EuAWE

TALCA - CHILE 2013

ENOMETRICS XX

Talca, Chile

September 04 – 07, 2013

V.D.Q.S.

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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 at 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.

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General Overview

Wednesday September 4th 2013

Thursday September 5th 2013

Friday September 6th 2013

Saturday September 7th 2013 2012

Pick up at the hotels
Vine tourism
Arrival in Santiago de Chile (airport)

Wednesday September 4th, 2013

15:00 – 15:45

Opening

tbc

15:45 – 16:30

Keynote 1:

Tim COELLI – University of Queensland, AU

"The Economics of Wine in Australia: Supply, Demand and Product Differentiation"

17:00 – 17:45

Keynote 2:

Yerko MORENO – Director of the Technology Centre of the Vine and Wine, CL

"Research and Development in the Chilean Wine Industry"

17:45 – 18:30

Keynote 3:

Gregory JONES – Southern Oregon University, US

"Climate, Grapes, and Wine: Structure and Suitability in a Variable and Changing Climate"

Climate, Grapes, and Wine: Structure and Suitability in a Variable and Changing Climate

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Grape growing and wine production are largely weather and climate driven enterprises. Extreme weather events such as hard winter freezes, spring or fall frosts, and hail can result in major losses in a given vintage, while long term changes in climate can result in changes in ripening potential and the style of wine that a region can produce. In addition, grapevines are typically grown in regions and under conditions that are considered narrow for a specific variety's optimum quality, ultimately putting it at a greater potential risk from climatic variations and change. To understand climate's role in growing winegrapes and wine production one must consider 1) the weather and climate structure necessary for optimum quality and production characteristics, 2) the climate suitability to different winegrape cultivars, 3) the climate's variability in wine producing regions, and 4) the influence of climate change on the structure, suitability, and variability of climate. This presentation summarizes a series of regional and global studies that examine observed climate structure, variability, and trends, along with climate model projections in relation to viticultural viability and quality issues in the future.

To place viticulture and wine production in the context of climate suitability and the potential impacts from climate change, various temperature-based metrics (e.g., degree-days, mean temperature of the warmest month, average growing season temperatures, etc.) can be used for establishing optimum regions. For example, average growing season temperatures typically define the climate-maturity ripening potential for premium quality wine varieties grown in cool, intermediate, warm, hot, and very hot climates. For example, Cabernet Sauvignon is grown in regions that span from intermediate to hot climates with growing seasons that range from roughly 16.5-19.5ºC (e.g., Bordeaux or Napa). For cooler climate varieties such as Pinot Noir, they are typically grown in regions that span from cool to lower intermediate climates with growing seasons that range from roughly 14.0-16.0ºC (e.g., Northern Oregon or Burgundy). From the general bounds that cool to very hot climate suitability places on high quality wine production, it is clear that the impacts of climate change are not likely to be uniform across all varieties and regions, but are more likely to be related to climatic thresholds whereby any continued warming would push a region outside the ability to produce quality wine with existing varieties. For example, if a region has an average growing season average temperature of 15ºC and the climate warms by 1ºC, then that region is climatically more conducive to ripening some varieties, while potentially less for others. If the magnitude of the warming is 2ºC or larger, then a region may potentially shift into another climate maturity type (e.g., from intermediate to warm). While the range of potential varieties that a region can ripen will expand in many cases, if a region is a very hot climate maturity type and warms beyond what is considered viable, then grape growing becomes challenging and maybe even impossible.

While the average climate structure in a region determines the broad suitability of winegrape cultivars, climate variability influences issues of production and quality risk associated with how equitable the climate is year in year out. Climate variability in wine regions influences grape and wine production through cold temperature extremes during the winter in some regions, frost frequency and severity during the spring and fall, high

temperature events during the summer, extreme rain or hail events, and broad spatial and temporal drought conditions. Climate variability mechanisms that influence wine regions are tied to large scale atmospheric and oceanic interactions that operate at different spatial and temporal scales. The most prominent of these is the large scale Pacific sector El Niño-Southern Oscillation (ENSO), which has broad influences on wine region climates in North America, Australia and New Zealand, South Africa, South America, and Europe. While each of the known climate variability mechanisms reveals some temporal periodicity, increases in climate variability for many wine regions have been observed. In general increases in climate variability would bring about greater risk associated climate extremes, which in turn would strain the economic viability of wine production in any region. Both observations and models indicate that climates experience changes in both the mean and the variability of temperatures in wine regions and elsewhere. For example, if the change response of a warming climate was only in the mean, then there would be less cold weather and more hot and record hot weather. On the other hand, increases in the temperature variance alone would result in more cold and hot weather and record conditions. However, evidence points to concomitant increases in both the mean and variance which would bring about less change for cold weather events and much more hot weather and record hot weather. For example, research has demonstrated that the European summer climate might experience a pronounced increase in year-to-year variability in response to greenhouse-gas forcing. Such an increase in variability might be able to explain the unusual European summer 2003, and would strongly affect the incidence of heat waves and droughts in the future. Evidence of changing climate variability in many other wine regions has also been found where the coefficient of variability in the growing season climates throughout the western US and many other wine regions globally has increased over the last 50 years.

On the global scale trends in wine region climates has found that warmer growing season climates have allowed many regions to produce better wine, while future climate projections indicate more benefits for some regions and challenges for others. The observed growing season warming rates for numerous wine regions across the globe during 1950-2000 averaged 1.3°C, with the warming driven mostly by changes in minimum temperatures, with greater heat accumulation, a decline in frost frequency that is most significant in the dormant period and spring, earlier last spring frosts, later first fall frosts, and longer frost-free periods. However, climate model projections by 2050 for the same wine regions predict growing season warming of an additional 1.5-2.5°C on average with spatial analyses showing the potential for relatively large latitudinal shifts in viable viticulture zones with increasing area on the poleward fringe in the Northern Hemisphere (NH) and decreasing area in the Southern Hemisphere (SH) due to the lack of land mass. Within regions, spatial shifts are projected to be toward the coast, up in elevation, and to the north (NH) or south (SH). Furthermore, climate variability analyses have shown evidence of increased frequency of extreme events in many regions, while climate models predict a continued increase in variability globally. In addition, phenological changes observed over the last 50 years for numerous locations and varieties globally indicate that grapevines have responded to the observed warming with earlier events (bud break, bloom, véraison, and harvest) and shorter intervals between events that range from 6-17 days depending on variety and location.

Overall, winegrapes are a climatically sensitive crop whereby quality production is achieved across a fairly narrow geographic range. In addition, winegrapes are grown largely in mid-latitude regions that are prone to high climatic variability that influence relatively large vintage differences. On top of the knowledge of the climate structure and variability in wine regions worldwide are the projected rate and magnitude of future climate change which will

likely bring about numerous potential impacts for the wine industry, including – added pressure on increasingly scarce water supplies, additional changes in grapevine phenological timing, further disruption or alteration of balanced composition in grapes and wine, regionally-specific needs to change the types of varieties grown, necessary shifts in regional wine styles, and spatial changes in viable grape growing regions. While uncertainty exists in the exact rate and magnitude of climate change in the future, it would be advantageous for the wine industry to be proactive in assessing the impacts, invest in appropriate plant breeding and genetic research, be ready to adopt suitable adaptation strategies, be willing to alter varieties and management practices or controls, or mitigate wine quality differences by developing new technologies.

Thursday September 5th, 2013

9:30 – 11:15

SESSION 1

PROSPECTIVES & STRATEGIES

Chaired by: **Gregory Jones**

The Problem of Wines'Ranking: The Reasons why everyone is wrong

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Abstract

The issue of classification of wines has led to an abundant literature which seeks to (i) provide theoretical methods for aggregating preferences of evaluators and (ii) provide empirical evaluation based on a protocol of blind tasting. We show in this paper how the implementation of these experiments generally does not include elementary bias that should be avoided in this type of analysis and we propose a critical overview of the aggregations methods used by the authors. Faithful to the principles that were established in the 1855 classification of Bordeaux wines, we propose to go back to the price of wines in order to make these aggregations, using the willingness to pay of jury revealed in procedures for experimental auctions.

Mots clefs: aggregation ; classification ; tasting ; auctions ; experiment ; price ; wine

JEL Code: C7; C91; D12; D44; L66

Le problème du classement des vins: les raisons pour lesquelles tout le monde a tort

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Résumé

La question de la classification des vins a donné lieu à une abondante littérature qui s'attache à (i) proposer des méthodes théoriques d'agrégation des préférences des évaluateurs et (ii) fournir des résultats empiriques d'évaluation en fonction d'un protocole de dégustation à l'aveugle. Nous montrons dans cet article comment la mise en place de ces expérimentations ne tient généralement pas compte des biais élémentaires que l'on doit éviter dans ce type d'analyse et nous proposons un tour d'horizon critique des méthodes d'agrégations utilisées. Fidèles aux principes qui ont été mis en place dans le cadre du classement 1855 des vins de Bordeaux, nous proposons pour notre part de nous appuyer sur le prix des vins pour effectuer ces agrégations en utilisant le consentement à payer des membres du jury, révélés dans les procédures d'enchères expérimentales.

Mots clefs : *agrégation ; classement ; dégustation ; enchères ; expérimentation ; prix ; vin*

JEL Code: *C7 ; C91 ; D12 ; D44 ; L66*

Predictability of Robert Parker's ratings

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Robert Parker is by far the best-known wine critic in the world. His expertise, especially regarding Bordeaux wines, is widely recognized. Wine amateurs, collectors and investors consider him as the wine guru. The leading French magazine, La Revue des Vins de France, ranks him as the fourth most influential person in the wine world, well before other critics such as James Suckling (34th) or Jancis Robinson (35th).

A variety of factors may explain Parker's leading position. He has a long track record as he started rating Bordeaux wines in the seventies. This timing coincides with the massive arrival of American customers on this market. Parker's ratings are based on blind tastings and are generally consistent with little variation between tastings. He was also among the first to consider 1982 an extraordinary vintage. At that time, many French critics preferred 1983, which 30 years later is far from achieving the greatness of 1982.

In Bordeaux, Parker rates both en primeur and bottled wines. En primeur are marketed in spring following the harvest, 18 months before bottling. For most people, it is difficult to taste these wines and, even if invited to these early tastings, it is difficult to judge these unfinished wines. Thus, there is a huge uncertainty regarding the final quality of each wine. Hence, people heavily rely on the expertise of wine critics to know which wine to purchase en primeur. Parker's ratings, therefore, have a direct impact on demand and thereby on release prices. Parker also rates wines once they become physically available. His final scores normally have less impact except for wines with final scores significantly differing from their en primeur scores.

To illustrate the impact of Parker on prices, consider two examples: the en-primeur price of Larcis-Ducasse 2005, and the market price of Smith-Haut-Lafitte 2009. Larcis-Ducasse is a great but relatively unknown wine. In April 2006, Parker awarded a huge score for this wine (95-98)1 and noted that this was "the most profound wine made at this great terroir since the 1945". Consequently, the property increased its release price by more than 300% relative to the previous vintage. Without Parker such a price hike would have been unjustifiable. In spring 2012, Parker revealed his final scores for 2009 Bordeaux wines. Smith-Haut-Lafitte got a perfect score of 100 points, far above its en primeur score of 96-98. The price jumped by more than 100% overnight.

The key objective of this study is to examine the predictability of Robert Parker's ratings. We consider en primeur and bottle scores. The influence of Parker on both buying decisions and prices is exceptional. To the best of our knowledge there in no other economic field (except maybe modern art) one single person has such an influence. It is, therefore, highly relevant, to examine Parker's ratings. This constitutes a first step towards better understanding the wine market and participants' behavior, who seem to blindly follow the guidance of their guru. From a practical viewpoint, this study is particularly interesting for wine investors as Parker's ratings have a direct impact on wine prices.

