysis in which the direct effects of wine sweetness, wine acidity, wine tannin and food & wine expertise perceptions were entered first into the regression equation, followed by the 2-way interaction terms (Saks, 1995). For these tests, gender was included as a control variable; earlier studies have indicated a higher percentage of super-tasters are female (Gilbert, 2005) and therefore in this study we controlled for potential gender effects from wine element and food & wine expertise effects.

Results. Paired t-tests provided numerous significant differences in perceived match levels among wines and food items. Overall, the highest level of perceived match for each food and wine pairing were 1) chèrve and Sauvignon Blanc, 2) brie and Chardonnay, 3) spicy salami and Cabernet Sauvignon, and 4) milk chocolate and Port. The tests using regression provided several significant direct effects between level of match and key wine elements.

For the chèrve relationships, sweetness levels in Sauvignon Blanc (SB) and Chardonnay had positive relationships with level of match. Also, SB acidity level had a positive relationship with level of match with the chèrve. For the brie match tests, sweetness in the Chardonnay provided a significant and positive relationship with perceived match. For the match with spicy salami, gender had a significant relationship in the brie-SB match level along with a negative relationship with SB acidity and match with the brie. In addition for the spicy salami match tests, perceived tannin level had a significant and positive relationship for both Cabernet Sauvignon and Port tests. With the milk chocolate, sweetness and tannin levels in the Chardonnay had positive relationships with the level of match.

The level of food and wine expertise (FWE) or knowledge and a significant direct relationship for perceived match of wine with the chèrve, brie, spicy salami and milk chocolate. For both the chèrve-Chardonnay and spicy salami-Chardonnay match level, FWE had a significant and positive relationship with level of perceived match. For the brie match tests, FWE had a significant and positive relationship for level of perceived match with both SB and Chardonnay. For the level of match between Port and milk chocolate, FWE had a significant and positive relationship with perceived match.

In the tests using moderated regression, two significant interactions were apparent: 1) the interaction between SB sweetness and FWE on the average level of match with spicy salami, and 2) the interaction between Port acidity and FWE on the average level of match with milk chocolate. To interpret these interactions, wine element levels and FWE levels were separated into low and high groupings. Once categorized, these were plotted on a graph with low and high wine element groups on the X axis and average level of perceived match on the Y axis. A separate line was plotted for each FWE group (low and high). Based on this graphical depiction, the following interpretations were possible.

For the interaction between SB sweetness and FWE on the average level of match with spicy salami, the high FWE group perceived no difference in level of match between the SB and spicy salami based on an assessment of SB sweetness level. But, the low FWE group rated the match substantially higher when low expertise group members perceived SB sweetness levels to be higher. For the interaction between Port acidity and FWE on the average level of match with milk chocolate, the high FWE group rated the chocolate-Port match higher regardless of Port acidity ratings. The significant difference in this interaction appears to be that, when members of the low FWE group rated the acidity in the Port at higher levels, the average match level was greatly reduced.

Conclusions and Implications. The overall goal of this research was to evaluate the direct and interacting effects of wine acidity, sweetness and tannin levels on level of match with a variety of foods. The study selected particular wine styles and food items to expand food and wine tests not published in the past. A second purpose was to assess the direct and interacting effects of individual differences in the form of food and wine expertise. Further, this study used a larger sample that included participants with a range of food and wine expertise moderates the relationship between wine elements and level of perceived match substantially higher when low expertise group members perceived SB sweetness levels to be higher. For the interaction between Port acidity and FWE on the average level of match with milk chocolate, the high FWE group rated the chocolate-Port match higher regardless of Port acidity ratings. The significant difference in this interaction appears to be that, when members of the low FWE group rated the acidity in the Port at higher levels, the average match level was greatly reduced.

Overall, the highest perceived food and wine match levels for each wine and food item are in line with earlier studies and those proposed in popular texts. FWE, wine acidity, wine sweetness and tannin levels had significant relationships with match perceptions with food items. FWE had both direct and interacting effects on perceived levels of match among wine styles and food items used in this study.

Implications from this study highlight the importance of key wine elements and food and wine expertise levels associated with perceptions of match with a variety of foods. For practitioners in the wine and foodservice industries, an understanding of key wine elements impact on perceived match as well as an understanding of the relationship between consumer food and wine expertise on perceived match is needed to maximize the consumer food and wine experience.
**Geographical Indications in the Olive Oil Market:** does Social Identity matter?

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Abstract:
Geographical indications (GIs) are a social-economic and legal reality in most food markets, intended to protect consumers and prevent fraud. However, this paper maintains that the importance of GIs is relative to the social identity of the consumers: insiders (those directly affected by the GI) are going to value the presence of GIs more than outsiders (those not directly affected by the GI). Social identity is a crucial component of consumer attitudes as it has a direct impact on the utility of a choice. Following Akerlof (2000), we test the importance of social identity using a consumer survey: we compare the stated willingness to pay (WTP) for geographical indication between a group of insiders (Sicilian olive oil to Sicilian consumers) and a group of outsiders (Sicilian olive oil to non-Sicilian consumers). We conjecture that Sicilian consumers (insiders) have a higher WTP than non-Sicilian consumers (outsiders), which accounts for the social benefits that Sicilian GI has on local welfare and local identity.

**Strange Brew: European Lagers Not So Distinct?**

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Abstract:
We use a triangle test to examine whether tasters can distinguish between three European lagers that are readily available in the US. In two of three tastings, participants are no better than random at telling the lagers apart, and in the third tasting they are only slightly better than random. We conclude that when tasting blind, beer drinkers are unable to distinguish between different European lagers. Consumer loyalty to specific European lager brands is unlikely to be determined by the physical characteristics of the liquid inside the bottle.

Keywords: beer, blind tasting, brands, European lagers

JEL Classification: C90, D01, M30

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**Consumer Preferences and Certifications of Origin:**

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In recent decades, changing attitudes in consumers’ behaviour have led to considerable changes in the meaning of buying and consuming food. These important changes, due largely to the fact that today’s consumers are increasingly aware, informed and demanding, have led to a significant shift in the demand for food (Sabbe et al., 2009). Trends in demand (Nomisma, 2003) confirm that consumers in developed countries are increasingly sensitive to food safety, quality and authenticity and show greater willingness to pay (WTP) for products that have these characteristics.

Certifications of geographical origin, like P.D.O, I.G.P., P.G.I., D.O.C.G., D.O.C., are one of the ways of signaling quality and product differentiation. Serving as a guarantee of food safety and wholesomeness, it provides consumers with positive utility. Lastly, indication of geographical origin evokes environmental values, since it certifies that the product was made in a natural way and according to precise standards.

In this paper, in line with Lancaster (1971), a product is regarded as a grouping of several attributes. Consumers derive utility from the consumption of products according to their preferences and from the set of characteristics that define those products. The reference product in this study is dry-cured Parma ham, a typical local Italian product.

Specifically, the aim of our research is to test empirically the following three hypotheses:

- (HP1) P.D.O. certification significantly influences consumer preferences;
- (HP2) P.D.O. certification of food leads to a higher WTP;
- (HP3) There exist regional differences in consumer perception of P.D.O. certification.

To test these hypotheses, original field data were collected and statistically analyzed using SPSS software.
COMPETITIVITY, EFFICIENCY & COOPERATION

Strategic Development of Varietal Vineyards in the Czech Republic
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The paper describes strategic changes in the structure of grapevine (Vitis vinifera L.) varieties grown in the Czech Republic. In 2004-2005, (i.e. after the admission of the Czech Republic into the EU) expenditures associated with restructuralisation and transformation of vineyards amounted for CZK 25,423 thousand. The authors examine the development taking place in this domain within the last 50 years (i.e. from 1960 to 2010) and pay detailed attention to the period of 1989 to 2010. The paper analyses reasons of these changes and tries to describe the future development expected after 2010. The current production potential of the Czech Republic is 19,633.45 hectares of vineyards. For the time being, there are in average 1.07 wine growers per hectare of vineyards.

As compared with 1960, the acreage of vineyards has doubled up and the number of the most frequent varieties has also increased. Within the period of 1989 - 1990, four varieties (i.e. Müller Thurgau, Green Veltliner, Italian Riesling and Sankt Laurent) occupied more than 60 % of the total vineyards area in the Czech Republic, whereas at present there are altogether 8 varieties (Müller Thurgau, Green Veltliner, Italian Riesling, Rhein Riesling, Sauvignon, Sankt Laurent, Blaufrankish, and Zweigeltrebe) at the nearly the same acreage.

As far as the percentages of Müller Thurgau, Green Veltliner, Italian Riesling and Sankt Laurent varieties is concerned, it is anticipated that their acreages will further decrease, whereas those of Rhein Riesling, Sauvignon, Blaufrankish and Zweigeltrebe are expected to grow. The industry is under pressure of all Porter's five forces of competition from external sources.

**Keywords:** Strategy; structure; attractiveness; trends; grapevine varieties; development; popularity of varieties; vineyard area
Increasing Competitiveness of Wine Producers in Strategic Alliances VOC

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There are new trends and ways in which wine producers seeking to increase competitiveness in the Czech Republic. These include a new production of secondary products of the vine, the development of wine tourism and particularly the establishment of new strategic alliances VOC - Wine of Original Certification.

This paper describes the main reasons for the formation of new regional association of wineries, based on a different origin for wines in the wine region of Moravia in the southeast part of the Czech Republic. This research aim is to create a plan for new development of such strategic alliances on the basis of results of localization factors. There coefficient of localization is used for identification of cluster. Results are compared with already operating associations for the appellation in Austria DAC. They were traced changes in consumer preferences in the Czech wine market. Consumers are placing more emphasis on the selection of wine on its descent from a particular area, growing community and the individual grower. The dynamic development of the wine category, major changes in market and consumer demand are the main causes for the formation of associations of small and medium-sized wineries.

This paper specifically introduces new associations for appellation system VOC. This alliance is described in the context of the establishment, operation, development and expansion, respectively the possibility of involvement of additional organizations suppliers and research institutions. The application of the results of research was a plan for the establishment of new alliance VOC Blue Hills, where are associated 30 wine producers of wine in 5 villages around the center Velké Pavlovice. Based on the experience of newly emerging VOC system of appellations was setting up a plan of formation association with the proposed methodological approach. Open cooperation between associations VOC appellation and other entities involving suppliers, customers, research institutions and universities has the possibility of creating an institutionalized wine cluster. The plan to create a wine cluster was proposed to establish cooperation between the newly emerging associations of VOC at three sub-regions of South Moravia, in order to achieve competitive advantage.

Keywords: appellation, association, cluster, competitiveness, DAC, strategic alliances, VOC

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The Technical Efficiency of Wine Grape Growers in the Murray–Darling Basin in Australia

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Australian wine grape growers have faced difficult market conditions in recent years, with reductions in grape prices and increases in irrigation water prices having a significant effect on farm profitability. The need for these farmers to be as efficient as possible has never been greater. In this exploratory study we use a subset of the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) irrigation survey, consisting of four years of unbalanced panel data on 135 wine grape growers (214 observations in total) from the Murray and Murrumbidgee River basins in Australia (from 2006/07 to 2009/10), to estimate production frontiers and estimate the efficiency levels of the individual farmers.

Maximum likelihood methods are used to estimate translog stochastic frontier production frontiers. Mean technical efficiency is estimated to be 79 percent, with the many farms achieving well below this level facing tough times ahead if grape prices do not improve. A mean scale economies estimate of 1.07 is obtained, indicating that further farm amalgamations may be warranted. Finally, shadow price estimates for irrigation water are found to be (on average) above market prices, suggesting that current irrigation practices may need to be reassessed. However, this result is likely influenced by the presence of drought during the sample years.

Keywords: wine grape production, irrigation, technical efficiency, scale economies, shadow prices

* The content of this paper reflects the views of the authors and should not be interpreted as representing the views of ABARES.
Analysis of the Factors that Determine the Competitiveness of the Wine Industry in Extremadura (Spain)

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Extremadura is one of the main Spanish wine regions, with 88,000 hectares of vineyards and an average production of around 3 million hectoliters. The Extremaduran wine sector has undergone vast changes over the past 30 years, from being a producer of bulk wines intended primarily for the production of alcohol, to producing quality wines that are exported to many countries. Producers have adapted varieties towards those most in demand by the market, and wineries have introduced technological improvements that have enabled them to achieve high levels of quality with very competitive prices.

However, even though the sector enjoys advantages in climate, soil, and the price of grapes, these have not been translated into a fully competitive wine sector. This paper analyses these factors that have affected, either positively or negatively, the development of the wine sector, such as the lack of ties between the industries, the poor role of the Spanish and Extremaduran government without a clear policy to promote business integrations, or an incomplete policy for promotion of social enterprises.