Keywords: wine, alternative assets, en primeur, ratings, Robert Parker Jr

JEL Code: C60, G11, Q11

[1] En primeur ratings are always given as an interval (e.g. 91-93). This reflects the uncertainty on the final quality of such wines. On the other hand, final ratings (for bottled wines) are given as a single score (e.g. 92).

Classement des grands vins de Bordeaux: portée et limites

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L'objectif de cette étude est d'évaluer la performance des classements des grands vins de Bordeaux, à savoir le classement des grands crus classés du Médoc de 1855, des vins de Sauternes et de Barsac également de 1855, des vins de Saint-Emilion (1955) et des Graves (1959). L'échantillon étudié concerne un peu moins de deux cents châteaux appartenant à l'une des régions précitées et ce sur 16 millésimes (de 1995 à 2010). A l'origine ces classements ont été élaborés pour renseigner les consommateurs sur la qualité des vins. Ainsi, Ainsi, lorsque le classement de 1855 fut établi à la demande de Napoléon III en perspective de l'exposition universelle, l'objectif était donc de distinguer les meilleurs vins des autres. Cette mission fut confiée aux courtiers qui sur la base des prix de marché ont proposé une hiérarchisation des vins du médoc en 5 niveaux. En effet, en situation d'asymétrie d'information sur la qualité du vin, l'existence d'un classement des meilleurs vins peut permettre au consommateur de choisir plus facilement les vins qu'ils souhaitent déguster. Un classement peut également être utile pour le producteur dans la mesure où celui-ci peut faire connaître la qualité de son travail et ainsi vendre ses vins à un prix plus élevé. Il peut être aussi une source de motivation pour maintenir voir améliorer la qualité de sa production. Nous nous intéressons ici aux aspects qualitatifs, en testant d'une part si les différents classements apportent une information au consommateur et d'autre part s'ils sont source de maintien voire d'amélioration de la qualité.

Pour évaluer la performance de chaque classement, nous retenons trois critères en évaluant la qualité estimée du vin pour un château donné et deux critères relatifs aux prix. Cette multiplicité des critères s'explique par le fait que chacun peut présenter des limites quant à l'évaluation de la qualité réelle des vins étudiés. Pour le premier critère concernant la qualité estimée, nous avons retenu les notes de trois experts reconnus sur le marché des critiques : Franck Dubourdieu, Robert Parker et Jean-Marc Quarin. Pour les critéres relatifs aux prix, nous considérons les prix observés sur les marchés d'enchères en 2012 et ces mêmes prix corrigés de la rareté relative de chaque vin afin d'avoir un meilleur indicateur de qualité.

Ces trois critères considérés (qualité estimée, prix d'enchères, prix d'enchères corrigé), la performance de chaque classement est évaluée à un triple niveau. Tout d'abord on examine la performance endogène. Il s'agit ici de tester si pour les classements qui sont construits en différentes classes (Medoc, Sauternes Barsac et Saint-Emilion) que la hiérarchie établie des vins est bien respectée à l'intérieur du classement et que le nombre de classes est également le bon. Pour le classement des Graves qui n'établit pas de hiérarchie en son sein, le test de performance endogène consiste à évaluer la pertinence de mettre tous les grands crus classés au même niveau. Ensuite, on évalue la performance exogène : pour chaque classement on vérifie que des vins non classés ne viennent pas perturber la hiérarchie supposée sur la base d'un ou plusieurs des trois critères retenus.

Pour cela nous considérons les vins non classés faisant l'objet d'enchères et notés par les experts. Enfin on évalue la performance globale comme moyenne des performances endogène et exogène toujours sur la base des trois critères qualité estimée, prix d'enchères et prix corrigés.

Sur la base de cette batterie de résultats il sera alors possible d'évaluer la performance des classements du Medoc, de Sauternes Barsac, des Graves et de Saint-Emilion et ainsi de savoir d'une part si les classements sont utiles tant pour les consommateurs que pour les producteurs, d'autre part si la possibilité de réviser un classement comme à Saint-Emilion est un gage de meilleure performance que lorsque les classements ne sont pas révisables et enfin de trancher quant à la pertinence de diviser un classement en différents niveaux (Medoc, Sauternes Barsac, Saint-Emilion) ou non (Graves).

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Trade in Climate Smart Goods of Ecuador: Quantitative Analysis Using Trade Indices, SMART and Gravity Analysis

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The research study works out different trade indices based on trade data of Ecuador from 2002 through 2010.The study calculates RCA and Export Specialization Index, among others, to identify 20(at 2 digit level disaggregation) and 238 products(at 6 digit level disaggregation)and their markets of Ecuador in 2010. The paper also used

64 goods list of Climate Smart Goods used in APTIR, UNESCAP (2011,a,b).The Trade in CSG will help Ecuador to promote alternative industries in the face of Global Economic Downturn. Also, it will help countries to look for safe, alternative and reliable energy source rather than believing in trade of crude and Petroleum Oil only or investing a great deal in nuclear energy. Nuclear energy was in the brink of being affected in Japan due to recent Earthquake in Japan. Ecuador can direct its social spending in promoting small industries which can provide CSG goods (low carbon emanating goods) at low cost. Identification of goods for diversifying Ecuadorian economy is also done using different trade indices. The study then uses simulations done through SMART analysis(within WITS) for evaluating the relative benefits of tariff liberalization of CSG and specialized goods(both for 20 and 238 products) with MERCOSUR, China, Japan and the US, and EU27 separately by giving numbers to trade creation ,trade diversion, revenue, welfare and consumer surplus effects of liberalizing trade in 2010. One finds that for Ecuador it is beneficial to trade in 20(2digit level) and 238 products(at 6 digit level) with the MERCOSUR trading partners while for trade in CSG it is better to liberalize trade with the Japan, the US and the China, the main suppliers(exporters)of CSG products.

The study at the end then uses Baier and Bergstrand (2001) gravity formulation for working out the basis of trade and export potential in CSGand trade in 20 products of Ecuador in 2010. National and International Policies are recommended for promoting CSG goods at country and regional level.

One finds that there is export potential of 34 million US $ in CSG to four Latin American trading partners of Ecuador. The four Latin American Countries are Bolivia, Chile, Columbia and Peru. This is less than the export potential when Ecuador liberalizes its trade of CSG with China,Japan and the US. Theoretical justification of the Gravity formulation used is given along with equations of Trade Creation and Trade Diversion. The latter will depend on the import demand elasticity, substitution elasticity and supply elasticity. Small country assumption is made while pursuing SMART analysis in WITS

Economic Impact of Cold Hardy Grapes

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The advancement in grape breeding has resulted in a number of high quality wine grapes that can withstand winters were vinifera grapes will die. These grapes, referred to as cold hardy, have spawned a rapidly growing wine industry in the northern United States where just 6 years ago there were fewer than half of the wineries we see operating today. Very little is known about the cold hardy grape/wine industry.

Recently a study was completed at the University of Minnesota that estimated the economic impact of grape growing, winery operations and tourism related to winery visits in 12 states in the Midwestern and eastern part of the United States. In addition to economic impact basic characteristics of the industry was ascertained in order to monitor and evaluate the growth of the cold hardy grape/wine industry over time.

Results revealed that wineries are growth attractions for rural communities with an economic impact estimated at close to $200 million just for operations related to cold hardy grapes. The economic impact from tourist travel to the wineries more than equaled winery operations. Study results also revealed that wineries intend to expand operations in the near future and much of the production will be related to a just a few of the cold hardy grapes being grown.

This presentation will outline the growth in the cold hardy grape/wine industry and the background characteristics that explain the rapid increase in wineries witnessed in the last decade in the cold hardy grape states. It will also explain some of the other unique characteristics of wineries producing cold hardy grape wine.

Modeling Climate Change in the Ontario's Wine Regions of Canada: A Projection of Benefits and Risks

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In Canada, most agricultural regions are expected to experience warmer conditions, longer frost-free seasons and increased evapotranspiration attributed to human-induced climate change. The climate is gradually becoming wetter and warmer in southern Canada throughout the twentieth century and in all of Canada during the latter half of the century. In southern Canada, spring temperatures have increased, greatly shortening the period of freezing temperatures suitable for snowfall, while daily minimum temperatures, indicators of night-time temperatures, have increased significantly over the past century. Quebec's Monteregie and Estrie wine regions whose severe winters have previously constrained grape production to a limited number of cold-hardy French -American hybrids are now showing a decreasing trend in the number of extreme damaging winter temperatures and an increase in the number frost-free days and a lengthening of the growing season. This warming trend over the last thirty years has enabled the growers to gradually introduce a select number of cool climate Vitis vinifera varieties, such as Cabernet franc, Chardonnay and Riesling. In the Okanagan Valley and Ontario wine regions, warmer winter and spring minimum temperatures have been observed during the last forty years leading to an extension of the growing season and an improvement in the ripening potential of the growing season conditions.

Many factors influence climate change and the interaction of these factors is very complex. As such, predicting future changes involves some degree of uncertainty. However, this new research 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. Developing appropriate adaptive strategies to deal with the uncertainties of climate change will be contingent on our understanding of how future climatic conditions are likely to evolve.

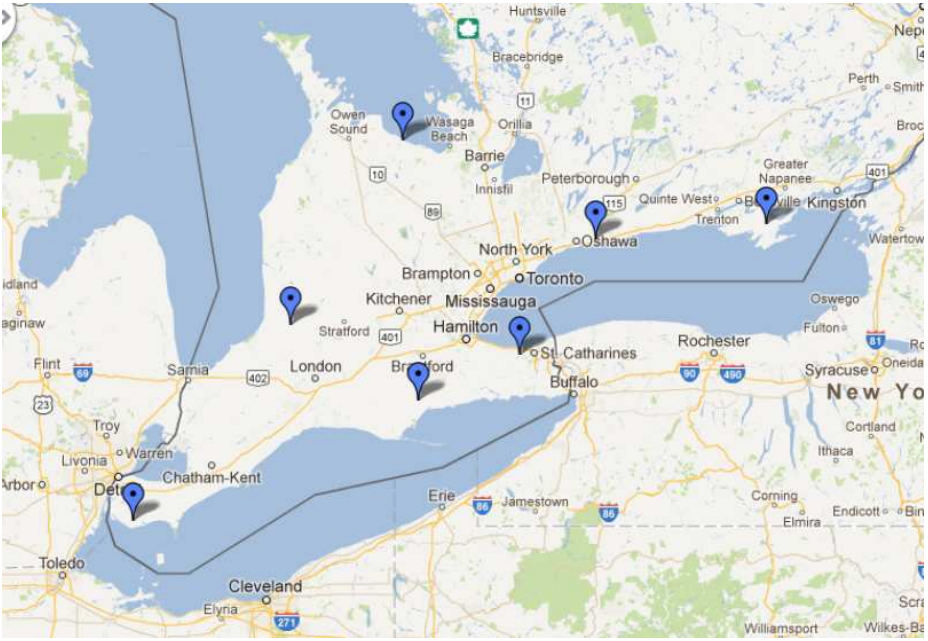
In this context, regional climate models are capable of providing (i) more realistic scenarios of climate change at regional scale than the direct application of (Atmosphere-Ocean General Circulation Model) AOGCM-derived scenarios, (ii) higher resolution of spatial and temporal data and (iii) a refined representation of some extreme weather events. However, they are computationally expensive, have fewer scenarios available and are still dependent on AOGCMs.