This paper is based on a 2010 study of 30 wineries in Extremadura (Spain), which was carried out to analyze the potential role of public and collective support institutions to promote competitiveness.

We have determined that one of the main factors affecting the competitiveness of the Extremaduran wineries is the pricing policy, which has been key to the maintenance and development of the companies. The region, as a result of its soil and climatic features, has excellent conditions for grape production, even taking into account the scarcity of rainfall between harvests, which greatly affects production. The result is a raw material of good quality at a price well below that of other Spanish or European regions producing wines of similar quality. This has provided an element of competitiveness to the wineries of Extremadura, although at the expense of the grape producers who have spent several years in crisis.

The other key element is the strong tendency for export, caused by the limited domestic market and facilitated greatly by the integration of Spain into the European Union. The wide European market and the development of logistics networks, have led companies to turn to foreign markets, where competitive prices allowed them to enter the markets.

However, the lack of business ties between companies and with the various advisory and administrative bodies leads to the excessive spending of resources, both human and material. The development and empowerment of the brands, attracting distributors, and market research, in many instances, does not receive the adequate funding considering the amount of resources invested in export. In this sense, an organized structure with management capacity would optimize investments in foreign markets, thus complementing the benefits of price advantages and generating large competitive advantages.

Another aspect that stands out in the sector is the lack of innovation, and more pointedly, the lack of interest in innovation, which may also be explained by the “individuality” in the sector. Most companies, because of their family-based characteristics, cannot afford an R & D department. Large companies, such as cooperatives, that could afford it, focus on the production of bulk wines, where they find it is more important to reduce costs than to innovate.

Key words: Technology transfer, innovation, quality, branding, Extremadura, Spain.
The aim of this paper is to propose an interpretation of advertising strategies in the French wine sector. Several public reports reveal the weakness of promotional investments by the French wine producers. This situation can be explained by two strategic motivations. First, the structure of the French wine industry is mainly composed of numerous little producers. Stakeholders of small scale cannot afford to develop strong brand names. This contrasts with the industry of Californian or Australian wines, which are supported by important promotional budgets. Secondly, the multitude of collective label (e.g. Protected Designations of Origin, AOC in France) raises the risk of free riding and the possibility of externalities (advertising spillover) of individual strategies. So French firms are encouraged to join their investments and developed collective advertising. These generic promotions are mainly done by collective marketing orders, called “interprofessions” in France. For several authors, the generic aspect makes necessary the cooperation between actors and justifies the mandatory programs. Our study underlines a second effect where the individual investments in advertising allow the development of the sector overall in spite of the presence of externalities. A process of cooperation is not thus an indispensable condition.

**Keywords:** Generic advertising, Wine industry, Marketing Orders, Protected Designations of Origin
Economical Success Factors of Pesticide Reduction in Grape Growing
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With the rise of the sustainability concept, there are high societal expectations on economic, environmental and societal impacts of human activities (Brundtland, 1987). Agriculture is no exception (Griffin, 2006). It has to maintain productivity levels while respecting the environment. And the French Grenelle objectives are to halve pesticides used by 2018 (Paillotin, 2008).

These new targets, sometimes experienced as constraints, are a real challenge for the French agriculture. Indeed, France is the third consumer of pesticides in the world and the first in Europe, significant at positions in regard of its agricultural area (which is approximately 30 million hectares). Fungicides represent the half of the pesticides used (in volume). Viticulture is one of the most consuming crop, with 20% of the total consumption of pesticides for only 3% of the UAA French (Aubertot et al., 2005), which is primarily due to a high number of treatments (Agreste, 2009). Moreover, if we focus on the evolution of the consumption of these products, it tends to remain constant (2009 data, UIPP) given the technological lock-in of the sector (Alonso Ugaglia, 2011).

Therefore, the pesticides reduction in viticulture requires studying new methods of crop protection practices in viticulture. Economic and environmental performances are often put in opposition, and growers have a double problem: they must both meet the regulatory and societal pressure and stay competitive (Belis-Bergouignan and Saint-Gès, 2009). This is even more significant that France is the second largest wine producer in volume.

The objective of this paper is to understand determinants of change in plant protection practices in viticulture. In this aim, we analyze the economic factors influencing pesticides reduction based on a survey of growers regarding their acceptability of practices to significantly reduce pesticide use.

The article is structured into four sections. Section 1 presents a literature review to understand practice changes in viticulture. We recall the assumptions underlying this problem and discuss the results. Section 2 presents data mobilized and their limits. We then develop a logistic model designed to highlight the main determinants of the reduction of pesticides in viticulture. Section 3 presents and discusses the results of the econometric model. The supporting role of extension services is particularly evident in the decision and success of the change. Section 4 concludes and suggests some relevant extensions.

REFERENCES
The purpose of this article is to analyse social movements that champion forms of economic regulation considered as more respectful of nature. Led by the stakeholders of economic activity, these movements develop a counter-model while remaining within the framework of the holders’ daily activity and its constraints. Our example is biodynamic winegrowing in France.

In the years following World War II, rural France experienced drastic changes with the rise of high-productivity agriculture, which turned peasants into farmer-entrepreneurs producing for the market and heavily relying on the use of synthetic chemicals. The result of this policy, notably due to agricultural economists, brought about a large exodus of the rural population that did not meet the new criteria of efficiency; it also gave rise to associative movements in reaction against this production deemed as harmful to health. These movements came about in the 1950s, notably buoyed by nutritionist physicians, agricultural engineers and teachers. They gathered together a small number of farmers (known as organic farmers) as well as consumers who refused to modernize agriculture through increasing the use of agricultural chemicals. In 1963, what was commonly known as the "Lemaire Boucher" method was implemented. The first company to invest in organic agriculture, it enjoyed great success amongst organic producers, and 70% of them had joined by the 70s. This company had a monopoly on organic fertilizers and, prior to that, a monopoly of selling grain to the "organic farmers" with whom it had signed a contract. Since it was too reminiscent of the integrated system of conventional agriculture, a significant number of its members wishing for organic farming rejected the commercial aspect of this institution and founded "Nature et Progrès" in 1964.

These associations refused to use synthetic chemical molecules, and encouraged the balance between the various species. In parallel and in fairly close connection with them (according to the contexts), a movement was developing which concerned a much smaller number of farmers: not only did these refuse to use synthetic fertilizers, but they considered that the development of plants depended on a larger equilibrium connecting the earth and the cosmos. This method, or rather, this view of the world, drew its inspiration from Rudolf Steiner’s Agricultural Course lectures. This Austrian philosopher had been sought out in the thirties to answer the concerns of German farmers worried about the orientation of farming that stemmed from the industrial revolution, and preoccupied with the quality of foodstuffs.

Biodynamics and Viticulture: from Militancy to Market Niches?
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Improvement of the viability of vineyards and other perennial crops is one of prerequisites for sustainable agriculture. Plant protection preparations of synthetic origin harm the environment and human health. The search for alternative systems of prevention and control of plant diseases, using environmentally friendly methods, is a priority direction. Among the diseases of vine the crown gall, caused by Agrobacterium tumefaciens is notable for its particular harmfulness. Tumors on grape bushes are formed in places of lesions (frost damage, hail damage, removal of surface roots) and, depending on the amount of galls, inhibit the growth of plants, or lead to their death, if encircled a trunk. The bacterial pathogen Agrobacterium tumefaciens colonizes the xylem’s vessels of the plants and may persist in latent condition for many years before the tumor development. In cells of host plant the synthesis of opines (specific for agent amino acids) is the factor for growth of them into vessels. Analysis on the spring of grape sap of bushes with pathogenic agent and without it showed the lowering of the quantity of same amino acids and complete absence of leicin, arginin, lisin, ornitin, guestidine. Lack of amino acids leads to the deterioration in the quality of wine (degradation of the wine aromatic complex).

Based on the exhaustion of the soil under the vineyards (in conditions of monoculture) and significant harmfulness of grape diseases, including crown gall, we developed new preparation for treatment of vineyards, including some trace elements and amino acids in very small contents and well-defined ratios – Microcom-VA. It can be used for optimization of nutrition in the critical phases of development, for increasing the productivity and resistance of plants, prevention of the crown gall development. The method includes the foliar fertilization of plants before flowering and within 2 and 4 weeks after the first treatment or treatment of grape seedlings before planting with the special complex of microelements, which additionally contains amino acids.

The efficacy of foliar treatment of vine with Microcom-VA was studied in the greenhouse and field conditions in 2008-2011. Foliar treatment of vine during the period of vegetation changed some physiological indices: intensification of phosphorus components and carbohydrate metabolism in leaves, shoots and xylem exudate, free amino acids content in tissues and xylem exudate, shoot growth and maturation, enhancement of sugar and anthocyan content in berries, anthocyan content in wine, formation and a fuller manifestation of genetically based potential of frost and winter resistance. Implementation of new compound Microcom-VA allows improving of the productivity and longevity of perennial plants, quality of grape and wine.
An economic and financial approach to the conversion to organic farming - conversion to organic grape growing
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Conversions to organic farming are growing rapidly in wine growing without the knowledge and tools to support this break are operational. Many studies focus on the determinants of this process, but few of them analyze it in economic terms. This paper proposes a method to analyze the conversion trajectories dynamically in wine growing, thanks to economic and financial indicators. These indicators are then tested on ten farms and the qualitative results are presented.

Une approche économique et financière de la conversion en agriculture biologique (AB) – le cas de la viticulture biologique
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Les conversions en agriculture biologique (AB) se développent rapidement en viticulture sans que les connaissances et outils permettant d’accompagner cette rupture soient opérationnels. Peu d’études analysent ce changement en termes économiques. Cet article propose donc une méthode pour analyser de manière dynamique les trajectoires de conversion des viticulteurs. Celle-ci repose sur des indicateurs économiques et financiers, dont les résultats sont analysés à l’issue d’un travail d’enquêtes qualitatif auprès d’une dizaine d’entreprises.
Thursday May 31st 2012
14:30 – 16:00

SESSION 4

CONSUMER BEHAVIOR

Buying Habits for Alcoholic Drinks: A Greek Market Research
ASTERIOU Dimitrios, DILMPERI Athina, SIRIOPOULOS Costas
Hellenic Open University, Patras - GR, & University of Cranfield, London - UK
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Targeting Green Consumers
BARBER Nelson
University of New Hampshire, US
P. 31

Putting Your Money Where Your Mouth Is: The Value of Low Purchase Intention Consumers to Product Pricing
BARBER Nelson, BISHOP Melissa
University of New Hampshire, US
p. 32

French Consumer Behaviour for Syrah - Shiraz / Perception des consommateurs français sur la Syrah - Shiraz
SERIEYS Michel
ISARA-Lyon- FR
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Analisi delle preferenze del consumatore di vino presso il canale Ho.Re.Ca.
FOTI Vera Teresa, TIMPANARO
Università Agraria diCatania - IT
p. 35

The aim of this paper is to draw conclusions about the buying habits of Greek consumers concerning alcoholic beverages. Based on the data provided by the W.H.O., the European Region has the highest proportion in the world of total ill health and premature death due to alcohol. At a societal level, the European Union is the heaviest-drinking region in the world. Focusing in the Greek reality, we find very interesting data provided by Non-Governmental Organizations, leading campaigns that have to do with the consequences of excessive alcohol consumption. The data suggest that the Greek consumption stands in the median of the European countries. Adult men consume alcohol every day in a percentage reaching 42.5%, while the relative percentage for women is 13.6%. Only 8.3% of the general population does not consume alcohol at all, while the consumption is bigger amongst the age range of 55 - 64 years old. Relating to the place of the preferred consumption, one out of three people, consume alcohol in their home or in the house of another person, while the vast majority 61.9% prefers to consume alcohol elsewhere (bars, clubs, cafes, restaurants). Women prefer consuming more at home than outside, contrary to men. Also, while data on a European level suggest that one out of four deaths in the ages between 15-29 is related to alcohol, Greece is still low in that percentage, leaving Ireland, England and Denmark on the top of the list. Nevertheless, we find that Greece is also facing problems that have to do with excessive alcohol consumption, especially for the age group of 18-24 years old. Young people prefer to consume more “hard” beverages than wine or beer. Finally, it is important to underline that alcoholic beverages are consumed more frequently in rural and semi-urban areas, than in the big cities like Athens and Thessaloniki.
Targeting Green Consumers
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The intention to purchase does not always translate into actual purchase behavior when consumers are confronted with a purchase situation. The aim of this study was to profile consumers who expressed an intention to pay more for environmentally friendly wine packaging and to elaborate marketing strategies that arise from this consumer profiling.