This study provides statistically-downscaled daily climate projections using the LARS Weather Generator for seven locations in the study area of southern Ontario, Canada (see map below).Future projections (2041-2070 or 2050s climatology) of climate (temperature and precipitation) for seven locations in southern Ontario - Harrow, Exeter, Thornbury-Slama, Simcoe, Vineland, Bowmanville and Picton - were calculated by statistically downscaling four global climate and summaries of the annual, seasonal and monthly statistically-downscaled projections. All ensembles of downscaled models show an increase from 1971-2000 (1980s) climatology to 2041-2070 (2050s) climatology at all seven locations of ~3 degrees Celsius in maximum temperatures, minimum temperatures and mean temperatures. All ensembles of downscaled models show an increase in total precipitation from 1971-2000(1980s) climatology to 2041-2070 (2050s) climatology at all seven locations ranging from 2 to15

percent. models (HADCM3, IPCM4, MPEH5, NCCCSM) used in the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC AR4) under three greenhouse gas emission scenarios (A2, A1B, B1) using the LARS (Long Ashton Research Station) Weather Generator.

A validation of 24 global climate models used in the IPCC 4AR against observations (NCEPre-analyzed data) using 1971-2000 mean temperature and total precipitation variables was conducted to determine which models should be used to calculate the climate indices for the wine industry. This validation exercise recommends the NCCCSM downscaled values for the calculation of wine indices for both Harrow and Exeter study sites as well as for the Thornbury study site; the HADCM3downscaled values for the Simcoe and Vineland study sites; and theMPEH5 downscaled values for the Bowmanville and Picton study sites.

Keywords: Ontario, climate change, statistical-downscaling



Portugal and the Douro Valley: A Case Study of the Effects of Climate Variability and Change on Wine Production

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It is evident from the history of growing winegrapes worldwide that they are a climatically sensitive crop whereby quality production is achieved across a fairly narrow geographic range. In addition, winegrapes are grown largely in mid-latitude regions that are prone to high climatic variability that drive relatively large vintage differences in quality and productivity. Furthermore, historic trends and future projections in climate parameters for wine regions has shown that changes have occurred and are likely to continue in the future. This presentation provides an overview of a recent assessment that examined numerous aspects of climate in one of the world's most historic wine regions – the Douro Valley of Portugal – with the goal of documenting and examining the historic, current, and future climatic conditions of the region.

While there is a general understanding of the climate of the Douro Wine Region, a comprehensive, high quality, long term station data set for the region has been limited over both space and time. Therefore this climate assessment utilizes the best available data that are of three main types; 1) historic climate normals, 2) weather stations within the Douro Wine Region, and 3) spatial climate data for observed and future projections of climate in the region. Furthermore, the assessment includes an examination of the relationships between the large-scale regional circulation controls and climate variability in the Douro Wine Region.

Updated spatial climate data for 1950-2000 reveals similar climate conditions to the 1931-1960 climate normal over the Douro Wine Region. For growing season average temperatures the region averages 17.8°C and is spatially classed as 65% a Warm climate type, 24% an Intermediate climate type, and nearly 10% a Hot climate type on the GST index. Observed trends in the region were examined both for individual stations and spatially over the entire region. Differences between the 1931-1960 and 1950-2000 data reveal that the later period was warmer by an average of 0.9°C for annual temperatures over the region with the growing season and winter being 1.2°C and 0.4°C warmer, respectively. Examining three long-term stations in the region shows greater warming in minimum compared to maximum temperatures with rates ranging from 1.2°C to 3.6°C during the time period. Results from an analysis of extreme events for the three stations reveals significant changes for both maximum and minimum temperature extremes, with overall warmer nights, warmer days, a general decline in the diurnal temperature range, a higher number heat stress events, some evidence for longer warm spells, and a clear reduction in cold spell durations.

Future climate conditions in the Douro Wine Region were examined using IPCC SRES projections from the HADCM3 model for three greenhouse gas emission scenarios (B2, A1B, and A2) and three future time slices (2020, 2050, and 2080). Average annual temperatures are projected to warm for all emission scenarios and for each time slice. Projections range from 0.5-1.4°C by 2020, 1.4-3.3°C by 2050, and 2.1-5.1°C by 2080. For GST the region is projected to change from a largely Warm climate suitability (65% of the area) in 1950-2000 to increasing area in Hot climate suitability by 2020 (43%) and even Very Hot climate suitability by 2050 (36%). By 2080 the spatial pattern of GST is projected to have 19% of the landscape becoming Too Hot, 54% Very Hot, 25% Hot, and less than 3% Cool, Intermediate or Warm. The pattern of the changes shows warming increasing most rapidly along the main sections of the river

valley, then across the Douro Superior, and by 2080 up in elevation across much of the region. Precipitation changes for the Douro Wine Region are projected to be fairly low to moderately high depending on the scenario and time period. For annual average precipitation the projected changes are near zero to declines as much as 21.6% in the A1B scenario by 2080. The majority of the changes in precipitation are projected to occur during the growing season where decreases from 10-42% are projected by 2080. The future projections for the climate in the region from this assessment are in general agreement with other research for Europe, the Iberian Peninsula, and Portugal.

Wine regions have developed to best match their regional environmental conditions, allowing for generally consistent ripening of the varieties that were found to be best suited to the regions. While the overall structure of climate in regions drives the suitability and climate variability strongly influences vintage to vintage production and quality variations, the projected rate and magnitude of future climate change will likely bring about numerous potential impacts for the wine industry. However, the Douro Wine Region is rich in landscape and plant characteristics that may help mitigate the deleterious effects of climate change. First of all the region's geomorphology and relief contribute to multiple meso- and micro-climate situations, which may provide spatial adaptation strategies. Furthermore, the landscape provides growers with choices in cultivation techniques to manage the ecophysiological dimension of the environment. One characteristic that will be very important is how growers can adapt the landscape and vineyards to help balance global photosynthetic activity of the grapevine and water loss by transpiration. A highly significant factor in the management of changes that may be required due to climate change is the genetic heritage of the plant material, particularly the varieties and their oenological performance. Although the general characteristics and aptitude for drought resistance of rootstocks have been studied, it is above all the vast heritage of varieties grown in the Douro Wine Region that will provide some of the most useful tools for wine growers, both through the different thermal requirements of varieties and the elasticity of their phenological behavior and their different physiological responses. By following sustainable approaches and being innovative across the entire production system the region will undoubtedly reduce its vulnerability and increase its adaptive capacity in the face of a changing climate.

Thursday September 6th, 2013

11:45 -13:15

SESSION 2

MANAGING THE WINE BUSINESS

Chaired by:

Winery Tourism Comparisons to Typical Travel Spending in Texas: Are Winery Consumers bigger Spenders?

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INTRODUCTION

Attracting consumers to visit Texas wineries is very important for the industry, since many wineries are small and not able to access larger scale distributors. Winery tourism is not only valuable to the winery, but also valuable to the local community in the form of economic impacts from spending in the areas of hotel accommodations, meals and entertainment and winery purchases. In many cases, state's have aligned their marketing efforts to enhance winery tourism spending as a community or rural economic development tool.

REVIEW OF LITERATURE

Rutgers University (Adelaja, Brumfield and Lininger, 1990) identified a growing interest among states to assist in marketing agricultural commodities. Holloran and Martin, (1989), policymakers typically seek to promote (a) products that have certain state characteristics, (b) promote unique products, and (c) attempt to gain economic returns.

Swinburne University (Langworthy, Howard, Fiona & Mawson, 2006), agri-tourism is a growing phenomenon in Australia, often most strongly associated with wine regions. Recommendations to improve include creation of tourism regions & cooperatives, cooperation between sectors (CVBs, restaurants), infrastructure development and model development to measurable factors.

M. O'Neill and S. Charters, 2000 identified that wine tourism is a very lucrative industry with the ability to generate substantial wealth and growth. They reported 390,400 international tourists visited wineries in Australia in 1996, a 68% increase in 3 years. They also found that winery issues in promoting tourism are the service quality of the winery and the importance of empathy and responsiveness to generate brand loyalty.

South African wineries Bruwer, 2003 identified factors that were helpful in developing a wine tourism market of South African wineries. Regarding South Africa wine tourism, areas of winery business that promote tourism include, both service provision and destination marketing, development of wine routes forms an integral part of the wine tourism industry, estates sell more wine through the cellar-door and tourism industry needs well-developed infrastructure.

E. Cohen and L. Ben-Nun (2009) found that a tourist's decision to visit a specific winery is also shaped by the willingness to experience the region's features and to participate in other activities or attractions during the visit. In reference to wineries, the most important attribute was the winery offers wine tasting.

MKF Research (2008) reported that the Texas wine industry created an economic value of $1.35 billion. The report also finds that tourism Expenditures related to wine tourism in Texas represent an economic value of $296.6 million and represent

958,000 in annual consumer visitations. Consider the wine industry in Texas, 9,000 jobs are supported by the industry and 38% of those jobs relate to the tourism industry. Considering the $1.35 billion in total value, the largest single line item area is tourism spending (28%).

State travel spending is annual tracked by Dean Runyan and associates (2010), which reports Texas travel spending at $55 billion. Travel in wine regions report higher values than non-wine regions along with per capita spending is higher in rural regions of the state.

METHODS

In June, a Texas consumer survey was developed following formats of several online surveys and research reports (HanniCo, LLC of Napa Valley/ Wines USA/ Wark Communications of California). The objective of this survey was to define wine visitor spending values and associated demographics to spending. This sample was a convenience sample sent to approximately 9,000 newsletter subscribers, which resulted in 610 consumer responses. This is a response rate of 7%, but the 610 sample size according to Krecjie and Morgan (1970) is a representative sample to well over 1 million consumers. Comparison values are deducted from the Dean Runyan (2010) report, which represents a travel spending in Texas.

FINDINGS

Preliminary results identify that consumer spending is approximately $300 per day, which exceeds typical state tourism spending. Thirty-two percent travel spending is related to winery spending, but accommodations spending are closely valued at 25 percent, which also exceeds typical state spending. Other comparisons exist in the areas of miles traveled, length of stay and overall impact to local economies.

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The Development of Wine Tourism in the Czech Republic

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Abstract:

Wine tourism development and the resulting formation of regional strategic alliances in the form of clusters may lead to increasing the competitiveness of wineries in South Moravia in the southeastern part of the Czech Republic.

The main research objective of this paper was to find potential for wine tourism development and creating a plan for newly formed strategic alliance coordinating services offer all wineries in the region. This study describes the potential to offer services and products of wine growing areas in South Moravia region, suitable for promotion offers wine tourism destinations and services. To achieve the objective of the study was conducted marketing research data collection and mapping current events and activities taking place in the wine-growing region of Moravia, promoting or offering specific local products and services associated with gastronomy and wine.

Keywords: association, cluster, strategic alliances, VOC, wine marketing, wine tourism

Cost Comparison of Harvesting Grapes for Wine (Mendoza, Argentina)

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Among the activities necessary to conduct a vineyard, the fruit harvest or "vintage" is one that consumes the greatest amount of physical and monetary resources producer, accounting for between 29% to 41% of the direct cost, depending on destination end of the grapes. In turn represents an activity generating labour for locals and neighbouring provinces. Mostly it is a manual activity that requires 15-20 temporary workers about to perform the harvest of one hectare of vines intended for the production of varietal wines and basic wine respectively. The main problems of manual harvesting, declared by farmers is lack of manpower, sustained conflict by wage increases and the growth of labour disputes that lead to lawsuits. Mechanized harvesting is used by 6,000 hectares in the country, accounting for 3% of the area cultivated with vines. Considering that the machines used in high trellis the relative amounts to 8% of the 68,000 hectares currently leading in this system and its cost is USD r400 per hectare and say the cost of harvest of a vineyard with a production of 120/150 quintals by hand is equal to mechanically.

The objective of this paper is to present a scheme for the calculation and evaluation of harvesting costs and provide tools for decision making. We conducted the survey of farm data for three types of grape harvest: manual mechanized and bins. Period of analysis: harvest 2012. In the survey data manual harvest data were obtained from 7 (seven) cooperatives and farms belonging to two (2) non-integrated companies. In mechanical harvesting took rental values for the period of analysis. At harvest in bins provided data through informants wineries that use the system.

In the analyzed farms harvesting costs were obtained over the reference value set for the price of grapes, because most of the area is for the production of varietal wines. The price average is $ 4.16 and $ 4.60 unassociated. The differences between types of companies are mainly attributed to grape yield and their health. The price of rental services combine additional cost including infrastructure maintenance support was $ 4,400 per hectare. It has been estimated the cost of harvest equivalent / kg for a range of performance that starts at 10,000 kg / ha to 30,000 kg / ha, yield Mendoza usual.

Mechanization has reduced costs when the machine is primarily own and is used to its maximum capacity. In the manual type crops is performed in bins has lower costs compared to the traditional manual. It is observed that the variable "performance" is crucial to decide on the methodology of crop choice. Where rental machine harvest bins and took a single value for each yield per ha.

An analysis from the perspective of potential yields obtained and the fate of the grapes, for 10,000 to 15,000 kg / ha lower cost is obtained with harvest bins, but stresses that it is not feasible to implement in all vineyards due investment and vineyard design requires, it would be advisable to optimize handpicking. The turning point in unit costs is seen almost 25,000 kg per hectare since the values are similar in

any system. For higher yields 30,000 kg case has the advantages of mechanization is observed for any type of machinery. When comparing hectare level shows that the mechanized harvested for rent is one of the greatest, so their decision should be linked to performance feasible to obtain.

In cost of harvesting, vineyard yield is key. Comparing hand harvest versus mechanical harvester hire, it appears that the latter would be justified from the 25,000 kilograms per hectare. When the comparison is made between manual and combine acquired from the 15,000 kilograms per hectare is lower than the cost per pound of the second long as the maximum hours use (1200) per season. When using the minimum number of hours per season (500) newly justified from 300 kilograms per hectare. For the case of bins versus manual harvest yields in all analyzed its cost is higher because the cost per kg must append the part corresponding to the use of bin and tractor tractoelevador. When compared with mechanical harvesting bin, the bin when yields should be less than 15,000 kg per hectare.

In terms of performance shows that 15,000 kg / ha begin to approach the unit values for manual and mechanized harvesting. From the 20,000 kg per hectare machining options have any advantage over manual crop (manual or bins).

The decision to purchase a combine must be associated with the ability to work it in the maximum capacity possible. Vineyard design and performance are the key variables for the decision of the harvest system to implement, but also influences the social context in which there is increasingly fewer staff available to carry out field. In turn, 80% of the vineyards are located in the lower extensions 15 hectares fact that makes it difficult to mechanize the harvest

Keywords: grapes, costs, viticulture.

JEL Code: Management.

Determinants of Radical Innovation Using Alternative Research Methods: Luxury Carmenere Wine from Chile

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Developing countries export commodities. There are few examples of luxury manufactured exports from the Third World. This paper looks at Chilean wine made from a particular grape variety, carmenere, retailing at US 50 dollars or more for a 750 ml bottle in international markets. For Chile, this is radical innovation in both production and marketing, since just one luxury carmenere (LC) bottle is more expensive than a typical 12-bottle case of ordinary Chilean wine. By 2012, LC brands had been introduced by about 45-50 companies, which constitutes about 15-20 percent of the total number of Chilean wine producing firms. Some of these LC producers have been extremely successful in international markets. This paper examines which firms engage in LC production and which ones do not, and why. Several methodologies are used (chi-square association tests, binary probit regressions, a qualitative method, and ordered probit, censored and truncated regressions), and the respective results compared. Some results are robust to changes in method but others are not. Significant roles are confirmed for foreign ownership, partnership or systematic advice and support, and the long-term presence of a highly skilled senior expert winemaker. No role seems to be played by company size, company age, or membership of a geographical production cluster. Interesting associations also appear depending on a firm's participation in a knowledge network, its capacity or willingness to retain its skilled winemakers, or its emphasis on award winning in international competitions as a marketing strategy. Extreme care should be exercised in terms of accepting the results of a particular research method without checking these results against other methodological approaches, or in terms of accepting results from a particular time period as also applicable to other periods.

The Increasing Knowledge Intensity of the Modern Wine Industry Challenges and Opportunities for Developing Countries

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Since the last quarter of the twentieth century, an intensive technological modernization process has gradually permeated the wine industry in all its phases. This process has become more pervasive since the wine industry started to operate on a global scale, and innovation, knowledge inputs and technological capacity have become key to success in an increasingly globalized market. In terms of R&D, three main pillars of wine science seem to have emerged: grape culture; wine production; and sensory analysis and marketing. Therefore, the knowledge and skills required to make quality wines have become increasingly complex and sophisticated, while modern winemaking, by drawing on different scientific fields, has become inter-disciplinary in nature. More specifically:

- Firstly, in order to master the determinants of wine quality, it has become essential to understand the physiology and genetics of the vine, while notions of microclimatology and soil physio-chemistry are key to explaining grape quality and vineyard yields.
- Secondly, the role of chemicals in the winery has progressively diminished, but that of physics has increased, with a view to understanding how presses can produce a clearer juice, how gravitational flows can better preserve the integrity of the liquids and how fine filtration technologies can improve wine structure.
- Thirdly, the knowledge of human sensory psycho-physiology has become essential for interpreting wine quality, while the possibility of testing the organoleptic qualities of wine with electronic devices has made possible a totally new, science-based type of quality assessment.

In this context, the present paper provides solid evidence of the increasing importance of both codified and tacit knowledge in the emergence of the modern concept of quality winemaking. It shows how the growth of the international wine trade, which has characterized the last quarter of the twentieth century, was mainly due to a group of new entrants — so-called “New World” producers — that managed to compete in a market dominated for centuries by established “Old World” producers, based on quality upgrading, R&D and the incorporation of sophisticated new machinery and equipment. It also explores the opportunities and challenges for the entry of developing countries into the modern wine industry. It argues that entry opportunities do exist - but for developing countries, taking advantage of them is increasingly difficult.

This paper is structured as follows: Section 1 illustrates how science has been brought in to solve problems of different nature both in the area of viticulture and in the area of viniculture, and how innovation of all sorts has permeated the wine industry in all its phases. Section 2 focuses on the key role of tacit, codified and capital-embodied knowledge in modern winemaking, as pillars of the so-called “wine revolution”. Section 3 examines the relationship between this revolution and the

dramatic shift in international wine consumption patterns. Section 4 shows how the capacity to innovate was key to the ability of New World producers to become leading wine exporters, and how this translated into fast-growing world wine market shares. Section 5 illustrates show FDI flows, mergers and acquisitions (M&A), alliances and joint-ventures have radically changed the structure of the world wine industry. Section 6 portrays the surprising entry of developing countries under these new circumstances. This is a surprising phenomenon since one would expect that the increasing knowledge intensity of the wine industry would make entry conditions for developing countries narrower with respect to the past. The solidity of the current position of developing countries as leading wine exporters actually opens up a series of interesting questions about the determinants of the export boom of their wine industries, their different performance over time, and the extent to which their increased exports have been characterized by increased quality, value-added and technological change, or have been confined to the low-end of the quality spectrum.

How Modern Architecture is helping Wine to a New Change of Status? Analysis of the Phenomenon of New Modern Wineries built by Known Architects

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The question this paper focuses on is *"How can we explain the interest of some of the greatest wineries, part of the greatest wine regions, in asking some of the most world renowned and expensive architects to design their new buildings?"* So the basic question is why, why did these wineries invest in such architecture? The answer, in our opinion, is to be found in the changing status of wine. From ancient Greece and Rome till present time, wine has undergone many changes of status. There is one final change that is undergoing right now, just under our eyes. Some wines are becoming just an idea of it, what is called 'archetype'. These are the 'mythical' wines that are more spoken of than drunk. When these wines are opened it's mostly at public relation occasions, such as wine tastings or dinners for the press. These are wines that are no longer made for the purpose wine was first produced: a fermentation of vine grapes put in a glass bottle to be opened and drunk while eating. Architecture is one of the major components of this new change in wine status. The paper will show this new trend with recent facts and figures from two major wine touristic regions: Bordeaux and Rioja. In conclusion, we'll show that architecture is playing a major part in this phenomenon: first as the constructed 'envelope' of the new wine museum; second as a way to make wine join the select club of monuments and paintings; third by helping some less know wines enter the club of the already 'inaccessible' wines. The fact that almost the major Bordeaux' castles or Rioja' bodegas are building new wineries, new hotels, new visitors centre by some of the most popular architects is just a consequence of this major trend. We can wonder if this trend will last for decades, or if it will just be a fashion for some years. That part of the story is yet to be written.

Wineries' Performance, Response to a Crisis Period

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Objectives

This study investigates the key variables to explain the crisis effect in the performance index of the wineries in CLM (Castilla La Mancha – Spain), according of the accounting variable

At the core of the discrepancies lies the difference between the performance variable used to measure the wineries and, in turn, the impact upon the existing asymmetry between the consequence of the commercial and financial strategies adopted.

On one hand, the study will analyze the presence of similarities and differences in the whole period; on the other, we will study the differences of the performance variables between the two periods: growth and crisis.

In this paper, the hypotheses about performance measures are tested with Panel Data Analysis.

Design/methodology/approach

The data needed to carry out the analysis include the wineries operating in CLM (Spain), from 2004 to 2010. This period corresponds, firstly to a growth economic cycle (2004-2006) and secondly a crisis period 2007-2010.

Our database arises from financial statements filed at the Register of Companies (SABI Database). All the enterprises whose data have been analyzed in the paper include two financial statements: Balance-Sheet and Profit and Loss, which permit to calculate the performance measures. Our database is an unbalanced data for the period 2004-2010.As the average sector, our database includes the micro-firms (< 10 workers) which represent the 73% of the database and the SMEs the 98%.

Measures of managerial performance comprise index of Value Added (VA), EBITDA (Earnings before Interest, Taxes Depreciation and Amortization), ROA (Return of Assets), ROI (Return of Income) and Total Solvency.

Using Pooled Cross Section Time series, we test a model that includes environmental variables (age and size); commercial variables (growth of sales, market share, market orientation and export); financial variables (negotiation power of suppliers and customers; leverage and cash-flow); and special events in the period (economic crisis and legal variables)

Findings

The main finding highlights some strong differentiators between the economic cycle and the path chosen by the wineries to maintain the index of enterprise performance.

Our interest therefore focuses on testing the main hypothesis of the traditional economic theory that performance differences between the companies are mainly due

to their distinct strategies and to their corresponding different ways of managing measures of performance and size.

According to the economics literature, performance measures vary according to the common objective function of all firms, which regardless of size is profit maximization, while small firms focus primarily on survival and stability.

The wineries manage performance variables in terms of expenditure levels of the intermediate variables. The difference between VA and EBITDA is consequence of personnel expenditures; and the variation between EBITDA and Profit before Interest and Taxes is consequence of amortization and provisions. With a final Profit, the companies are cushion between economic performance measures. The choice of different performance measures can lead a different results and recommendations. The crisis period transforms the sign of the performance measures and also can invalidate some of them like as ROI and we propose the use of a different measure, Total Solvency.

Originality/value

The analysis deals with the problem of the performance measures and economic cycle of the wineries and the ability of them to sustain competitiveness in this special period.

The analysis of the whole sample and the two subsamples was moved of the independent variables that explain the performance measures.

In the growth stage, the relevance is in the commercial variables, while in the period of crisis, moves to the financial variables, both short term and long term.

Keywords: Performance Measures, Business cycle, Wine business, Strategies, Castilla La Mancha (Spain)

Thursday September 6th, 2013

12:00 -13:00

SESSION 3

WINE ECONOMY

Chaired by:

Patents and Standards in Wine Sector: From a Right of Industry and Commerce to an Exclusive Right of Economic Exploitation of Technologies

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Techniques are the basis of all economic activity. Between the development of a new technique and its application in industry or commerce, however, there is a route to be followed, which presents limits imposed by patents and technical standards.