The population under study was the general adult population of the United States. The sample was randomly selected from a consumer database and provided a link to an anonymous online survey. Reliability and factor analyses were performed to identify whether the measurement items reflected the constructs of attitudes, behavior, values, and intention to pay more. To determine significant differences, t-tests on each construct were performed, along with stepwise discriminate analysis. The results indicate that importance of being environmentally friendly, considering environmental issues when making a purchase and collectivism were all very good predictors of consumers’ intention to pay more for green wine packaging.

This study contributes to the understanding of environmental wine purchase intention by investigating relationships of consumer characteristics to environmental behavior. By segmenting consumers in this manner, it is possible to better understand the importance of environmentally friendly wine packaging, thus aiding wine producers, retailers, and packaging companies in directing their marketing and advertising efforts.

Keywords - Consumer behavior, Wine marketing, Green packaging

Putting Your Money Where Your Mouth Is:
The Value of Low Purchase Intention Consumers to Product Pricing
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Consumers’ willingness to pay (WTP) refers to the maximum price a buyer is willing to pay (Franke, Keinz, and Schreier, 2008; Wertenbroch and Skiera, 2002) or, in economic terms, his or her reservation price. Accurately estimating consumers’ willingness to pay (WTP) is critical when developing new offerings (Anderson, Jain, and Chintagunta, 1993), implementing various pricing tactics (Gu and Yang, 2010), and creating targeted promotions (Shaffer and Zhang, 1995). However, measuring consumers’ actual WTP is a challenging task (Franke and Piller, 2004).

Most research on WTP has focused on comparing different methods in order to determine which leads to the best approximation of expressed WTP (Backhaus, Wilken, Voeth, and Sichtmann, 2005; Dong, Ding, Huber, 2010; Jedidi and Zhang, 2002; Kohli and Mahajan, 1991; Miller, Hofstetter, Krohmer, and Zhang, 2011; Malhotra, Peterson, and Bardi Kleiser, 1999; Voelckner, 2006; Wang, Venkatesh, and Chatterjee, 2007). Malhotra et al. (1999) suggested that the most notable gains in pricing research use experimental price methods and/or an analysis of historical market data. Recently, Miller et al. (2011) examined four different common approaches to assess individuals’ WTP to determine whether there were statistical differences between these methods and, if so, which approach leads to better pricing. In general, they found that approaches requiring consumers to actually purchase a product were most accurate in obtaining a “true” mean WTP.

This research extends the work that has been done on WTP by considering whether there are differences in individuals’ expressed WTP and actual purchase behavior based on individuals’ expressed purchase intentions (PIS). The relationship between PIs and behavior (especially initial purchase behavior) is an important relationship to both contemplate and capture (Zeithaml, 2000). Thus, we investigate whether individuals with lower PIs behave more closely in line with their expressed WTP than individuals with higher PIs (Study 1 and Study 2). Equally important, we examine if all individuals actually pay a similar price to each other when required to purchase a product (Study 1 and Study 2). The secondary purpose is to understand why individuals who express higher PIs may overstate true WTP, with prescriptive normative and social desirability bias taken into consideration (Study 2). Taken together, if 1) there are no differences in actual purchase behavior based on PIs, and 2) individuals with lower PIs act more in line with their expressed WTP, this research underscores the importance of conducting marketing research among lower PI individuals in the product development stage. Conducting research among individuals with low PIs would seem, intuitively, to be unproductive. However, the aim of this research is to show that individuals with low PIs can provide valuable pricing information during the product development stage.

No significant differences existed in actual WTP based on level of PIs (low, moderate or high). The price that low PI consumers were willing to pay through the contingent valuation method (survey) represented closely what they and the rest of the market were actually willing to pay in practice. This is critical, suggesting that market researchers may take their pricing cues from individuals they may not consider in their primary target market.
The aim of this article is to analyse the perception and interest of French consumers towards Syrah or Shiraz. In order to achieve this, a French-administered survey was carried out over three years using the combined expertise of various professionals working with wine. The information from the survey is intended to help managers in the wine sector put together their business strategies as there has previously been very little information available, especially for red wines such as Syrah.

The initial phase involved constructing specific tools for an empirical survey in order to obtain a database. We then propose a model of consumer behaviour in relation to Syrah, based on the influence from four specific parameters. The results confirm that the characteristics of the wine (syrah) are more influential than the characteristics of the consumer. However, the involvement and expertise of the syrah consumer are the factors that most influence their behaviour when purchasing wine, and in particular Syrah. These conclusions can influence some recommendations for producers or managers who wish to sell their wine in new markets and to new consumers. Finally, the constraints of this study and the potential for future or additional research have been addressed.

Key words: Consumer behaviour, commitment/involvement, expertise, wine, Syrah vine, structural equations modelling.
Le evoluzioni intervenute nel consumo di vino devono inquadrarsi in quell’intenso processo evolutivo che ha interessato negli ultimi anni la domanda dei prodotti agroalimentari, sotto la spinta di interessanti fenomeni sociali, demografici ed economici. In particolare, tali evoluzioni si concretizzano nell’esistenza di un consumatore che esprime un’esigenza di consumo sempre più differenziata e mutevole nel tempo e che effettua le proprie scelte in base a diversi criteri di consumo.

I cambiamenti negli stili di vita, nelle abitudini alimentari e nella funzione d’uso hanno portato a partire dagli anni ‘70 ad un trend decrescente dei consumi di vino che ha caratterizzato un po’ tutti i tradizionali Paesi produttori di vino, compresa l’Italia. Tale fenomeno è stato accompagnato da un cambiamento negli stili di consumo espresso da un forte orientamento verso prodotti imbottigliati qualitativamente superiori che ha portato ad una riduzione del consumo indoor a favore del consumo outdoor che si esprime sempre più nel canale Ho.Re.Ca. (Hotel, Ristoranti, Enoteca Wine bar, ecc.). Tale orientamento caratterizza sia i tradizionali Paesi produttori vinicoli dove, negli anni, si è assistita ad un contrasto dei consumi domestici a favore dei consumi extradomestici, complice, come già accennato, la continua ricerca di prodotti imbottigliati di elevato livello qualitativo, sia i nuovi produttori vinicoli mondiali, dove tale canale svolge un importante funzione informativa favorendo l’avvicinamento dei consumatori al “nuovo” prodotto.

Il lavoro si propone di indagare sulle determinati in base alle quali un congruo campione di consumatori sceglie il vino da acquistare nell’ambito del canale Ho.Re.Ca. L’analisi risulta interessante anche perché in virtù dell’ampliamento del concetto del “prodotto vino”, che coinvolge sempre più l’intera sfera socio-economico culturale, sono aumentati gli attributi che lo definiscono e le componenti prese in considerazione da parte del consumatore finale.

Tra l’altro in un contesto fortemente dinamico caratterizzato da interessanti processi evolutivi sia dal lato della domanda sia dal lato dell’offerta, l’indagine condotta risulta di particolare importanza allo scopo di colmare alcune carenze conoscitive ed interpretative sul comportamento del consumatore di vino, i cui risultati possono risultare utili per indirizzare le scelte aziendali e gli interventi dei policy maker.

Per lo svolgimento della ricerca si è fatto ricorso ad un questionario appositamente predisposto, che è stato somministrato mediante interviste dirette face to face, attraverso il quale sono state acquisite dati ed informazioni relativi al comportamento di consumo di vino (frequenza, quantità, tipologie, ecc.), ai fattori che maggiormente influenzano le scelte (prezzo, gusto, presenza marchio, vitigno, conoscenza diretta, consiglio di terzi, ecc.) ed alle caratteristiche socio-demografiche del campione (età, sesso, reddito, condizione lavorativa, titolo di studio, ecc.).

L’enorme mole di dati raccolti nel corso delle interviste è stata trattata mediante l’ausilio di tecniche di analisi multivariata utili a mettere in relazione le variabili individuate (relative alla frequenza, occasioni di consumo, quantità consumate, motivazioni a sostegno delle scelte, giudizi sulla percezione della qualità, ecc...) in modo da incrementare il livello di conoscenza su abitudini e comportamenti del consumatore di vino all’interno del canale Ho.Re.Ca., utili anche per impostare eventuali strategie d’intervento da parte di soggetti pubblici e privati.
Experience of Consumer and Interactive Labelling of the Wine.

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The horizontal project Géowine consists in setting up a system of "géotraceability". He integrates a marketing part on the development of an interactive labeling of the wine, which allows the consumer to complete the information supplied by the labels of wine.

A survey with 500 consumers allowed to measure if Géowine was accepted by the consumers then to identify the judgments and representations of the consumer and at last to encircle the nature of the information wished after the purchase.

The used theoretical frame is the one of the expériential consumption. The experience of the consumer is all the phenomena lived by this one in its relation in products. The consumer is not only a consumer, he is in search of sense and hedonist profits, given by the experience of consumption. The expériential marketing is supposed to answer the existential desires of the consumer by giving experiences which associate sensations, feelings and imagination. So, the real motivation of the consumer is not any more only the purchase but the experience of consumption which answers its search for identity and provoke him feelings.

The article presents at first the purchase and information process of the consumer of wine, then the concept of the experience of the consumer and finally the outcomes of the survey and their application in Géowine.

Consommation expérientielle et étiquetage interactif du vin.

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Le projet transversal Géowine est axé sur la mise en place d’un système de géotraceabilité. Il intègre un volet marketing consacré au développement d’un étiquetage interactif du vin devant permettre au consommateur de compléter les informations fournies par les étiquettes de vin.

Une enquête auprès de 500 consommateurs a permis de mesurer leur acceptabilité de l’innovation Géowine puis à identifier leurs jugements et représentations et enfin à cerner la nature des informations post-achat qu’ils souhaitaient.

Le cadre théorique utilisé est celui de la consommation expérientielle. L’expérience du consommateur est entendue comme l’ensemble des phénomènes vécus par celui-ci dans sa relation aux produits. Le consommateur n’est pas que consommateur, il est à la recherche de sens et de bénéfices hédonistes fournis par l’expérience de consommation. Le marketing expérientiel est supposé répondre aux désirs existentiels du consommateur par des immersions dans des expériences alliant sensations, émotions et imaginaire. Ainsi, la véritable motivation du consommateur n’est plus seulement l’achat mais l’expérience de consommation qui doit remplir sa quête identitaire et lui provoquer des émotions.

L’article présente d’abord les particularités du processus d’achat et d’information du consommateur de vin puis le concept de consommation expérientielle avant d’exposer les résultats de l’enquête et de leur application en terme de contenu et de développement de l’outil Géowine.

Keywords - Consumer behaviour, Marketing, Environment, Wine packaging
A Marketing Response Model for Rising Wine and Shrinking Beer Sales in Germany.
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Summary

The market of alcoholic beverages in Germany is characterized by rising wine and shrinking beer sales. I use the approach of sales response (SR) models as in Polasek and Baier (2010) to estimate a simultaneous time series model for wine and beer sales over the last decade. A new class of growth sales response (gSR) models is proposed using endogenous and exogenous variables as in Polasek (2011), subject to optimal marketing budget allocations that follow a new sustained growth allocation principle. This approach allows to model growth rates in markets that are exposed to fierce competition and where the results of marketing efforts cannot be evaluated directly. The class of gSR models has the property that it allows to model supply (i.e. marketing efforts) and demand factors (sales) jointly in a log-linear regression model that are correlated over time. The estimated model can explain the relative success of marketing expenditures for the rising wine and shrinking beer market in the period 1999-2010.

Keywords: Sales response functions (SRF), marketing budget models, MCMC estimation, wine and beer consumption, optimal budget allocation

JEL classification: C11, C15, C52, E17, R12.
The main purpose of this study is to research buyer-seller relationships in Port Wine distribution. Based on case studies in three of the main Port Wine markets (France, the UK and the Netherlands), an analysis was made of the type of distribution relationships between buyer and seller, leading to the development of a buyer-seller matrix. It was concluded that not all relationships can evolve towards cooperation, and that the investment in resources and time required by cooperation would make it impossible to apply it to all relationships. Although cooperative relationships may well constitute a competitive advantage for Port Wine companies, they take up a great deal of time and resources and may therefore lead to a decline in the quality of other relationships. It is possible to construct balanced and satisfactory transactional relationships. In this sense, it may well be more advantageous to prioritise investment towards improving transactional relationships with greater collaboration.