Currently, the technical standardization system and the patent system regulate the use of techniques in the market. While standardization determined technical outlines, by establishing standards, in the limits within it is recommended, or permitted, the exercise of an economic activity; patents set limits on the exclusive use of certain technique in the exercise of economic activities. Despite being characterized as systems appropriate to a market economy, the interrelation of them generate tensions in the market, which may in effect cause negative effects on trade, innovation, technology transfer and development.

The wine sector has faced challenges in this regard. On one hand, some standardization bodies ignore the most advanced prior art and establish standards that limit the use of new technologies. In such situations, if a product or a process is patented, nonetheless, does not observe the technical prescription of a standard, especially when compliance is compulsory, the exclusive right to use the technology, in the exercise economic activities, granted by the patent, became unfeasible – once the noncompliance of the standards may correspond to a legal violation.

On the other hand, patented techniques are involved in technical standards. In such cases, if the patent covers the technical content of a standard, it means, if the standard incorporates a patent, another source of tension arises: for the user of a standard to comply with the prescribed requirements, he needs to obtain authorization of the patent holder, without which he may incur infringement.

As a consequence, if the user does not get a license to use the technology incorporated into the standard, he is unable to comply with the standard and, therefore, his rights to exercise an economic activity can become impracticable. Thus, patent incorporated into technical standards can generate high barriers to entry in standardized (or technically regulated) markets.

These characteristics of contemporary patent and technical standards systems, and the effects of their interrelation in the market, are the result of a set of changes occurred over the centuries, especially from the Middle Ages. In order to understand the relationship between patents and standards, and the origins of the tensions inherent in it, especially in the wine sector, this paper analyzes the transformations of these systems, from the Medieval to the Contemporary Periods. Initially, it is examined the medieval patent system, when the letters patent (privileges of corporations, individual monopolies and privileges of inventions) conferred the right to exercise an economic activity, with or without exclusivity. In the second part, it is evaluated the changes in the patent system, particularly based on the principle of freedom of trade

and industry, when the privileges of invention were strengthened and the corporations declined. The analysis of the contemporary patent system and the formation of the technical standards system is carried out in the third part. In the conclusion remarks, the current challenges of the tensions inherent to the relationship between patents and standards are highlighted, through concrete examples, especially in regard to the technical limits imposed on freedom of trade and industry in the wine sector.

Keywords: Patents; Intellectual Property; Technical Standards; Innovation; Technology Transfer; Wine Market.

Impact of Trade Agreements with the European Union on Wine Exports from the New-New World

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Economic theory holds that greater openness to trade generates a welfare gain. However, it remains unclear whether this effect holds in the case of bilateral negotiations. This is due to the fact that when the openness is bilateral, there are two possible effects: trade creation and trade diversion (Viner 1950). According to this theory, a reduced tariff through the free trade agreement does not necessarily lead to a welfare improvement. The net effect will depend on the magnitude of trade creation (welfare gain), defined by the replacement of domestic production by cheaper imports from a trading partner, and trade diversion (welfare loss), defined by the replacement of imports from the rest of the world by imports from countries that are members of the agreement but at higher costs and in an inefficient way. In this context, it is interesting to analyze how trade agreements affect exports.

In this paper I focus particularly on the wine sector, analyzing exports from Argentina, Chile and South Africa, which in 2010 accounted for 96.6% of wine exports from the New-New World2. To measure the impact on wine exports I consider the free trade agreement signed between Chile and the EU in 2003 and the agreement between South Africa and the EU in 2000. Besides, I then make a comparison with Argentina, in order to control for the performance of other countries that have no agreement with European Union.

To measure the effect of the agreement, this paper uses the Gravity Equation (Tinbergen 1962; Anderson 1979). The dependent variable is the value of wine exports in dollars from Argentina, Chile and South Africa to all destinations. Independent variables include the exporter GDP and importer's GDP, the population of each country, the bilateral real exchange rate and wine production in the exporting country. It also includes the geographic distance between each pair of countries as a proxy for transportation costs and two dummies that identify whether countries share a common language or have common border. It also includes a trend, a dummy indicating the years of the agreement with the European Union and a dummy indicating the existence of other trade agreements outside the EU.

As expected, I find that wine exports from Chile and South Africa to the EU increased considerably after the agreement. However, estimations show that wine exports to the rest of the world also increased considerably. In turn, exports in countries like Argentina that have no agreement with EU, also grew significantly, both to the EU and to other destinations. However, in this case, exports to the rest of the world increased more than exports to the UE, unlike what happens in Chile and South Africa.

Therefore, this paper estimates a model that, on the one hand, takes as a control group "other destinations" to compare with exports to EU and, on the other hand, takes Argentina as another control group. As a result, I find that Chilean exports

[2] New-New World: Argentina, Chile, Hungary, Lebanon, South Africa.

recorded a significant increase in the period post agreement, although the impact is smaller when controlled by the observed increase in exports to other destinations. Finally, the positive effect of the agreement also decreases when it is controlled by the good performance of countries without agreement like Argentina. After this controls, I obtain the estimation for the net effect of the agreement.

It should be noted that in the case of South Africa, the comparison with Argentina is not that accurate due to the differences in the composition of wine exports. However, the model estimates a positive net effect for wine exports from Chile and South Africa, indicating that there exist benefits from trade liberalization and particularly from trade agreements with the EU. This means that Argentina would probably benefit with this type of agreements and following an openness strategy as Chile has. However, Argentina`s trade negotiations through Mercosur are not that wide and currently show little dynamism. Although actually there are some negotiations with the EU, the implementation of an agreement between both blocks does not seem close enough.

Wine and Legality: A Survey to Know the Consumer Opinions on the Activities of Sicilian Wine Companies Operating on Lands Confiscated from the Mafia

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Introduction

In the European Union, since the mid-90s with the new Common Agricultural Policy (CAP) the term agriculture was joined to that of multifunctionality, as stated in the second pillar of the CAP, because the agricultural sector was placed in front of new challenges, attributing to the development policies of this sector a role of backbone for the economy of all rural areas with low capacity to achieve economic diversification.

Actually, with the multifunctionality, the agricultural sector is no longer considered, only, the one which produces food goods, but also it has new and different functions, including those of preserving the environment and the rural landscape and to support the socio-economic development of rural areas, also through the creation of employment opportunities.

In particular, among the different aspects provided by the multifunctional role of agriculture, the social function is the one that has spread and established itself more and more, especially in recent years in Sicily, where, as social, it means the ability of the farm to generate services to a population considered at risk of social exclusion.

In this regard, all the initiatives for agricultural purposes that are pursued, mainly in the south of Italy and especially in Sicily, in those lands confiscated from organized crime (the so-called Mafia) are believed to be very interesting. In fact, just thanks to the Italian Law n.109/1996 it is permitted to particular legal entities (cooperatives, associations, non-profit, etc.) the use, with social purposes, of all the assets and properties confiscated from organized crime, among which there are included also the agricultural lands that, otherwise, would remain inevitably abandoned[3]. Instead, thanks to the application of this Law, these legal entities can exercise an agricultural activity aimed, in addition to food production regularly put on the market, also to offer employment in the agricultural sector.

In this context, in Sicily, is well-known the activity of the social company (cooperative) "Placido Rizzotto - Libera Terra". It was founded in 2001 within the project "Libera Terra"[4], promoted by the "Libera"[5] and the Prefect of Palermo and,

[3] Companies confiscated from organized crime are spread over the whole Italian territory, but with a strong concentration in Sicily. The 18% of the confiscated goods are farmland and the 6% of confiscated companies work in the agricultural sector and in particular in the production of wine (Source: National Agency of seized and confiscated).

[4] Libera Terra: Free Land

[5] "Libera. Associations, names and numbers against mafias" is an association of social promotion, recognized by the Ministry of the Interior, devoted to solicit and coordinate the civil society against all mafias and to foster the creation and the development of a community alternative to the mafia itself . It is a coordination, born in 1995, in order to urge the civil society in the fight against the mafia and currently consists of about 1,500 associations, groups, schools, grassroots groups, territorially committed to build synergies political-cultural and organizational able to promote a

through a contract of loan for use, it got into management and now it cultivates over 150 hectares of land confiscated from the Mafia that fall in some municipalities of the Province of Palermo. Inspired by the principles of solidarity and legality, the Company Coperativa Placido Rizzotto performs an activity of agriculture, but at the same time, encourages the employment of disadvantaged people and creates new employment opportunities6.

Within the Company Cooperativa Placido Rizzotto it has arisen "Cantina Centopassi"7, whose wine production is also carried out according to the criteria of respect for environment and quality, that the wine industry today requires. The Winery (Cantina Centopassi), from the early harvests has won prizes and awards from the major magazines, trade shows and wine guides.

In this work, which is part of a much broader study on wine and legality, it aims to know, through a survey, the opinion8 of Sicilian wine consumer on this topic.

In particular, through interviews to a sample of consumers, aged between 21 and 50 years, we wanted to know their current information and their opinions with respect to the particular business activities of the Association "Libera", with particular reference to the Cantina Centopassi and to the quality of the wines produced by it. In fact, the choices of purchase and consumption behavior can be a valuable tool to observe and interpret the changes of a society that, now more than ever, is constantly evolving.

With regard to the group of the youngest consumers (21-30 years old range), the main objective was to learn about their behavior and attitude towards business decisions avowedly anti-Mafia, to assess whether the possible purchase of these special wines was a conscious choice or just a phenomenon linked to a current market trend. In addition, the opportunity to observe young people's purposeful and free from Mafia-type constrains, would be an important factor for themselves and a possible driver to entrepreneurial activities in this field, thus creating jobs in a legal context. While, as far as the adult consumers (41-50 years old class), it was considered that it was also interesting to know their opinion and attitudes, because, being probably involved in a stable work context, they could play roles of coordination, leadership, autonomy, etc., such as to be able to also affect, positively or negatively, individual behavior of colleagues or employees and more generally the context where they operate.

Keywords: Social Agriculture, Multifunctionality, Consumer behavior

JEL-Code: C83, M31, O15, Q13, Q18

culture of legality. The law on the social use of property confiscated from the mafia (L. n.109/96), education for democratic legality, commitment against corruption, mafia training camps, projects at work and development, business wear, etc.., are some of the concrete commitments of this coordination. "Libera" is also recognized as a social promotion by the Ministry of Social Solidarity. In 2008 has been inserted Eurispes (Private Institute for Policy Studies, which operates in the economic and social policy research, economic, social and training) between the Italian excellence.

[6] The Cooperative adheres to "Libera, Associations, names and numbers against mafias".

[7] Cantina Cantopassi: Centopassi Winery.

[8] Opinion poll.

Geographical Indication can be a Tool for the Development of a Region

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During the last decades, have been establishing an institutional context - trade rules and standards, consumer demand, technology, general and sectorial policies as well as cultural traits that shape the economy and society - which conditions, substantially, the production and technological dynamics of all agribusiness chains. New market niches have been created, as well as new strategies for product recovery. The notion of geographical indication was built gradually, when producers and consumers start to perceiving flavors or peculiar qualities in some products that come from certain regions, and found that this could be a competitive differentiator. These characteristics were not found in similar products made elsewhere. Thus, began to call the products - which had a differential - with the name of your geographic origin. In addition, other producers, checking these peculiarities, began to take advantage of the names that were becoming known, selling products falsely identified as such. This created the need to develop mechanisms that would protect this new intangible asset of a specific product. To understand the intrinsic relations between this tool and his application, a case study was made to specifically examine the vitiviniculture in southern Santa Catarina, Brazil, focusing especially on Vales da Uva Goethe. The objective is analyses if the recognition of this geographical indication – namely in Brazil indicação de procedencia - may contribute to develop the region sustainably. We use here the Sen theory's Development as Freedom to base on our understand about development. The article focuses on check the positive and negative effects stemming from this recognition in the region delimited and its relationship to the development of wines produced within this geographical indication. The research is characterized as a case study. The means used to research the literature are secondary sources such as scientific papers, books and websites. Although, this research has a qualitative character, which is realized with the use of case study in conducting its investigation. The essence of the case study is an attempt to illuminate a decision or set of decisions: why they were taken, how they were implemented and with which result. It can be concluded preliminary that the protection of geographical indications is strategic for Brazil, a country with potential to produce goods with its own identity and to occupy spaces in markets increasingly demanding in terms of typical quality product. But is not enough that a region becomes known by yours typical product. We must go further. We must ensure a protection system, which enhances the product profile and the link between these products and the territory, ensuring the permanence of the people in the countryside in a sustainable way that encourages industry and the local market, creating jobs, encouraging tourism, generating income and guaranteeing everyone a development as freedom. Therefore, it is necessary to achieving tools such as geographical indication, that aim to ensure the appreciation of local culture and tradition, protection of the environment, the economy and the social group through the promotion of sustainable development.

An Overview of the Organic Wine Sector in Chile

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The purpose of this study is to provide a brief overview of ongoing developments in organic farming and we then focus on the recent evolution of organic wine production in Chile. The objective is to derive some possible lessons regarding the future of organic grape and wine production in Chile.

Over the last four years the global sales of organic products have increased by 20.6% a phenomenon that has been observed in the demand for organic wine has experienced a similar trend. According to the International Federation of Organic Agriculture Movement (IFOAM) the organic products market reached $59.1 billion USD in 2010. In the five years prior to 2010 the market grew at an average annual rate of $5 billion due to consumer concerns regarding food scandals (e.g. dioxin) and advances in artificial-food technology(e.g. Genetic Modified Organisms and irradiation)(Olivas and Bernabéu, 2012). Consumers have increasingly requested healthy and high quality foods produced with environmentally friendly methods and these are attributes viewed as positive distinguishing features from traditional foods. Furthermore, the shift in preferences has largely been driven by consistent findings that highlight the consequences of non-organic agricultural production. Research has shown that pesticides cause nearly a million nonlethal poisonings among agricultural workers and consumers, and about 20,000 deaths per year (Figiel, 1994).

Global organic food demand is concentrated in North America and Europe and these regions generate 96% of global revenues. In terms of supply, Africa and Latin America are the major producers and exporters of organic foods (Willer and Kilcher, 2012). The organic sector in Chile is still small and the domestic market is quite scarce. According to IFOAM, 90%of Chilean organic food production is sold to food-importing countries, while the remainder is sold domestically mainly as conventional products (Lernoud, 2008).

Chilean statistics show that 126,331 hectares were managed organically during the 2011/12agricultural season. Almost 90% of the organic land is associated with the harvest of wild products (e/g., rosamosqueta), natural pasture, and fallow land. The most important organic crops are berries, mainly blueberries and raspberries, which represent 40% of the total organic agricultural land (4,736 hectares). Organic production is located mainly in the Maule and Bio-Bio regions, which account for roughly 72% of the total land under organic production. Currently, at least 500 farms grow organic products, all located between the Coquimbo and de los Rios Regions in Central Chile (SAG, 2012).

Although it pales in comparison to total area of grapes planted, the area used for organic grape production in Chile evolved significantly between 1997 and 2011, going from 44 to 4,707 hectares (SAG, 2011). The grapes used to produce organic wine must be organic; however, there are two distinct classifications for organic wine depending on the production technique used. Organic Wine is subject to a completely organic production process while Transition Wine or Wine made with organic grapes

uses organic grapes in a conventional winemaking process. Most major wine producing countries have standardized rules that clearly define the organic wine classification (e.g., US, Chile, South Africa, and Australia).

There are currently six regions that produce organic grapes, which are concentrated in the center of the country and stretch from Coquimbo to Bio-Bio. These regions are able to specialize in organic production because their soil and climatic conditions offer an ideal setting for organic vineyards. As for the variety of organic wine cultivated in Chile, red varieties are much more popular than white. The main red varieties grown organically are Cabernet Sauvignon, Merlot, Syrah, Carmenère, Malbec, Cabernet Franc and Pinot Noir. The most common white varieties are Sauvignon Blanc and Chardonnay.

During the 2008/2009 season a total of 4.4 million liters of organic wine was exported, mainly to Europe (90%), followed by North America (7%) and Asia (1.44%). FOB prices for a case containing 12 bottles ranged from US $50 to US $300 depending on the quality of the wine. According to estimates by Gallardo (2005), the production of organic wine reached 5.96 million liters of wine, 72% (4.28 million liters) was organic and the remaining 28% (1.68 million liters) was transitional wine. In 2009, 2,946 hectares of organic vineyards produced a total of 8.09 million liters of wine, 70% (6.23 million liters) was used to produce organic wines and 30% (1.86 million liters) was used to produce transition wines. In the agricultural season 2011/2012, 4,707 hectares produced 23,800 tons of grapes - averaging yields of 5.05 tons per hectare - and 14,700 tons of grapes were processed into 11.5 million liters of organic wine. The two most produced and exported Chilean organic wines, Cabernet Sauvignon and Merlot, accounted for more than 2 million liters and 1.8 million liters respectively.

Chilean vineyards anticipate that the demand for organic products will continue to grow and offer promising export opportunities. Thus, organic production in the country is expected to continue to exhibit robust growth over the next several years (Eguillor 2012). However, relatively inexperienced firms are still trying to overcome challenges with product quality, differentiation and consolidation within export markets (Agroecología 2010). It is important to emphasize that organic consumers are usually better educated than consumers of non-organic food. In general, these consumers are drawn towards organic products because they care for the environment, are keen to support organic farmers, and/or regard organic food as healthy and safe. Despite shifting consumer preferences, organic wine lags slightly behind the aggregate demand increase for organic products. This could be due to the stigma that organic wine is of lesser quality; however, this perception is changing as more organic wines are being purchased and receiving recognition for their high-quality.

In sum, the organic wine sector in Chile has showed an important development in the last 10 years; however, more research is needed in several areas. First, there is need to explore alternative markets such as Asia and Latin America. Second, it is also important to identify clearly consumer preferences for organic wine in the main international markets. Finally, and keeping in mind that the domestic market is quite small, it is necessary to study the best strategies for increasing organic wine consumption in Chile.

Keywords: Organic agriculture, wine sector, Chile

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Positioning Mapping of the Chilean Wine in the European Market Case Study: Germany

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From the middle of the 90s, Chile has been experimented a impact revolution in terms of its wine production technics and quality levels. The constant increase of the production areas with high quality grapes and technological investments applied to the vinification process allowed a positive trends in terms of chilean wine exports to different countries undepinned by an atractive price/quality ratio. Moreover, the value of the chilean exports has been evolved in the past decade from U$51 million (43 million of liters) to U$569 million (246,5 million of liters). Under this scenario, from 1997, the planted area with vitis vinifera has been growth 15,1% in annual average and the wine production in 16,5%, increasing the Chilean exports. In addition, in 2012 the total exports grew 8,9% in volume terms and 15,8% for bottle wine. However, the annual growth rate in the last part of this period decreased as consequence of reductions in terms of average value by liter and box exported due to an increment of the bulk exports. As a matter of fact, the future and perspectives of this industry requires a new strategical approach in terms of its commercial guidelines with the aim to maintain or even increase its participation and reputation in the world wine market. According to the current international trade indicators, Germany is the fourth importer country with more than 20 millions of hectoliters and 24 liters per capita by year. Furthermore, the increase of the European Union envolving wine producer countries, reinforce a new design of the Chilean commercial strategies in order to maintain its competitiveness. In this sense, this work aim to diagnose and analize the current commercial position of the Chilean wines with respect to the European countries, focusing in the German market.

The Great Trade Collapse of 2008-9 and the Influence on Prices of Traded Goods: An Empirical Analysis using Wine Prices

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An important feature of the international crisis and recession of 2008-9 was the Great Trade Collapse where world trade declined relatively much even compared to the slow or negative growth performances of many countries. During such recessions also the prices of traded goods must be expected to be particularly influenced in downward directions due to declining global demand. In order to analyze the price development of traded goods during the 2008-9 recession, we include wine prices in an empirical analysis of this question. Wine as a traded good is an obvious candidate for this kind of analysis as the respective wines are well-defined goods – no matter in which country the trade is taking place - and in many cases with known and openly available prices. Additionally, both low-priced and high-priced wines can be included in the analysis to investigate whether e.g. the more expensive quality wines are the most sensitive to recessions and declining trading opportunities.

Price data for a range of wines are obtained from Wine-Searcher where price information can be found for the time span 2007 to 2012, i.e. including the before-mentioned international recession. The wines are usually well-defined – opposite to other traded goods where prices information may cover various versions of the same commodity. For example, a bottle of Margaux 2005 is the same, no matter where in the world traded. The prices of approximately 100 wines are collected for the time period 2007-12, and both less-known, lower-priced wines as well as the more famous wines are included in the analysis.

Many of the wines exhibit a relatively clear pro-cyclical price development – while some prices seem rather robust to the 2008-9 recession. Several issues related to the development of prices of traded goods, with wines as a representative good in the present case, are addressed. The methodologies applied are the Triples test as well as the Sichel test for investigating whether recessions are characterized by the so-called steepness and deepness phenomena. The Triples test is included as this is a more robust test in some dimensions compared to the often applied Sichel test when analyzing business cycles. The latter is in the present case related to very sharp wine price declines when the recession turns up, and if prices stay low for a relatively long time (in the troughs) this is interpreted as 'deepness'. The empirical evidence form the analysis is mixed, showing that only some of the well-known high-prices a wines are sensitive to recessions (others considered a longer-term investment objective), but generally the price developments are pro-cyclical and may even be statistically significant concerning the concepts of steepness and deepness.

Wine as an Alternative Financial Asset: An Exploratory Study on Bordeaux Wines

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Abstract:

This article tries to characterize the wine market. The idea is whether these wines can represent assets credible alternative to traditional financial assets. We show that this trend is fashionable but it is probably premature. Indeed, the first part of our work shows that the analysis of actors and rules that govern this market, as well as the review of the academic literature, demonstrate the vagueness around this market: incomplete information, product heterogeneity, opacity of valuation rules. As many problems which confirm the efficiency absence in this market. In the second part, we prove this result empirically through a hedonic price analysis of the 5 first growths chateaux in Bordeaux (Haut-Brion, Lafitte Rothschild, Latour, Margaux, and Mouton Rothschild). Data are issued from 30 auction houses operating in six countries over the period from 2000 to 2012. We show notably that the place where the wines are exchanged significantly influences their prices. A systematic bias appears because the wines traded in Hong Kong are always more expensive. So, the market is not refereed. This reveals the inefficiency of the market and its immaturity. The fashion effect around the fine wines should not forget that this market is very shallow and unorganized which makes it more risky it appears under existing indices.

Keywords: wine, finance, alternative assets, hedonic prices

JEL Code: G11, G12, G14

Thursday September 5th, 2013

14:00 – 14:45

SESSION 4

GASTRONOMETRICS

Chaired by:

Food and Wine Pairing: The Effect of Education and Test Repetition on Hedonic and Intensity Ratings

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The interactive relationship between food and beverages has been one growing in interest and variety over the past decade. Food and wine pairing has a long history but much of defined match relationships are based on regional pairings, anecdotal evidence and expert opinions (Harrington et al., 2010; Pettigrew & Charters, 2006). These relationships provide an interesting and under-researched area for study whether this research considers the food and wine combinations or the relationship between education and hedonic or intensity ratings. In comparison to general food and wine research, research on the impact of food and wine education has been even more limited. Most studies to date have focused on wine education in general rather than the study of the impact on food and wine appreciation or hedonic perceptions (Taylor et al. 2008).

The purpose of the current study is to assess the differences in hedonic pairing ratings for 2X2 combinations using two wines and two food items. Further, it investigates the impact of food and wine education on perception of match (hedonic ratings) and intensity ratings of wine elements.