**Keywords:** Marketing, Distribution, Multiple Channels, Port Wine.

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**Contracting in the Wine Supply Chain with Bilateral Moral Hazard, Residual Clemency and Multi Tasking**

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**Abstract**

This paper takes a quasi-case-study approach to stylized wine industry facts to assess predictions about the optimal sharing rule from a principal-agent model with residual clemency. An optimal sharing contract is developed between a grape grower and a winery, when a risk-averse grower allocates efforts among multiple activities that differ in measurability, while double-sided moral hazard is assumed to be present. Several comparative static results regarding the Pareto optimal share are in line with certain production practices and properties of observed contracts that are found in markets where residual clemency is used, namely in Australia, California, New Zealand and France.

**Keywords:** incentive contract, residual clemency, wine, double-sided moral hazard, multi-tasking, supply chain

JEL classification: L22, M31, D23

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Ontario’s wine appellations comprise the Niagara Peninsula and the adjacent regions of Lake Erie Northshore, Pelee Island and Prince Edward County. Although the Great Lakes moderate their climates throughout the year, these areas are often incorrectly perceived as being on the climatic limits of successful commercial viticulture, owing to their cold, snowy winters and short cool growing seasons. Endowed with a favourable range of mesoclimates, topographies and soils, wine production has evolved slowly under a scrupulous system of site selection matched by suitable cold-tolerant international grape varieties. Although cold winters are the norm for this semi-continental climate, global warming could threaten the stability of wine production. On one hand, these regions are likely to benefit from a warmer climate that could extend the growing season and moderate the severity of winter temperatures, allowing the production of cold-sensitive varieties and expansion of the industry into new areas. On the other, milder winters could jeopardize the production of the internationally renowned ice wines by unpredictably warmer spells during the first half of winter when frozen grapes are typically harvested after having experienced a number of freeze-thaw cycles.

In Ontario’s wine appellations, the severity of winters has determined the spatial distribution of perennial fruit and vine crops, but warmer winters in a climate change scenario are not altogether beneficial. Winter damage could actually increase in Ontario’s wine regions due to reduced cold hardening during the fall, an increase in the frequency of winter freeze-thaw events, and a decrease in protective snow cover. In particular, an increase in winter freeze-thaw events would decrease the hardiness of the vines, and increase their sensitivity to cold temperatures in late winter. Also, damaging to dormant vines are temperature fluctuations within the winter season (repeated freeze-thaw cycles) and the annual variability that are related to the occurrences of extreme events. These can significantly affect the health of the vines and consequently, substantially reduce yields. Finally, climate change research generally suggests that extreme weather conditions are likely to increase in the future resulting in higher volatility of weather conditions in countries such as Canada.

**Objectives and Methodology**

The main objective of this research is to develop a prototype expert climate system to enable grape growers to adapt suitable vineyard management practices and grape varieties to projected changes in the regional climates of Ontario’s main wine appellations. The study will examine the projected increase in the number of heat units >1400 GDDs (Winkler Index), >1800 GDDs (Huglin Index) a frost-free period >180 days, growing season diurnal temperature range >10°C, maximum temperatures >30° C, damaging minimum temperatures <-20° C and precipitation reduction in the growing season of <400 mm and their affects on the phenology, grape quality (sugar and acid content) and the per acre yield. Determining how these
Projected climatic changes will impact winter and the growing season conditions of the established grape varieties and yield in Ontario is crucial to the sustaining the production of quality grapes and therefore high quality style wines. An accelerated increase in temperature could significantly increase the phenological stages of the vine thereby reducing the viticultural suitability of some varieties.

These objectives will be achieved by (i) analyzing the daily historical climatic data from the 1960 to 2011 period for six representative locations in Ontario’s wine region using linear regression analysis (to determine long-term trends in the critical viticultural indices and climatic variables, (ii) providing a baseline analysis of the temperature and precipitation data for the 1961-1990 normal period (iii) employing the Canadian Regional Climate Model (CRCM) predictive model based on three greenhouse emission scenarios (2020s, 2050s and 2080s) to project the regional climate change impacts (iv) using a grapevine phenology model to predict budburst, veraison, and harvest and dormancy phases of selected varieties. Finally, the study will propose adaptive strategies with respect to viticulture practices, suitable grape varieties and risk reduction options.

Benefits

Many factors influence climate change and the interaction of these factors is very complex, predicting future changes involves some degree of uncertainty. However, this is new research that is especially crucial for the wine industry due to its acute sensitivity and vulnerability to the climate variability. Grape yield and quality are greatly dependent on climatic conditions. Therefore, determining how the climate of these regions evolves over the next thirty years is crucial in developing adaptive strategies in order to reduce risks and optimize the growing conditions. In particular, this aspect of the project will assist growers to reduce the risks related to climatic hazards such as freeze damage, extreme maximum temperatures and high precipitation during the harvest. It will also assist growers to plant grape varieties that are most suited to the climate of the respective wine region and allow them to produce wines of consistent quality in the highly competitive Ontario market. The industry currently consists of about 500 growers and 70 estate wineries.

Key Words: climate change, wine regions, analysis, impacts, adaptive strategies
El mundo del vino es cada vez más competitivo y requiere ampliar sus mercados a los internacionales para mantener un crecimiento; así, es necesario conocer sus características, necesidades y posición. A modo de ejemplo, en el caso español, sólo hasta julio de 2011, las exportaciones de vino habían crecido un 13% con respecto al total de 2010 - 2.001 millones de litros, frente a los 1.766 millones de 2010, según datos del Observatorio Español del Mercado del Vino (OeMv) . Estos datos muestran una dinámica tendencia de las exportaciones españolas de vino, que parece consolidarse con el paso de los meses, no sólo en volumen, sino también en valor, recuperando los mercados de Italia y Francia en la UE y los de Rusia y China fuera de la UE.

Este incremento de las exportaciones refleja la mayor competitividad del vino en el mercado internacional. Pero, ¿cómo es la presencia real del vino español en el mercado mundial? En este sentido, es importante estudiar su competitividad. Existen dos enfoques para medir, empíricamente, la competitividad: uno que utiliza indicadores directos a través de comparaciones de costos de producción en regiones y/o países competidores, ajustados por los costos de transporte y comercialización y por las tasas de cambio. Esta comparación es útil pero tiene limitaciones (Sharples, 1990). Otra vía es medir la competitividad a través de indicadores indirectos tales como la participación de mercado o algún índice de ventaja competitiva revelada. Este último enfoque es el que nosotros seguiremos, aplicando, entre otros, el índice de ventaja competitiva revelada propuesto por Vollrath. El índice de Vollrath no requiere información de comercio bilateral; se deriva del índice de Balassa, de medición de la ventaja comparativa revelada, y elimina la doble contabilidad, por el lado de productos y países, al mismo tiempo que facilitan la comparación al ser expresados en términos logarítmicos.

Medida la competitividad del vino, ilustraremos su comportamiento, estudiaremos sus determinantes con diferentes modelos econométricos y predeciremos su tendencia para los próximos años. Este análisis nos permitirá deducir la capacidad de participación española en los mercados internacionales, detectar las oportunidades y amenazas para mejorar los negocios, fortalecer el tejido empresarial, aumentar la inversión, la productividad y la calidad, e identificar los factores que explican por qué algunos países han tenido más éxito que otros, para lograr ser más competitivos en los mercados internacionales.

Teniendo en cuenta el objetivo del estudio y los datos disponibles, los modelos econométricos más aptos son los Modelos de Vectores Autorregresivos, idóneos para el estudio de la integración de mercados. La principal novedad de la investigación, es que estos modelos, será aplicados por vez primera al mercado del vino a series de competitividad y con ellos avanzaremos en perfilar los requisitos que están latentes para mantener para mantener o incrementar nuestra competitividad en los mercados internacionales.

Accumulated theoretical and empirical evidence suggests that wine prices depend on quality, reputation and sensory characteristics (Combris et al., 1997 and 2000; Oczkowski, 2001; Jones and Storchmann, 2001; Schamel and Anderson, 2003; Cardebat and Figueur, 2004; Lecocq and Visser, 2006). Generally, price is also an important cue for quality when there is some degree of risk of making a wrong choice (Cox and Rich, 1967; Szybillo and Jacoby, 1974; Horowitz and Lockshin, 2002). Beyond the attributes of the wine and the situation, different consumers choose wine differently. Given the incomplete information on quality, price is used in the purchase of wine to overcome any perceived risk. Risks include functional, such as the taste of the wine or the physical aspects of the product, social, such as being embarrassed is the quality is not adequate, financial because of the cost of the product. Gluckman (1990) contends that the act of purchasing wines is clouded with insecurity and many wine purchases therefore involve risk-aversion (Mitchell and Greatorex, 1988, 1989).

Buying a bottle of wine is often marked by expectations and uncertainty as to its quality. Spawton (1991) suggests that with the exception of a few connoisseurs, most wine purchasers are highly risk-sensitive and their subsequent purchases are governed by risk-reduction strategies. Consumers are also confronted with an enormous amount of changing information on brands and vintages which impacts on perceived risk (Speed 1998).

Different people will respond to similar risky situations in very different ways. Numerous experiments have been undertaken by psychologists and others in attempts to define profiles of risk-taker and risk-averse persons. Differences in the behavior of individuals facing similar risky situations could be partially explained by the individual’s family background, education, position, prior experience, and geographical location (Kogan and Wallach 1974). The conventional anthropological theory is that individuals are guided in their choice between risk-avoiding and risk-taking strategies by their culture. A renewed interest in this area of study is linked to the work of Hofstede.2

MacCrimmon and Wherung (1986) provide an extensive survey of theoretical and empirical studies directed towards the understanding of risk behavior. Some of this research focuses on the riskiness of situations, while other studies focus on the willingness of people to take risks in such situations. An important amount of research has been devoted to study how people recognize, evaluate, and respond to similar risky situations that have been framed in different contexts or across different countries (Loubergé and Outreville, 2001).

1 Risk-reduction strategies in the purchase of wines include, selecting a known brand, recommendations, advice from retail assistants, undertaking wine appreciation education, pricing, packaging and labelling, getting reassurance through trials such as tastings and samples (Mitchell and Greatorex 1989).

The study of human choice behavior provides a focus for considering this issue in different contexts. The experiments reported in this paper try to shed some light on this issue by analyzing choices within the framework of a purchase decision for a wine bottle. It provides an example of a study of human behavior when aversion towards loss is considered. The experiments were conducted with graduate and undergraduate students using a questionnaire similar to the one originally tested by Loubergé and Outreville (2001).3

The context is the decision to purchase a bottle of wine (the price of which varies from $x to $x+n) assuming that there is a probability (defined in the question) that the wine may have a functional risk (it is corked or corky). The purchase is considered in a tax-free zone of an airport rather than in a wine shop where the consumer usually can bring back the bottle. The experiment is defined in two phases: 1) there is no possibility to hedge the potential loss (no insurance) and 2) there is a possibility to buy an insurance contract (the price is determined in the question) to cover for the loss.

The paper presents a detailed explanation of the context that is used for the experiments and the experimental designs. The experiments reported in this paper provide some evidence on risk-taking when purchasing wine and show how individuals actually behave when they are confronted by the prospect of a potential loss.

Keywords: Wine purchase, risk behavior

3 A similar kind of questionnaire was used by Hershey and Schoemaker (1980).
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Abstract:
According to the World Health Organization’s (WHO) recent survey, Hungary can be found among the top ten wine-consumer countries. The Hungarian consumption pattern is largely influenced by consumer purchasing power, consumer way of life and health. Important consumption differences among single consumer groups can be observed. Richer households consume double or triple amount of wine than the poorer households and the tendency is similar among older contra younger households.

In this paper we analyze Hungarian wine consumption patterns based on socio-economic status (SES), age level and marital status. Our object is to examine, whether money is the only responsible for allowing one’s access to wine or it depends mostly on social factors. Our hypothesis is that same influencing factors causing different impact on every single social stratification.

For the analysis secondary data received from the Hungarian Central Statistics Office (HCSO) is utilized. The aggregated consumption panel data contains the years between 1998 and 2010. In order to improve perspicuity of the study we separate consumer deciles into three main groups: poor, rich and middle class. Beyond these three socio-economic status categories, we create three different age-level profiles and two other groups according to the number of their children.

For the calculations an own-built multivariate regression model for demand analysis is evaluated by the technique of ordinary least squares (OLS). The method is adopted into two multidimensional measurement-environments. In the first case the dependent variable (y) means the amount spent on wine, while the independent variables (xi) are defined such as total food expenditure, education, housing, household energy, health care, etc.

In the second step income, own and cross price elasticity are analyzed. As wine can be considered as a luxury good, significant and positive income effect is expected. Besides red- and white wine own prices, the price effect of basic food products like meat, milk and oil are integrated into the model.