Methodology and Results

The study used purposeful selection to create two comparable groups. Both groups were junior and senior-level students at a large mid-western U.S. university. Group 1 were students enrolled in a 16-week food and wine university course. Group 2 were student volunteers that were not enrolled and had not taken the 16-week food and wine university course. Thirty-two (23 females and 9 males) students with an age range between 21 and 33 years (mean age ± standard deviation = 23 ± 3 years) participated in this experiment. All participants confirmed that they had no clinical history of major disease and no impairment in smell and taste perceptions.

For the tasting sessions, the researchers selected two wines and two food items that are likely to create two good matches and two mismatches. The two wines included Ruby Port and Sauvignon Blanc; the two food items included dark chocolate and goat cheese. Ruby Port combined with dark chocolate and Sauvignon Blanc combined with goat cheese are thought to be good to ideal matches. Conversely, the Ruby Port with goat cheese and Sauvignon Blanc with dark chocolate should be perceived as significant mismatches based on conflicting taste elements of sweetness level and acidity level as well as texture conflicts when consumed together (Harrington, 2008).

Each participant was asked to complete a questionnaire assessing wine consumption and preferences, level of interest/knowledge in wine, and food and wine pairing experiences. The questionnaire also included demographic information and other factors that might impact study results: overall health status, smell function, taste function, specific health problems (e.g., respiratory disease, diabetes, taste dysfunction, etc.) or allergies to foods, odors or drinks. The survey utilized a Likert-type 9-point scale (e.g., 1 = extremely weak, 5 = neither weak nor strong, 9 = extremely strong) to assess perceived wine flavor strength, sweetness,

dryness, sourness, and tannin level, as well as like or dislike level of the wine, food, and food and wine combinations.

Hedonic ratings for pairs of wine and food

There were no significant effects of test repetition ($P > 0.05$), wine sample ($P > 0.05$), and food sample ($P > 0.05$) on the hedonic ratings for pairs of wine and food samples. In addition, there were no significant interactions between test repetition and wine sample ($P > 0.05$) and between test repetition and food sample ($P > 0.05$).

However, there was significant interaction between wine and food samples [$F(1, 31) = 12.76$, $P = 0.001$]. Specifically, hedonic ratings for the pair of Port wine and chocolate were significantly higher than those for the pair of Port wine and goat cheese. In contrast, hedonic ratings for the pair of Sauvignon Blanc wine and goat cheese were significantly higher than those for the pair of Sauvignon Blanc wine and chocolate. These empirical findings provide support for previously assumed general match perceptions across both trained and novice consumers of wine and food (Immer, 2002; Simon, 1996).

Effects of education and test repetition on ratings

Interestingly there were no significant effects in intensity ratings of test repetition or grouping (education program or not) on intensity ratings for wine flavor, sweet taste, sour taste, tannic (astringency), and dryness ($P > 0.05$). Although the wine samples significantly differed in terms of wine flavor [$F(1, 31) = 45.56$, $P < 0.001$], sweet taste [$F(1, 31) = 41.90$, $P < 0.001$], sour taste [$F(1, 31) = 7.48$, $P = 0.01$], tannic (astringency) [$F(1, 31) = 4.32$, $P < 0.05$], and dryness [$F(1, 31) = 10.96$, $P < 0.01$].

Conclusions

The study demonstrated strong match differences among wine and food pairings. Specifically, these hedonic differences were consistent with earlier articulated expectations based on traditional rules and anecdotal evidence. More importantly is that this finding was consistent across groups and test repetition; this demonstrates the strength of these relationships for both novice and more expert consumers. While no significant differences were apparent for education effects, the study demonstrated some practical difference effects with participants in the education treatment able to more accurately assess presence and levels of tannin in the wines in this study when compared to the non-education treatment group and to the education treatment pre-test. The lack of statistical significance is likely to be a function of the lack of power in the tests and small sample size. Therefore, future research should extent this research using a larger sample and additional wine and food combinations.

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Keywords: Food and wine; Hedonic rating; Education; Wine Intensity.

JEL Code: Quality & Gastronomy; Association of Food and Wine.

Japanese Wine Makers: Comparative Analysis of Wine and Sake Makers

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Japan is unique in terms of wine. The country has no wine law, produces wine and promotes exports of wine. As wine is regulated by Liquor Tax Act and Food Sanitation Act, “wine” is not defined in Japan.

This paper explains current situation of Japanese wine industry and regulatory environment, as well as wine market. This paper further explains how or whether the industry is fostered and why most producers are structurally-suffering from low earnings instead of raising revenue by making comparison with Sake producers.

An Attempt of Estimating Hedonic Price for Italian Vinegars

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Vinegar, although derived from wine by mean acetic fermentation, is not a beverage but a dressing, the second dressing in Italy after olive oil, with an increasing relevance in the world market (Berry, 2011).

The vinegar market characteristics have received modest attention by researchers and the few studies (e. g. Mattia, 2004; Radman et al., 2005) concern mostly particular vinegars and deal scarcely with the price issue.

A preliminary literature survey indicates that hedonic price analysis, which has been widely used for wines, beers and other beverages food products (Nerlove 1995; Landon and Smith 1997; Combris et al. 2000; Angulo et. al., 2000; Schamel and Anderson 2003; Lecocq and Visser, 2006; Couto and Rodrigues, 2007; Almenberg J. and Dreber A., 2011), seems to be never applied to vinegar.

Therefore, we have undertaken a first attempt to investigate the most important features influencing the vinegar price, by means of a survey on a sample of Italian large scale retail (LSR) outlets (hypermarkets, supermarkets and minimarkets).

Data collection has been carried out in 46 sale points of different size, belonging to 27 different LSR labels, which are located 21 towns of the Verona province (Western Veneto) and it took place between July and November 2012. In each store we completed a questionnaire section for each commercial reference, which includes the following bottle related features: a) geographic indication, b) type of vinegar, c) size, d) type of cap, e) glass color, f) presence of back label, g) producer's brand, h) acidity level (acetic acid percentage), i) price per bottle, j) price policy, k) discount percentage. Moreover we included two other merchandising characteristics: a) display level and b) facing (no. of bottles on the shelf). The reference sample totalizes 1036 vinegar bottles, belonging to 113 different brands. Such a number of brands on the market show a highly differentiated market, due to an arena made up by few big producers who compete with of many other of small size. As dependent variable we use the natural logarithm of price per liter. Estimation was performed by using both enter and stepwise methods.

The best model selecting the most significant variables with the stepwise method is reported in the three lines below. The name of the independent variables (ranked in decreasing order, according to the standardized beta values) is followed by the coefficient and its standard error.

Constant	**Size (cc)**	**Facing**	**Foot level**	**Cork cap**	**Spray cap Sasso brand**
3.354	-0.011	-0.074	-0.358	0.514	0.668
	0.639	-0.202	0.518		
0.271	0.001	0.007	0.071	0.07	0.126
	0.12	0.044	0.138		
LSR chain		**Eye level**	**Ponti brand**		
-0.14		0.115	0.115		
0.049		0.051	0.057		Adj. R squared 0.466

An additional model, taking into account some interactions between couple of variables increases the Adj. R squared to 0.50.

Estimations show a high contribution of point of sale features to vinegar price. Adding another bottle in the shelf reduces price by 7.4%, and locating it at the foot level implies a 36% decrease in comparison with the hand level, while setting it at the eye level result in a 11.5 increase. Furthermore, bottles that are sold in outlets owned by the main local LSR chain are priced 14% less than those that are sold in the other outlets.

Among the bottle related features, size ranks first: each additional centiliter decreases price by 1.1%. Also the type of cap is quite important. In fact, we have found that the mushroom-shaped cork cap increases price increases by 51.4%, and the spray type by 66.8% in comparison with the screw cap (no matter If made by plastic or metal). Both the two particular cap types close only Balsamic vinegar bottles, and therefore the difference in price is not attributed only to the type of cork, but also to the type of vinegar. Another feature which tends to decrease the price is acidity. In fact, augmenting the acetic acid concentration of one degree leads to a 20.5% decreases in the vinegar price.

The model likely underestimates the effect of the producer's brand on price variability, due to the presence of too many small size firms. We have tested the eight more represented brands by means of dichotomous variables, but only Fini and Sasso outstand significantly among the others brands.

Unexplained price variability seems to be related to local pricing policies from both vinegar producers and outlets. Moreover, the effect of some attributes, as back label, geographic indication and type of vinegar seem to be, at least partially, "captured" by the type of cap.

Keywords: vinegar, hedonic price, brand, point of sale

JEL-Code: M31

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The International Olive Oil Trade: A Network Analysis

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Abstract

Aim of this paper is to test whether or not the Network Analysis (NA) could possibly help to grasp Country level competitiveness in the International Trade Network (ITN) of a specific commodity. We focus over the positions that each Country occupies within the net of international trade exchanges assuming this could lead to competitive advantage. Starting from Ronald Burt's structural holes theory, we move forward analyzing the whole network evolution in the last years. We apply NA to the world network of valued exchange relationships of virgin olive oils building a 12 years' time series of weighted directed networks (WDN)

Keywords: olive oil, international trade network.

The Changing Shape of Global Olive Oil Value Chain: New Markets, Policies and Strategies

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Abstract:

The emergence of integrated food value chains is one of the most visible results of the globalization and modernization of agri-food systems. The olive oil value chain is no exception to this tendency. Indeed, increased international product expansion, consumer concerns about health and food quality and the growing role of standards and market power of retailers, have brought stronger focus on the value chain as an instrument to organize olive oil marketing schemes and institutions. At global level, the olive oil value chain in undergoing a rapid process of transformation prompted by changing world supply and demand geography, new regulatory frameworks and business strategies.

Within this context, this contribution aims at analyzing the changes underway that are affecting the international expansion of olive oil supply chain and the value creation therein. Key drivers of chain dynamics and their implications for chain configuration and performance at global level are illustrated by addressing 1) the changing structure of world olive oil production and trade, 2) the role of emerging, increasingly diversified consumer markets, and 3) the changes in agricultural and trade policies related to the product and their likely impacts on chain agents. Moreover, some recommendations are formulated for a better understanding and development of the global olive oil value chain. Special attention is drawn to the need for further use of quantitative measurements in policy-relevant chain areas including, for instance, the quantification of value creation and capture patterns which are hardly reflected in existing trade statistics, and the development of empirical sustainability indicators (economic, social, environmental) to determine and assess actual chain sustainability levels.

Keywords: value chain, international expansion, olive oil

South Tyrol Culinary Tourism: Gaps between Expectation and Fulfillment for German Travelers

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While culinary tourism is not a new travel activity, interest in culinary tourism has seen significant growth over the past few years. Culinary tourism is thought to create distinctive experiences as part of a unique bundle of activities associated with local culture, landscape and food. With that said, culinary tourism as a research topic is a relatively new and under-researched phenomena. Therefore, the objective of this study is to bridge this gap and extent research on the relationship among expectations prior to visit, fulfillment of these expectations post visit and the relative importance of culinary aspects compared to other aspects such as nature and landscape, wellness, sports, etc.

To assess these relationships, the study ties methodology to theories of consumer satisfaction. Several theories provide proposed links between consumer satisfaction and its consequences. Three of these include expectancy-disconfirmation theory, norm theory, and equity theory. The most commonly accepted theory to explain consumer satisfaction is the expectancy-disconfirmation theory. Essentially, the theory indicates that customers have expectations of goods and services prior to consumption and satisfaction level is derived based on whether or not the actual outcome exceed, meet or do not meet a priori expectations.

Methodology

Data for this report was collected using a survey instrument during three days in the city center of Bolzano in South Tyrol, Italy. Bolzano is the largest city in the South Tyrol region; the region provides a unique location for study due to the blend of Germanic and Italian influences on food, wine and culture. Due to its proximity, the primary travelers to the region are German, Italian, Austrian and Swiss. The survey contained 46 items with sections on expectations of various tourism activities, fulfillment of these activities, activities with the greatest potential and related questions. For this study, the authors focus on the relationship between activity expectations and fulfillment for German travelers to the region. The sample for this study is 525 German tourists.