As a result of our calculations we can identify, evaluate and quantify the main factors that might affect a consumer group’s wine-drinking habits.
Entry Barriers, Strategies and Post-Entry Performance of Micro- and Nano-breweries in Denmark
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Until the beginning of the new millennium beer production in Denmark was dominated by Carlsberg and a few number of semi-large and small competitors who mainly produced mainstream beers. However, over the recent years a huge number of new breweries have entered the market and by today more than 100 micro- and nano-breweries produce and sell beer. In most cases the upstart process can be characterized as a pure 'green field' entry, i.e. with one single entrepreneur having little or no background in beer production. Naturally, entry barriers, learning by doing, innovation, organizational and marketing skills become important factors for performance and in the end determine the survival of the entrants. The aim of this paper is to shed light on the newborn Danish micro- and nano-brewing industry. Using survey data for approximately 60 micro- and nano-breweries we illuminate entry barriers and future strategies, which are highly important for survival. Next, by merging the survey data with account information reported to the tax authorities we construct an empirical model for post-entry performance. We argue that factors like the age of the brewery, the number of awards in beer contests, market characteristics and a number of background characteristics of the founder of the brewery - hereby controlling for potential unobserved heterogeneity - are essential for the economic performance.

Multinational Firms in the World Wine Industry: Who and Where?
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Business summary

The wine industry is a growing sector of the world economy and although of minor importance for statistics on foreign direct investment (FDI), the potential for globalization and trade has expanded rapidly in recent decades. As explained by Coelho and Rastoin (2004), there has been a continuous globalization of the world market place for wines which has led to a major restructuring of the largest wine operators into multinational enterprises (MNEs).

In response to foreign market opportunities made available by deregulation and globalization, many firms have increased their foreign direct investment and acquired other companies in part because of the belief that only very large players will have the cost advantages necessary to remain competitive in emerging global markets. Moreover, since the late 1980s, New World wine producers have emerged as significant players in the global wine market. At the same time, the traditional wine-producing regions of Europe, saddled by EU regulation, have struggled to adapt to changing market conditions.

International diversification is a growth strategy that has a major impact on firm performance. This relationship has been studied extensively in the international strategy literature (Capar and Kotabe, 2003). The reduction (or elimination) of barriers to trade has been a major factor in the expansion of MNEs abroad. Firms with strong competencies that are developed at home can utilize these in international markets (Bartlett and Ghoshal, 1989) to generate growth. One of the important questions in international business research is where and why firms invest in specific activities in specific locations. The literature on the locational preferences has long acknowledged the use of a location as a source of competitive advantage (Nachum and Zaheer, 2005; Porter, 2000) but also that these will mainly depend on the motives for investment, i.e. market-seeking, asset-resources seeking and efficiency-seeking (Dunning, 1998). Despite a resurgence in interest in the geographic or location aspects of international business in recent years (Enright, 2009), there is to our knowledge no empirical work that focuses on the location of investment in the beverage sector.

Thus, this paper has two objectives. The first is the documentation of the relative importance of the largest firms in the world wine market. The second objective is to examine where firms are expanding their operations, list the most-favoured locations, and identify some of the determinants linked to the location-specific advantages of some host countries.

First, this paper reviews the growth of the international market. Market growth, exports and imports are important factors to be considered when looking at investments of the largest firms. Second, a list of wine multinational firms (MMEs), based on several sources of information, is proposed, and analyzed. Third, drawn from this list, a sample of the most-favoured locations for affiliates of these firms is presented. Finally, we examine some of the factors that may explain the choice of these locations by multinational firms.
Marsala Wine and Porto Wine, two Important Stories and two Great Wines in Comparison. The Current Market Situation and Opportunities.

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Introduction

Marsala wine is the oldest of the Sicilian wines and it takes its name from the little town where it is produced. It is one of the most famous fortified wines in the world thanks to its organoleptic qualities and its incredible versatility. Despite its ancient origin and its fame, which led this wine to be known all over the world, Marsala wine is for several years in a decline phase.

Porto wine, has always been a true symbol of Portugal, is also very famous worldwide for centuries, it is obtained from different varieties of grapes grown in the Douro Valley and then it is aged in wooden barrels at the cellars of the Oporto City where it was then shipped to be exported all over the world. As the Marsala wine, also the Porto wine is a fortified and versatile wine, with its several varieties, depending on grapes, maturity and production technique used. Marsala and Porto are then two great wines with very similar stories and destinies, but they have now encountered (especially the Marsala wine) difficulties in holding a good position in the market, this is because of the “younger” sweet wines, their new strong competitors, passito wine, malvasia wine, sauterne, etc..

Objectives

This study compares these two wines which have very similar stories and qualities. The aim is to identify the strengths and the weaknesses of these two wines and then the actual treats and the future market opportunities. It is also analyzed why and how competitor wines encounter wider success on world markets despite the ancient and great history, the beauty of the lands and the richness of the environment the Marsala and Porto wines are related with.

New market strategies are formulated to renew the product, overcome the decline and start again with a phase of introduction and growth.

Materials and Methods

There were identified the strengths and the weaknesses of the two wines by the identification of some key variables of success and failure – like environmental quality, human and relational capital, etc. – determined by a sampling survey and a Focus Groups carried out on “experts” in two different times.

It was also tested the intrinsic quality of the two wines through a sensory analysis. With the ranks given by the interviewed to the variables it was made a SWOT Analysis in order to focus opportunities and treats for the two wines.

References

Columba P., (a cura di) (2007), Il vino fattore di sviluppo del terziario: le strade del vino in Sicilia. CORERAS, PALERMO.
Disciplinare di produzione della Denominazione di Origine Controllata del vino Marsala (D.P.R. 17 novembre 1986; pubbl. in Gazz. Uff. n. 163 del 15 luglio 1987)
Piccoli F., (2005) La comunicazione nel food e nel beverage, Editore Agra - Roma
Rizzo F., (1948) La fabbricazione del vino marsala e dei suoi vari tipi, Palermo, Ed.Tip. S. Pezzino

Keywords: marketing, consumer, Swot analysis, association coefficient
Internationalization Strategies of Companies in the Wine Industry in Portugal - Context, Forms of Action and Performance
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This research work aims to analyze the competitive environment of companies in the wine sector and assess the implications in the development of strategic contingent guidelines and various performances. It proposes applying the methodological reference Integrated Grid for Strategic Reflection - IGSR (i), adapted to a context of international business IGSR(i), which structures research into two levels: a preliminary one, generic characterization of the companies; along with a central one analysing its strategic strand, through the articulation of three components studied systematically (CRP) - contingent factors external and internal (C), the style of strategic reflection (R) and economic performance (P).

The approach involved the collection of primary data by a questionnaire sent by mail (between June and December 2010) to entrepreneurs / managers / export managers of the Portuguese wine sector companies, and secondary data, mainly from documentary sources. The external diagnosis was based on the analysis of the global, European and Portuguese wine sector context, its contextual and transactional dimension (PEST analysis and five forces model of Porter). The internal diagnosis allowed characterizing the companies surveyed in relation to human, organizational, informational, technical, production and trade resources. With regard to the results, the application of factor analysis to the variables of context, allowed to identify two main components: the growth of internationalization and degree of internationalization. The cluster analysis (two-step cluster), based on the two components obtained, lead to four styles of reflection / action strategy, according to Oviatt & McDougall (1997) and Porter (1986). Its profile was characterized as a function of variables that were statistically significant in the ANOVA / MANOVA and Chi-square in the following dimensions: business logic, characteristics of activity, extent / quality, IS/IT and internationalization profile. Based in the statistical results and in the contextual and transactional analysis, the authors outlined several strategic guidelines.

The theoretical and practical contributions consist of identifying the types of strategic thinking in the context of internationalization in the wine sector, identify the profile in terms of contextual variables associated and cross all those profiles with the levels of performance. The originality extends to methodological aspects, mainly by the application of a framework developed by Sousa (2000) - called Grid Integrated Strategic Reflection (IGSR) - adapted in this research to the context of internationalization and applied in a different geographic scope.

KEY WORDS: Strategic Management, Internationalization, Wine Industry, Wine

Abstract

The paper focus on recent developments in the South African wine industry, with reference to empowerment and social responsibility. It reviews the institutional structure and strategic framework directing transformation - the Wine Industry Transformation Charter and Scorecard, adopted on 31 July 2007 - through which good governance and social responsibility programs are fostered, implemented and monitored in the South African wine industry. The paper outlines how the wine industry seeks to foster social change through integrated socioeconomic support structures, as based on the Wine Industry Plan (WIP) accepted in 2003. The wine charter and scorecard components are a representation of good governance in the industry, whereas the social capital development approach is the focus of social responsibility programs in the wine industry. The seven components of the wine transformation charter are: (i) ownership, (ii) management/control, (iii) employment equity, (iv) skills development, (v) enterprise development, (vi) preferential procurement, and (vii) rural development, land reform and poverty alleviation. Five areas that constitute the programs on social responsibility are: (i) the responsible alcohol use, (ii) rural development and poverty alleviation, (iii) security of tenure, (iv) land, and (v) sectoral determination. The implications for the agri-food sector and conclusions are provided.

Keywords: good governance, social responsibility, social capital development approach, wine transformation charter
Friday June 1st 2012
14:00 – 16:00

SESSION 9

LOCAL & INTERNATIONAL MARKETS

A New Statistical Methodology for the Evaluation of Wine Information on the Export Markets of Some Italian Wines
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On being forced to be born global: Internationalisation, Competition Awards, and a New Test of Alternative Internationalisation Paths
HOJMAN David E.
University of Liverpool Management School - UK

Globalisation Strategies of Chilean Wine Exporters
HOJMAN David E.
University of Liverpool Management School - UK

Branding Wines in a flat World
MIGDALIS Nikolaos
University of Patras - GR

The Relevance of Wine in the New Zealand’s International Trade
MIGHELI Matteo
University of Eastern Piedmont and IEL – IT

The Market for Alcoholic Beverages in Japan
NINOMIYA Mari, ENOMOTO Keiichiro
Fukuoka University - JP

An Analysis of Wine Consumption Trends and Food-Related Expenditures in Japan
OMURA Makiko, EBIHARA Kensuke, SAKURAI Yuka
Meiji Gakuin University - JP

Marketing Channels in the Wine Sector: Wine Distributors in Catalonia as a Case Study
ESCOBAR, Cristina; GIL, José María
CREDA (Center for Agro-food Economy and Development), ES

Does the Euro Exchange Rate Matter for French Wine Exports?
FIGUET Jean-Marc, CARDEBAT Jean-Marie
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A New Statistical Methodology for the Evaluation of Wine Information on the Export Markets of Some Italian Wines

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From last time, the European Union has radically reorganized the way the wine market is managed by adopting the Council of Ministers Regulation (EC) No. 479/2008. With reference to the National financial package, each Member State can adopt a suitable tool to promote information about all aspects of wine processing and marketing to Third Countries.

This paper aims to estimate how effective was the most significant information on measuring the activities of Italian quality wines produced in a certain region (V.Q.P.R.D.), and to compare it to the monitoring and evaluation of the data collected in foreign markets. In this context we look at the Public Relations activities aimed at strengthening the image of the product and at providing an added value on the market (Harris, 1998, Whalen, 2006).

The data gathering has been carried out in the most important cities of the Baltic Republics (Estonia, Latvia, Lithuania), the Netherlands and Belgium during the three year period of 2009/11. This research has been replicated in American countries and in those Asian areas which are strategically important for Italian exports (i.e. United States and Japan). The research sample amounts to 3,496 cases which have been divided according to the following performed communication actions: Press conference (1,116), Wine tasting (1,535), Tasting course (694) and knowledge level of Italian V.Q.P.R.D. (151). On the whole the interviewed operators are Press Officers, restaurateurs, wholesalers, importers, oenologists, and wine experts (i.e. key people). The data collected through a specially designed model questionnaire range from socio-demographic, to those of perception of overall quality of the event and the organization of communication activities (eg. facilities and equipment, materials, schedules, etc.) to those of the qualitative perception of the wines tasted, sensory satisfaction, preferences of the interviewee, up to the propensity to buy.

The data have been analyzed using the methodology of nonparametric combination of dependent permutation tests (NPC) (Pesarin and Salmaso, 2010). In recent years permutation testing methods have increased both in number of applications and in solving complex multivariate problems. Permutation tests are essentially of an exact nonparametric nature in a conditional context where conditioning is on the pooled observed data set which is generally a set of sufficient statistics in the null hypothesis. There are many complex multivariate problems which are difficult to solve outside the conditional framework and in particular outside the nonparametric combination (NPC) of dependent permutation tests method. For a given number of subjects, when the number of variables diverges and the no centrality parameter of the combined test diverges, then the power of permutation combination-based tests converges to one. This method has also another practical relevance as well, especially for agricultural research where a global ranking in terms of performance of all investigated products is a very natural goal (Bonnini et al., 2010). When performance evaluation takes into account more than one aspect, the problem can be complicated and some methodological and practical issues arise: standardization, multivariate structure of data, distance with respect to target (highest satisfaction level), stratification in presence of confounding factors (Fayers and Hand, 2002).

The results highlight, on the one hand the good performance of the Italian VQPRD wines being promoted abroad and on the other hand the importance of using cognitive tools for the development of appropriate strategies in relation to the markets that have to be reached. For example, the strengthening of the role played by the quality of the wine products ‘Made in Italy’ appears especially important strategically, as acknowledged by the majority of the people interviewed in Third Countries and in European Union Countries.

Keywords: Italian PDO wines, communication of wine abroad, NPC Test, consumer satisfaction

On being forced to be born global: Internationalisation, Competition Awards, and a New Test of Alternative Internationalisation Paths

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Abstract

Awards in prestigious international competitions are key indicators of a winery’s internationalisation success. In London’s International Wine Challenge, domestic presence (quality multiplied by product range) has a negative impact on awards to small and medium-size wineries. Production activity in many different regions has a negative impact regardless of firm size. For new entrants, optimality means to be born global. These results challenge the Uppsala model. They also suggest a new definition of ‘born globals’ free of arbitrary age or export share thresholds, and a new test of ‘Uppsala-ness’ versus ‘born-global-ness’.

Keywords: Internationalisation, Competition awards, Uppsala model versus born global test, Wine, Oenologists as knowledge workers, Chile
Globalisation Strategies of Chilean Wine Exporters

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Chilean wine exports are booming. But not all wineries are equally successful. Quality production may be easier to get right, as compared with international marketing and distribution. The best export results reflect innovation, award winning at international competitions, opportunities offered by large supermarkets and other distribution channels, good relations with the specialist press, and embracing organic production and if possible wine tourism. Failures of some very small wineries may be inevitable. Inability or unwillingness to face dramatic changes in the industry and international markets, leading to poor handling of expert winemakers, may be behind some big winery failures.

Keywords: Globalisation, Exports, Innovation, Knowledge workers, International wine competitions, Chile

Branding Wines in a flat World

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"Wine is bottled poetry”
Robert Louis Stevenson (1850-1894)

Nowadays, the world is flat. This situation that in more formal terms we define as “globalization” has its good and bad side in each business sector, in each part of our daily life. As a matter of fact the winemaking industry has also been affected from that. Winemakers are trying to market their products in that international, challenging and dynamic global market. Homogenization of the global market is another result, with the same bottle of wine in any table of every corner restaurant around the world. While globalization does promote contact and exchange between cultures, it also tends to make them more similar to one another. This paper reviews the obstacles that globalization is causing to the winemaking industry and how necessary is the proper branding of the sector so the products to be well positioned in the global map.
The Market for Alcoholic Beverages in Japan

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An analysis is made on the structural changes in the market for alcoholic beverages in Japan, particularly that of sake.

Sake had been the most popular beverage throughout the centuries. However, shochu, a hard liquor, superseded its popularity in the 1990s. This was a drastic change in the history of the Japanese culture because, until then, shochu catered mainly to the lower-income-class workers. Diversification of values and lifestyle changed the consumer behavior as did the evolution of the nation-wide network of computerized distribution systems.

There are about 1,585 sakagura* all over Japan in 2010 that have been in business for several generations. 16 major kura with modern production outfits dominate 52.8% of the sake market. The remaining kura are local, small and independent, and serves the market for connoisseurs of the sake finesse.

The sales of sake produced by major kura are reliant on large wholesalers or retailers that deal with wide range of assortments, including wine, beer, ready-made liqueur. Thus, when customer preference for sake began to falter, it was pushed out of the shelves by anticipation as computerized marketing came into fashion. These types of mass-produced sake were under heavy price competition and could not create a differentiated market of its own. Despite the producers' efforts, the brand names that once sparkled lost their appeal.

Small, independent kura sell directly to customers or through a very short chain of sales outlet that seldom go beyond their regional boundaries. The producer-consumer ties are intense. They symbolize the efforts to preserve the Japanese sake culture and its heritage. Attempts are being made to differentiate their products by regionalization. Fermenting the rice with water both available in the locale, employing the seasonal local hands and using the methods and know-how inherited from the long lineage of ancestry make the distinctions. AOC (Appellation Origin Control) is necessary to support this initiative.

* sakagura: a sake producing kura, equivalent in meaning to "winery" and "brewery"

An Analysis of Wine Consumption Trends and Food-Related Expenditures in Japan

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Although Japanese economy has been experiencing recession since early 1990, wine consumption has been remaining relatively stable. In fact, looking at the growth rate, wine consumption in Japanese market has a fairly steady upward trend, with significantly higher average growth rate compared to the GDP or many other consumption goods. This is particularly so for imported wines. Although Japanese consumers do not drink as much wine as their Western counterparts, such a growing trend may suggest a possibility of wine steadily gaining its place in Japanese life. In particular, wine consumption may be related to the westernisation of cuisine in Japan. Whilst the analyses do not give strong evidence of correlation between wine consumption and other food item consumption at a household level, wine consumption is found to be significantly positively correlated with expenditures outside the household, in particular, expenditure on eating-out and social-expenses. The results from the analyses on food service industry sales may suggest younger generations, reasonably-priced wines, and casual eating occasions outside household being keys to the future wine consumption in Japan, contrary to the trends recently experienced by France.
Marketing Channels in the Wine Sector:
Wine Distributors in Catalonia as a Case Study
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The wine sector in Catalonia is clearly dual: on one hand, there is a small group of large companies following differentiation strategies and enjoying economies of scale while, on the other hand, there are many small companies and growers who have suffered a situation of surplus and decreasing prices, resulting in negative outcomes for the last recent financial years (OVVC 2007; 2011). From the standpoint of marketing, the wine sector in Catalonia is fairly uncoordinated (OVVC, 2007). Cooperatives could play a key role in marketing agricultural products by achieving economies of scale and thus, lowering marketing and promotion costs (Costa-Font M. et al., 2009). Nevertheless, wine cooperatives in Catalonia, in spite of controlling half of the Catalan grape production, show low market shares coupled with an overall lack of marketing contracts within the wine sector (Costa-Font M. et al., 2009).

Distribution channels are critical for success. Achieving good partnership with the right distributor can have a significant effect on profitability, by helping out promoting a brand (Prichard, 2004). In this sense, it becomes necessary to take into account the wine wholesaling sector as a key element to enter into the appropriate marketing channels. This issue is especially strategic for those small wineries that do not enjoy economies of scale and that have difficulties to market access. However, so far, there are no studies examining the position of Catalan wines in the wholesale distribution channel. Our study aims at exploring which are the main motivations of wine distributors when buying and selling wines and which winery attributes can provide greater success in their relationship. In this sense, we aim at communicating to wineries what wine distributors are looking for in order to be more appealing for their businesses.

To tackle with this issue we perform a vertical differentiation analysis of the wine supply service for wine wholesaler distributors. Methodologically, we have applied the means-end chain (MEC) analysis to identify the linkages that wine distributors establish between service attributes, the benefits they symbolize and the values they try to reach through them. In other words, wine distributors will assess which are the main attributes they are seeking in a winery to achieve their desired end states.

Results obtained show that a trustful relationship with the wineries is the key strategic factor of success for wine distributors. The most important winery’s attribute to establish a trustful relationship with a wine distributor is to provide an excellent product. Furthermore, trust in the relationship can also be achieved by offering a friendly dealing and being professional accomplishing what was agreed upon (timings, contract conditions, availability, etc.). Another interesting attribute that provides trust in the relationship is the winery’s own self-esteem, which has been stated as believing in their own product and providing a good image as a cellar (facilities, portfolio, history...). Results obtained from this study could help wineries to design more effective marketing strategies.

Abstract:
We analyze the impact of Euro on French wines exports. For wine producers, the over-evaluation of the Euro penalizes the exports. We test econometrically this hypothesis for the period 2007-2009. We show that this explanation is not sufficient. Other causes (quality cost of production, supply fragmentation...) must be study to explain the decline.
Who is the Expert? On the Determinants
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We provide an empirical analysis of the determinants of quality awards to wines. To this aim, we consider six yearly editions (2007-2012) of the three most known and influential professional guides to Italian wines: Slow Food-Gambero Rosso (SF), Associazione Italiana Sommelier (AIS) and Vini di Veronelli (VV). We build an original panel dataset of all the wines which, in each year, have been awarded the top evaluation by at least one of the three guides. The top evaluation corresponds to 3 glasses (SF), 5 grapes (AIS) and 3 blue stars (VV), respectively. For each awarded wine, we collect a set of relevant variables, including: region, geographic area, category of wine (red, white, traditional method sparkling wine, sweet wine), official classification of the wine (IGT, DOC or DOCG), name and type of grapevines (autochthonous or international), their proportion in mixtures, productive methods and vinification techniques, aging years and habitat (steel, wooden barrel, barrique), number and type of perceived aromas, number of produced bottles, hectares of grown vineyards, experience and reputation of the wine-producer and the oenologist. Based on our dataset, we provide some descriptive statistics on the relative composition of the sample of awarded wines, in particular concerning Italian regions and grapevines, and test the existence of a bias in the guide valuations. We then extract the sub-sample of the wines which have been awarded the top evaluation by all the three guides, the truly best Italian wines in each year, and replicate the previous analysis. Furthermore, we run an ordered probit estimation to assess the effect of each of the collected variables on the probability for a wine in the dataset to win awards by more than one guide. Finally, we explore whether there is any significant change in the evolution of such probabilities over time.
Cin Cin!
Competing for the Leadership in the Italian Sparkling Wine Market:
Franciacorta versus Trento
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We estimate a hedonic price function for the “classical method” sparkling wines from Franciacorta, a hilly area close to Brescia, and from Trento, a mountain area at the border with Austria, the two mostly renowned Italian “Champagne-like” regions. We use data from an original panel data of about 400 wines, based on seven yearly editions (2006-2012) of the three most known and influential professional wine guides: Associazione Italiana Sommelier, Seminario Veronelli and Gambero Rosso-Slow Food (Gambero Rosso only from 2011). Wines differ concerning typologies (Brut, Extra Brut, Satìn, Rosè, Pas Dosè), wine-makers styles, grapes mixtures, cuvée, vintage years, fermentation and production processes. On the top of the latter explanatory variables, in some specifications we also control for tradition, prestige and supply characteristics of the wine-maker’s brand, cultivated hectares, number of the produced bottles, and, finally, for scores and prizes awarded by each Italian wine-tasting guide. Finally, we test whether, for each wine typology and region, there is any price premium from previous year’s awards.

The Portuguese Wine Ratings: an old Product, a new Assessment
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Typically, wine is an experience good, i.e., its quality is unknown before consumption, and wine drinkers tend to be risk-averse people. As a result, expert and consumer opinions may help to fill an information void. Robert Parker (RP) of the Wine Advocate and various experts at the Wine Spectator (WS) are well-known wine gurus. In terms of consumer evaluations the information contained in the web page www.cellartrack.com deserves special attention, since its ratings depict, a-priori, the preference of an average buyer. Moreover, and specifically taking into account Portuguese wines, one of the most relevant expert references is João Paulo Martins (JPM) annual publication Guia dos Vinhos de Portugal.

Following the classic example of the Bordeaux region, and being aware of its importance in consumer purchases and in the definition of wine prices, there are an increasing number of wine regions and producers who submit their wines to the raters’ appreciation. Portugal, particularly in the last decade, has been following this tendency, with increasing numbers of Portuguese wines that emerge on the list of ratings of RP and WS gurus.

Portuguese wines that emerge on the list of ratings of RP and WS gurus.

Using the ratings published in 2010, by RP, WS, JPM and cellartrack.com, the main aim of this paper is to test whether there are differences and consistency between the ratings assigned by experts and consumers and, additionally, to assess if the score attained by a specific wine is influenced by color attributes and grape region (geographic origin). The statistical analysis shows that, with minor differences, there is consistency between the different ratings. Furthermore, the results of the regression models indicate that red wines tend to have higher scores and, in geographical terms, Douro wines are in a prime position.

Keywords: Portuguese wines, ratings, consistency
JEL: C20, D89, L15
Weak Form Efficiency of Investment Grade Wine Prices
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Abstract

We investigate the fine wine market from a weak-form efficiency viewpoint using the Liv-ex index family for the period of January 1993-February 2010. The ARMA spectral estimations of variance ratios show that the random walk hypothesis can be rejected regardless of whether the prices are quoted in USD or GBP and regardless of whether inflation is considered. The wine returns exhibit large positive autocorrelation, resulting in variance ratios that are above unity, which means that, aside from the random walk, a stationary component characterizes wine prices. The large stationary component can be associated with the illiquidity of wines and the inefficiency of young wines, which varies by wine classification. The random walk component of wine prices seems to be driven by the market factor. Due to the currency risk, a US wine investor faces a larger risk than his UK counterpart, although wines hedge against inflation in both currencies.

Keywords: Wine, Alternative investment, Market efficiency
JEL code: G11; G14

Acknowledgements: We are thankful for the participants of the 5th Annual Conference of the American Association of Wine Economists at Bolzano, Italy. We owe special thanks to Phillipe Masset and James Miles for careful reading and advice.

From Grapes to Wine: an Overview of a Chilean Success Story
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From Grapes to Wine:
an Overview of a Chilean Success Story
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Abstract:
The purpose of this (evolving) paper is to present a descriptive analysis of recent developments in the Chilean grape and wine production sub-sector over the last three decades. The paper starts with a background of policies that arguably set the foundation for the expansion of the agricultural sector particularly the fruit subsector and wine production. The paper then presents an overview of the recent evolution of global wine markets with special attention given to Chile’s participation, followed by a discussion of organic viticulture in Chile. This preliminary and evolving analysis suggests that the path the Chilean wine industry has followed is consistent with the evolution of market demand, which continues to shift toward higher quality wines, produced in a friendly environment. Chile is poised to capitalize on the further growth in the demand for wine, as it becomes increasingly perceived as a functional food. In addition, the relative geographical isolation of the country affords it a comparative advantage in organic production, which is likely to be another expanding market niche.
The Gastronomic Districts?
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The aim of this text is to explain the location of the French gastronomy by the mean of the "Gastronomic District" concept, which is a special type of industrial and / or cultural cluster. After building the concept of "Gastronomic District", we study two main forms.

We identify two types of gastronomic districts in France, by source of supply of gastronomic inputs -and consequently the type of heritage(s) used-:

"the gastronomic district based on a regional and common gastronomic heritage" symbolised by the model of Lyon, and,

"the gastronomic district based on an aristocratic gastronomic heritage, derived from the Court cuisine and organised by the local cultural heritage" illustrated by the Parisian model. The origin of raw materials needed for Chefs induced a different relationship with the local heritage and a different organisation within the district...

The purpose of this work is to produce an analysis of two French gastronomic districts, which can then be used for the study of other districts and to identify other types of gastronomic districts.

Keywords - Gastronomy, gastronomic district, cultural district, localisation, gastronomic heritage.

JEL Classification: R1, Z1
Cooperation in Wine Tourism and its Role in the Development of Disadvantaged and Isolated Areas. 
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Wine-tourism is an important resource of income when it comes to organized wine producing countries such as France, Germany, Spain, Italy, U.S.A, Argentina, Chile, Australia and New Zealand. In these countries enjoying wine is a significant part of culture and daily life. Wine tourism in Greece emerged and developed only during the last twenty years and it’s far from being a well-organized industry.

The foundation of the “Wine producers’ Association of the Macedonian Vineyard” with the trade name “Wine Roads of Northern Greece” in November 1993 by 15 wine producers has played a decisive role in the introduction of Wine tourism in Greece. They made important decisions and created an innovation for Greek standards collective project that would reform and pre-empt any progress in wine-related activities. They established common goals and effectively addressed the challenges of the international market. They created and they suggest specific routes that go through the most picturesque points of a winery zone.

Nowadays, 37 members of the Association suggest 41 wineries open to visitors in 8 routes. The agenda also includes notable restaurants, taverns, inns and hotels, traditional products stores and places that offer alternative activities. All these businesses are members of the Wine Roads of Northern Greece and have been evaluated according to specific qualitative criteria and are thus distinguished by a special seal of approval. One of the suggested routes is the “Wine Route of the Lakes”, which includes a large part of the Municipality of Amyntaio in the prefecture of Florina.

In December of 2011 a field empirical research with questionnaires was realized in order to record the contribution of Wine tourism in the local development of a distant area. The study took place in the Municipality of Amyntaio, which is a large part of the "Wine Routes of the Lakes". Furthermore, 11 wineries, hotels, restaurants, Environmental Centre (Arcturos), alternative activities offices operate in Amyntaio. All the businesses are interconnected through their participation in the “Eco-touristic Company of Vitsi”.

Conclusions can be extracted by the analysis of the answers concerning the contribution of wine-tourism in the local Wine industry, the local community and the touristic businesses. Conclusions can also be drawn for the contribution of the "Wine Roads of Northern Greece" in local entrepreneurship. The study also records the restraining factors for further development.

We investigate the comparative technical efficiency of work-owned firms (WO) and conventional firms (CF) by looking at the performance of a mixed sample of Sardinian wine producing companies over the period 2004-2009. The Sardinian wine industry provides a unique laboratory for this kind of comparative analysis, which in the absence of definite theoretical statements and uncontroversial empirical evidence on the effects of organizational form on productivity continues to attract the attention of many researchers. Among the factors that bias productivity estimates in this area, scholars have emphasized the self selection problem (due to the tendency of successful PC’s to exit the sample); the heterogeneity of accounting practices and a host of uncontrollable aspects, even for the same type of firms, when the samples under investigation cover several industries. Thanks to a reformulation of the income statement of the firms included in our dataset, we have been able to measure uniformly the magnitude of the labour input across firm types. Moreover, since all the firms considered were established well before the period under study, self selection biases are significantly reduce. Finally, being all the firms located in the same region, i.e. within the same social, productive and natural environment, one can safely assume that our units of observations are “twins” in all non-organizational aspects, e.g. technology, products and market conditions.

Based on this sample, we first measure the technical efficiency of the firms by applying the non parametric DEA (Data Envelopment Analysis) method. Subsequently, we run a pooled truncated maximum likelihood regression in order to estimate the impact of environmental and firms’ characteristics on the technical efficiency indicators. We test carefully for the robustness of our two-stage bootstrap procedure. On average, the cooperative wineries are less technically efficient than conventional firms.

Based on this sample, we first measure the technical efficiency of the firms by applying the non parametric DEA (Data Envelopment Analysis) method. Subsequently, we run a pooled truncated maximum likelihood regression in order to estimate the impact of environmental and firms’ characteristics on the technical efficiency indicators. We test carefully for the robustness of our two-stage bootstrap procedure. On average, the cooperative wineries are less technically efficient than conventional firms. These findings go against previous empirical analysis in this area (particularly for the wine industry) and, owing to the key role of work-managed firms in the rural world of many European countries, raise concerns about the likely effects of the forthcoming liberalization of the EU wine sector.
The packaging is often the first cue used by consumers to assess the quality of a wine; wine packaging also represents the “business card” of the winery, through which it presents its product and in which it makes its communication strategies explicit.

International studies on wine packaging focus on the different technical options for alternative materials (Buiatti et al., 1997, Thompson, 2010), on its influence on the consumer decision (Spawton, 2008, Barber et al., 2010, Szolnoki et al., 2010, Sherman and Tuten, 2011) and on its impact on the market price of wine (Mueller and Szolnoki, 2010).

The study of Orth and Malkewitz (2008) identifies, starting from wine packaging, the key types of package designs and proposes itself as a tool to help managers in packaging policies.

However, in the marketing and packaging literature, the role of packaging as a communication strategy for the wineries has not been deeply analysed, as well as the role of the collective denomination of origin as an essential component of the packaging for the wineries in the Old World. Recently, its interactions with the brand are generating new communication elements which should be explored to give new marketing inputs to the wine producers.

This research aims at analysing the package profiles to understand the communication choices of the wineries in the denomination of origin area.

This objective will be pursued through the case study of Valpolicella wines. This area of origin has been chosen because it is one of the most important typical red wine areas of Italy, with a wide range of combinations product/market, diversified target prices according to wine categories and brand notoriety, and an high export propensity.

A survey by a representative sample of wineries has been conducted to collect the package profile elements actually used. An ad hoc survey scheme has been applied to 700 wines of the 130 member wineries, aiming to analyse the characteristics of the bottle, of the labels, and of the information they provide.

Different “package profiles” able to represent the different communication styles adopted by the Valpolicella wineries have been determined, segmenting packaging strategy of Valpolicella wineries.

Future development of this research aim at interpreting the quality cues perceived by the consumer through the package profiles and the role of the denomination of origin in the determination of the utility of the package profiles, also considering their interaction with the brand and the other packaging elements.

Keywords: Wine brand, digital marketing, social media, case study, Italy
In the context of high competition between the wineries, the pursuit of differentiation valued by the customer is a basic order to stay successful in the market or enter new markets. The label, as an introduction of a wine, is increasingly influential in purchasing decisions of consumers and therefore the efforts being made up wineries updating and modernizing the extrinsic component of a wine. For this reason, the main objective of this research was to generate consumer level knowledge about the perception of different attributes of the wine labels such as design, color and shape. The main source of information was a survey with closed-type questions (selection of options and scales of measurement). Before applying massively the survey, we conducted a pretest to 15 people. Subsequently, we applied a random probability sample comprised 400 consumers belonging to the town of Maipu (NC = 95.5%, e = 5.0%), which is one of the communes that records as many people and also has a distribution similar socioeconomic strata to Santiago as a whole, which allows an approximation to the overall behavior of consumers living in the capital of Chile.

The requirements, prior to survey, consumers were: being over 18 years and declare to drink regular or occasional bottled wine. Subsequently analyzed by descriptive statistical information for the variables related to descriptive aspects of consumption, sociodemographic characteristics and multivariate methods were used, namely principal component analysis in combination with hierarchical cluster analysis to classify consumers and conjoint analysis to assess consumer preferences. The main results of this research have identified three market segments according to attitudes toward the label of a wine. The segments identified were designated: aspirational (39.5%), traditional (31.8%) and Informed (23.0%). Also detected a fourth group of consumers, which represented 5.7% of the sample and analyze non-po was chosen because the statistical error was 5.0%, which could imply the absence of this segment also detected in the segments "aspirational" and "traditional" dominant frequency of use is casual, a situation that continues in the frequency of purchase, but appears in second place with about 1 / 3 of participation in each segment, the monthly purchase rate, which could be attached to the family monthly grocery shopping. Another interesting result corresponds to the attributes that consumers consider when purchasing, which is relatively similar in all 3 segments identified and crews is to: trademark, grape variety and price, attributes that are in line with business strategies countries of the New World wine producer. In terms of preferences for labels, it is concluded that, as the orange color is strongly rejected by consumers, while colors like white and beige are preferred by segments being 'aspirational' or 'traditional'. As for shapes, the circular segment is preferred by the 'traditional.'

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La nouvelle réglementation communautaire a précisé les modalités d’attribution des appellations d’origine protégées et des indications géographiques protégées, afin de mieux renseigner le consommateur et de protéger le producteur, en limitant la production pour privilégier la qualité et la commercialisation aisée des produits.

Nombre de pays européens étaient depuis longtemps déjà engagés dans une politique de recherche de qualité et les appellations étaient donc largement utilisées.

Toutefois, le droit des marques apporte également aux opérateurs de ce marché et aux consommateurs une précision importante, en leur permettant d’identifier plus aisément encore l’origine exacte du produit d’appellation.

On constate donc que cohabitent souvent sur les étiquettes des mentions relatives à l’appellation d’origine, et d’autres relatives à la marque. Dès lors, plusieurs questions peuvent se poser : quel est l’intérêt de cumuler ces deux titres sur un même produit ? Quelles sont les règles d’attribution des marques et comment le nom des appellations est-il protégé contre une éventuelle utilisation par un tiers ? On sait que les textes communautaires et internationaux protègent l’appellation, mais cette protection même doit connaître une limite afin de ne pas paralyser l’activité des autres opérateurs. Ainsi doit-on s’interroger sur la possibilité de déposer à titre de marque une partie du nom de l’appellation (voir le contentieux-fleuve en droit européen à propos de l’appellation Budweiser).

En outre, on peut se demander quel est l’intérêt pour un producteur d’utiliser une marque en plus de l’appellation ? Ces questions sont soulevées au moment de la demande de marque communautaire devant l’OHMI, mais également en droit international, ou les notions de noms génériques et semi-génériques sont très importantes.

Enfin, on constate parfois le choix fait par certains producteurs qui pourraient bénéficier de l’appellation de se limiter à une protection par le seul droit des marques. Cette stratégie ne peut manquer d’interroger sur les intérêts respectifs de ces titres et de leur cumul, ainsi que sur les contraintes imposées aux bénéficiaires de l’appellation, qui parfois, préfèrent s’en affranchir et opter pour la seule protection de la marque, dès lors que les consommateurs les ont clairement identifiés.
In California, grapes, including wine, table, and raisin rank as the highest valued crop and the second-highest valued product after milk and cream. California produced 86% of both U.S. winegrape volume and value in 2010. Wine grapes alone contributed roughly $2.5 billion in total value of California farm production in 2010. While measures of demand, and in particular, elasticities, are often used in policy analysis, despite the economic importance of this industry, very few studies have estimated the demand for wine produced in California, and even fewer have estimated the demand for California winegrapes.

Several complexities in the market for California winegrapes may explain this dearth of studies. First, the structure of supply and demand is recursive; in any year, the total quantity of wine grapes is predetermined as a consequence of decisions taken in previous years based on expectations of returns. Thus modeling this industry necessitates use of an inverse demand model, in which price, p, is a function of quantity demanded, q. An additional matter of note is that wine is a traded good and, consequently, the demand for wine made from California winegrapes (and thus the demand for California winegrapes) is effectively a residual demand, which is influenced by global supply and demand conditions, making the relevant demands much more elastic than they would be otherwise. We explicitly address this aspect of demand both in our estimates of elasticities of demand and in the interpretation of these estimates. Finally, wine is a highly differentiated product, and California produces correspondingly differentiated winegrapes across a very diverse range of agroecologies to supply a range of market outlets. Reflecting this diversity, the California Department of Food and Agriculture (CDFA) collects detailed data at the level of the crush district of which California has a total of 17, which for the purposes of this analysis we have aggregated into three primary regions—named “High,” “Medium,” and “Low” reflecting the average prices and quality of the winegrapes they produce and the wine made from them.

We have estimated an inverse flexible-form demand system using a model presented by Brown, Lee, and Seale (1995). This model nests several functional forms that can be obtained by imposing restrictions, although we opted to use the fully flexible form of this model because it produced the most sensible results; it was the only model for which, after inverting the matrix of flexibilities to obtain elasticities, all of the own-price elasticities of demand were negative. The econometric analysis yields estimates of the own-price elasticity of demand of about –9.5 for “High”-quality winegrapes (from Napa and Sonoma counties), about –5.3 for “Medium”-quality winegrapes (mainly from other coastal valleys and the northern San Joaquin Valley and Lodi), and –2.6 for “Low”-quality winegrapes (from the southern San Joaquin Valley where per acre yields are nearly 10 times those in Napa). Thus demands for all three categories are fairly elastic, with high-quality winegrapes being the most price-responsive. “Expenditure” elasticities (i.e., elasticities of demand for winegrapes from a particular region with respect to expenditure on California winegrapes) were computed using Wold and Juréen’s (1955) result: the sum of the direct and cross-price elasticities for a given category must be equal to the negative of the expenditure elasticity. The expenditure elasticity is much greater for high-quality than for low-quality winegrapes. The estimates of the expenditure elasticity of demand are about 2.0 for “High”-quality winegrapes, about 0.7 for “Medium”-quality winegrapes, and about 0.1 for “Low”-quality winegrapes.
How much is for the Reduction of Income Insecurity? The Case of Wine Growers in the Region of Veneto in Italy
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Abstract:
The European Commission’s proposal for the CAP post-2013, October 2011, despite the strong smoothing in farm payments and reduction of coupled support level, it promotes the application of mutual funds, already introduced in specific common market organizations like wine, for the protection of farm income. The proposed Regulation for rural development innovates the instrument of mutual funds with the so-called Income Stabilization Tool (IST). The art. 40 describes the regulates its functioning and quantifies the public contribution: “proportionate to the amount paid by the mutual found as financial compensation to farmers”.

Based on data collected from the Farm Accountancy Data Network of the Veneto region in Italy, the paper aims to simulate the effects of the introduction of IST on the specialised wine growers’ incomes estimating the factor affecting the probability in income variability.

The research results allow to evaluate the applicability in the area of IST and the role of the size of the fund to reduce the risk of insolvency. On the farm side, it is possible to evaluate the effect of IST in reducing the variability of farm income as well as the cost of participation in the fund in relation to the production area, the type of product and the size of the fund.

Keywords: income stabilization, insurance, CAP reform, wine economics

The Political making of a Wine Market: The Case of French « PAYS D’OC » Varietal Wines
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While exports of French wine have faced great difficulties since the 2000’s, those referring to the varietals have met incredible success. The Languedoc-Roussillon region, exporting more than 2 million hectoliters across the world in 2009, has exceeded the traditional Denomination of Origin (DO) wines from Bordeaux and the Côtes du Rhône. How is this category of wine met with such legitimacy today, when it did not exist 25 years ago? The economic sociologic perspective (FLIGSTEIN 1996, 2001; PODOLNY, 2005; GARCIA-PARPET, 2004, 2009; LAFERTE, 2006) enables a better understanding of how the market for varietal wines was socially structured.

With politics at work, varietals became legitimized at several levels, first local and then national. It was imposed as a key component for both the producers of the sector and consumers. In the 1980’s, local wine firms used the notion of varietals as a means to establish a new concept - or cognitive framing – of the wine market, in order to disqualify the competitors’ older modes of production. An unprecedented inter-firm co-operation took shape, giving birth to innovative strategies for production and presentation in order to adapt the local wines to the demand of international traders. Their success in exporting gradually attracted new incumbents in the game who adopted the wine-making model of the challengers, and locally diffused their standards of production and presentation. The wine-growers practices were transformed to meet their demand. Thus, the rules of exchanges, competition, and professional interests were gradually stabilized around varietals wines. To maintain this socio-economic organization, the representatives of the challenging firms began to lobby outside their regions. At a national level, the economic success of varietals gave them access to key positions with the ministerial authorities. Their locally constructed legitimacy allowed them to obtain a specific denomination, similar to that of AOC wines. In doing so, they built hand-in-hand with the State a specific set of regulations as well as a label of recognition like a brand - the “Vins de Pays d’Oc” label - guaranteeing favorable market conditions.

The existence of the local “Vins de Pays d’Oc” does not rely solely on the charisma of some local wine growers who introduced vine wines, as some might think (ATKIN, 1994), nor to the economic strategies that introduced their wines to the international markets (GARCIA-PARPET, 2004). Moreover, another major factor ought to be taken into consideration: the role of the State. In fact, the State plays a central part in the existence of a product since it defines the rules of production, marketing, competition and stability of the exchanges between the firms of the sector. It contributes to define essential market conditions for the success of a product such as the “Poids économique des vins de cépages pays d’Oc IGP au sein de la filière française”, Syndicat des producteurs de vins de pays d’Oc, juillet 2010. On the internet: http://www.vindepaysdoc.com/files/vpo/Actualites/Lettre-Poids-eco-VPO-IGP.pdf

product. Our aim is to connect both the micro and macro dimensions by showing how the
current success of the Languedoc-Roussillon varietals can be explained by the ability of certain
local wine firms to construct with the State a set of specific regulations. Our analysis rely on
press articles and interviews with founders of “Pays d’Oc” wines.

**Sources :**
Atkin T., 1994, Vin de Pays d’oc. Un vin contemporain en terre méditerranéenne, Editions
Gilbert & Gaillard, 192 p.
Fligstein, N., 1996, “Markets as politics : a political-cultural approach to market institutions”,
Garcia-Parpet, M.-F., 2009, Le marché de l’excellence. Les grands crus à l’épreuve de la
Podolny, J. M., 2005, Status signals. A sociological study of market competition, Princeton,

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**What motivates Wine Tourism:**
*an Application of the Best-Worst Method and Discrete Choice Experiment*

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The paper describes strategic changes in the structure of grapevine (Vitis vinifera L.)
varieties grown in the Czech Republic. In 2004-2005, (i.e. after the admission of the Czech
Republic into the EU) expenditures associated with restructurisation and transformation of
vineyards amounted for CZK 25,423 thousand. The authors examine the development taking
place in this domain within the last 50 years (i.e. from 1960 to 2010) and pay detailed
attention to the period of 1989 to 2010. The paper analyses reasons of these changes and
tries to describe the future development expected after 2010. The current production
potential of the Czech Republic is 19,633.45 hectares of vineyards. For the time being, there
are in average 1.07 wine growers per hectare of vineyards.

As compared with 1960, the acreage of vineyards has doubled up and the number of
the most frequent varieties has also increased. Within the period of 1989 - 1990, four varieties
(i.e. Müller Thurgau, Green Veltliner, Italian Riesling and Sankt Laurent) occupied more than
60 % of the total vineyards area in the Czech Republic, whereas at present there are
altogether 8 varieties (Müller Thurgau, Green Veltliner, Italian Riesling, Rhein Riesling,
Sauvignon, Sankt Laurent, Blaufrankish, and Zweigeltrebe) at the nearly the same acreage.

As far as the percentages of Müller Thurgau, Green Veltliner, Italian Riesling and Sankt
Laurent varieties is concerned, it is anticipated that their acreages will further decrease,
whereas those of Rhein Riesling, Sauvignon, Blaufrankish and Zweigeltrebe are expected to
grow. The industry is under pressure of all Porter’s five forces of competition from external
sources.

**Keywords:** Strategy; structure; attractiveness; trends; grapevine varieties; development;
popularity of varieties; vineyard area
Fine Wine Indices: A Comparison of Index Construction Techniques
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This paper addresses the need for a reliable and unequivocal index for the market for fine wine. The existence of such a reference wine index is crucial for the future development of the fine wine market as an alternative asset class of its own. A good index will facilitate (i) the estimation of the value of wine investments and of benchmarks; (ii) the estimation of coherent prices for infrequently traded wines; (iii) the use of risk management practices and (iv) a possible future development of wine derivatives, - which might be attractive for amateurs, merchants (including the "négoce") and, of course, wine producers.

Since the early 2000's, several wine indices have been proposed and calculated by practitioners (e.g. Liv-Ex in UK, Idealwine in France) but these all suffer from severe weaknesses. The absence of any solid theoretical foundations constitutes the major problem. These indices are purely ad-hoc and usually build in a hybrid way which borrows elements from classic stock market index theory and adds some subjective and sometimes opaque aspects (e.g. the weighting scheme in the Liv-ex indices). A further drawback of these approaches is the lack of consideration of the specificities inherent to the wine market and in particular its heterogeneous nature and low liquidity. The use of simple weighted averages in this context may lead to spurious autocorrelation and heavily biased volatility estimates. As such, and contrary to real estate indices, none of the so far proposed wine indices can be seen as adequate in reflecting the wine market or part of it.

The aim of this paper is, therefore, to close this gap and to propose a unified index for fine wine. In line with this aim we compare different approaches to construct wine indices and determine on the basis of a variety of tests which one is the most appropriate for this specific market. We consider the following approaches: (i) weighted average and median of the prices or the returns; (ii) repeat-sales regressions using both OLS and GLS to account for heteroskedasticity; (iii) hedonic regressions and (iv) a hybrid model including both the features of RSR and hedonic regressions. We compare these models on the basis of both theoretical and pragmatic arguments. For instance, a typical issue that affects all of the aforementioned techniques apart from the weighted average and median is the possibility of an ex-post revision of the index. This does not invalidate these approaches but a desirable feature of any model is to ensure that such revisions will not be too large or systematic (either upward or downward).

We consider three sets of tests to compare the quality of the different models: (i) in-sample goodness of fit (AIC); (ii) out-of-sample goodness of fit based on the predictive power of each model (root mean square error); (iii) the ability of each model to fit artificial data obtained from nonparametric simulations. This last framework has the advantage of being very flexible and allows for a vast variety of possible situations. Our empirical study is based on hand-collected auction hammer prices from The Chicago Wine Company (TCWC) over the period 1996-2011. This enables us to cover a long period of time for one of the major auction houses across the world. Although the analysis is still incomplete we already find some indications at this preliminary stage. The results suggest that the weighted average approach performs quite well when the sample is sufficiently large. It further has the advantage of being tractable, easy to communicate, and remains completely unaffected by the issue of ex-post revisions. When considering smaller samples, the RSR and the hybrid approaches take the lead over a simple weighted average. In terms of price interpretation, the hedonic approach is most appealing as it gives a value to a variety of attributes that are linked to fine wine. However, its assumption that the value attached to each of these attributes remains constant over time constitutes a major drawback. This assumption becomes more and more unrealistic for certain parts of the wine market, with an increased importance of brands like “Lafite” or “Latour” that has led the prices of those wines to increase dramatically during the last few years.

Keywords: Marketing, Distribution, Multiple Channels, Port Wine.
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A SPECIAL Thanks to our Partners for Providing Support to this Event

![Escola Superior Agrária Coimbra](Escola Superior Agrária Coimbra.png)