Following the expectancy-disconfirmation theory, the data were analyzed to assess tourist activities that had high expectations and high fulfillment (meeting expectations), moderate expectations and high fulfillment (exceeding expectations), moderate expectations and low fulfillment (disconfirmation of expectations), and low expectation and low fulfillment (confirmation of expectations but a negative or unimportant impact). The survey used a 5-point scale for expectation levels (1= very low expectations and 5= very high expectations) and fulfillment levels (1= not met at all and 5= exceeded expectations). The following break-points were used to separate high, moderate and low means: high = 3.75 or greater, moderate = 3.0 to 3.74, low = less than 3.0.

Results

For German tourists, the South Tyrol region had six activities or attributes that were rated both high in expectation and high in fulfillment. These include 1) nature and landscape,

2) traditional dishes of the region, 3) friendliness of staff in the hotels and restaurants, 4) friendliness of staff in wineries, 5) competencies of staff in hotels and wineries, and 6) competencies of staff in wineries. Five of these six regional attributes relate to culinary and hospitality capabilities of the region.

Four attributes or activities had only moderate expectations but resulted in high fulfillment: 1) sports, 2) regional wines, 3) authentic food products that can be purchased, and 4) authentic food products on restaurant menus and wine lists. These tourist activities represent areas where the region exceeds expectations for German travelers relative to a priori expectations.

For one activity German travelers had moderate expectations but low fulfillment. This activity or attribute was the local culture which created a slight gap between expectation and fulfillment. The fine dining activity had a low expectation but moderate level of fulfillment; this activity exceeded overall expectations but only to a moderate level.

Two activities were relatively low on both expectations and fulfillment: 1) wellness and spa and 2) special events. Special events had a slight positive gap between expectation and fulfillment but still remains a relatively low attribute for German travelers in the region.

Conclusions

The study demonstrated the strength and consistency of six tourism attributes in South Tyrol, four attribute that resulted in a positive gap between expectations and fulfillment, and three activities or attributes that have negative gaps or low overall expectations and fulfillment. In total, nine attributes or activities provided a positive gap between expectation and fulfillment; of these, four were related to culinary tourism (traditional dishes of the region, regional wines, authentic foods that can be purchased, and authentic foods on menus) and four were related to hospitality and service activities in the region (staff friendliness and competencies in hotels, restaurants, and wineries).

Those that exceed expectations suggest that region reputation and promotion has a tendency to under promise and over deliver; this positive gap relationship is likely to provide positive consumer behavior consequences in the areas of intention to return, positive word of mouth and increased spending behaviors.

To assess the relationship between positive gaps, neutral gaps, and negative gaps, the authors will provide further analysis of tourist intentions to return and the impact of other demographic characteristics as well as the greatest potential of food tourism categories and their importance to German travelers in South Tyrol.

Keywords: Culinary tourism; Expectancy-disconfirmation theory; Tourism attribute fulfillment.

JEL-Code: Enogastronomical Tourism and New Activities; Association of Food and Wine.

Friday September 6th, 2013

9:15 – 10:00

Keynote 4

Christian FELZENSZTEIN - Université Adolfo Ibáñez, CL

"International Marketing Strategies in Wine Clusters: Insights from the Southern Hemisphere"

Friday September 6th, 2013

10:00 – 11:30

SESSION 5

WINE MARKETING

Chaired by: **Christian FELZENSZTEIN**

The Country Brand Trap

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Data on 14,284 bottles of wine from six regions or countries, namely Argentina, Australia, Chile, California (United States), Burgundy (France) and South Africa, and from five vintages (1997, 1999, 2001, 2004 and 2005), are used to estimate a hedonic price model that causally relates wine prices to individual quality and country brands. A positive and statistically significant relationship between price and individual quality is confirmed, and it is found that the premium or penalty attaching to wines because of their associated country brand has held steady over time, as has price-quality elasticity. Individual quality being equal, Chilean and Argentine wines continue to suffer a penalty of over 50% relative to Californian wines. Another finding is that the country brand problem will not be solved until countries that are newcomers to the industry, such as Chile and Argentina, succeed in producing a critical mass of wines of outstanding quality, for this is the factor that will ultimately determine whether their producers benefit from a good collective image or reputation.

Keywords: Wine, hedonic pricing model, country brand, price-quality elasticity, exports, marketing, statistics, Argentina, Chile, Australia, France, South Africa, United States

JEL-Code: L15, D4, Q13

Look for the Signature: Personal Signatures as a Cue for Quality

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- Purpose: Personal signatures are often infused into marketing stimuli as a signal of product quality. Does a vintner's signature on a wine bottle connote quality to a consumer?
- Design: Two studies were run using experimentation. In Study 1, we examined the effect of a vintner's personal signature on a bottle of wine on perceived quality, as indexed by willingness to pay. In Study 2, we examined how wine knowledge moderates this effect.
- Findings: Results demonstrate that including a personal signature in marketing stimuli influences consumer perceptions of product quality through two paths. Personal signatures act as a generic cue for quality, and also associate a particular individual's identity with the product being marketed.
- Practical Implications: Although a personal signature often enhances perceived quality, the present research suggests that a personal signature can have the unintended consequence of detracting from perceived product quality.

Mountains, Vineyards and SME's – Marketing Wine from the Floral Kingdom at the Southern Tip of Africa

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Introduction

Wine marketing is a vital undertaking for wine producing SME's interested in surviving and profit making, even if the first 200 years are a problem, as famously suggested by Madame Rothschild.

Ninety percent of all private wine cellars crushing grapes in South Africa fall in the production category of between 1 to 1000 tons (n=453) and are concentrated in the Western Cape at the southern tip of the African continent. These wine SMEs face diverse and serious challenges in the marketing of their wines; in holistic terms the most taxing being the region's remote geographic location in global terms, fluctuating world economy and exchange rates, declining domestic wine consumption (7.7lt per capita), as well as declining domestic wine sales and the already felt impact of global warming on wine production.

Background

Although there is a long history with wine farms dating from the mid 1600's still in production today, the South African wine industry is viewed as a young (New World) industry and in competition with Australia, Argentina, etc in the world market. The local industry is still growing: there has also been a large increase in private wine cellars (and thus competition), since political and regulatory changes in 1994. The international accolades for the quality of South African wines have increased. Changes which directly affect wine marketing have been the evolvement of wine routes (17 in total in the last 40 years), wine (and food) shows, wine competitions and wine festivals. This has been due to incremental collaboration and networking within designated wine growing areas so named by the SA Wine and Spirit Board's 'Wine of Origin' scheme. The private wine cellars clustered within regional proximity in such areas share some terrior and landscape features, as well as infrastructure and site specific wine and other products. Collaborative marketing has assisted with establishing destination wine brands and increased wine tourism.

The Western Cape is home to the five wine regions that comprise the greater part of the South African wine industry and wine districts of the Coastal Wine Region per se are all located within a 200km radius of the city of Cape Town. The wine region is internationally renowned for its scenic beauty and biodiversity – 95% of South African wine is produced within the area known as the Cape Floral Kingdom, the richest and smallest plant kingdom in the World. It is a proclaimed World Heritage site and a pioneering partnership between the wine industry and conservation sector, the Biodiversity and Wine Initiative (BWI), encourages wine producers to preserve the unique natural habitat that surrounds them and farm sustainably. The BWI has become a recognised aspect in the marketing of South African wine.

The Stellenbosch American Express™ Wine Routes (STBWR) is the oldest and most extensive wine route organisation in South Africa, set out in 1971 by 4 starter members. Its current network of 150+ member wine farms (some dating from the 1680's) are organised into 5 sub-routes, where a high density of very old and very new wine cellars is evident –

almost half of the wine cellars have been established post-1994 – 30+ wine cellars have only been established since the year 2000.

Most significantly, a quarter of all South African wine SMEs (n=111) are located in the STBWR area. These wine SMEs have access to diverse resources with 6 nearby towns housing local suppliers of technology, skills, products, services, amenities and activities relating to viticulture, wine production, tourism, marketing and wine tourism. Stellenbosch in particular is considered the educational, research and marketing hub of the South African wine industry.

Despite the diverse circumstances some wine SMEs have been in business for many decades and the newcomers are gaining a foothold. This is especially admirable when taking into account these are family or single owner businesses.

Purpose of research:

The basic premise of the research project is that wine marketing for South African SMEs has become more complex in recent years (e.g. competition and evolving collaborative marketing) and that these SME's are surviving (being successful) by innovatively adapting their wine marketing (planning) to suit their resources and own circumstances. Success or lack thereof is not considered part of the proposed research project, rather the ability to sustain for a length of time is noted.

Problems that could be encountered by SMEs in general, for example financial and time constraints, lack of resources, personnel and lack of knowledge, are what may prompt them to follow a complex or to them more flexible/steady marketing route. It is assumed that all SME's would have some sort of planning in place, based more on the commitment, experience and outlook of the owner/marketer, but that a structured marketing plan may not be evident. A complex combination of both impromptu and researched based decision making and implementation of ideas, prompted by new opportunities popping up and lessons learnt in the past and trust in people (networking) may be evident. The reactive rather than proactive attitude in marketing planning can be problematic, but will happen if immediate survival is the most important factor, for example having to sell wine immediately to make way for new season's stock. The marketing planning of wine SMEs may thus not follow the traditional marketing theory of 4ps and a structured marketing plan allowing for segmentation, targeting and positioning.

This research aims to elucidate the actual marketing practised by private wine cellar SMEs in the Coastal Wine Region.

Research methodology:

Information gathering of such complex wine marketing and marketing planning situations would benefit from using qualitative research methodology and in particular in-depth personal interviews with owners of wine SMEs (who are also the marketers of their business). This has already been proven successful in garnering information in other similar projects pertaining to marketing and other sector SMEs.

While the interviews would be structured with open ended questions, no specific mention of the 4ps (8ps) or the structure of the plan will be utilised. The ideas associated with these aspects would be put forward to maintain the information flow.

Les circuits de distribution des vins bio en France

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Introduction:

"La filière de vins bios semble avoir de beaux jours devant elle - les vins bios s'inscrivent bel et bien dans une évolution de consommation." (Claudin, 2013). Aujourd'hui, le « bio » est « à la mode », on trouve de plus en plus de produits bio sur le marché Le secteur viticole n'échappe pas à cette tendance (Mora et al, 2012), et on a assisté ces dernières années un véritable essor des conversions de domaines en agriculture biologique ou en agriculture biodynamique (Delmas et Grant, 2008; Bouzdine-Chameeva et Krzywoszynska, 2011).

Avec 61 055 ha en mode de production biologique9 en France en 2011 contre 50 268 ha en 2010, la vigne bio enregistre une progression de 21% (Agence Bio, 2011), représentant 7,4% du vignoble national. C'est aujourd'hui, une des filières les plus dynamiques. Alors que les surfaces viticoles bios ont presque triplé en 4 ans, le nombre de producteurs a lui-aussi progressé, passant de 3 945 producteurs en 2010 à 4 692 fin 2011.

De côté consommation, en 2011, un français sur trois consomme du vin bio régulièrement ou de temps en temps selon une étude Ipsos/SudVinBio. Le marché du vin bio commercialisé en France a progressé de 11% en 2011 par rapport à 2010 (359 M€). Il s'est également développé à l'export (Allemagne, Japon, Etats-Unis, les pays scandinaves, etc.), représentant 34% du chiffre d'affaires réalisé à l'international. Aujourd'hui, la France est en troisième position derrière l'Espagne et l'Italie.

Le développement du nombre d'exploitations bio entraîne un nombre croissant des vins "bio" sur le marché. Il devint donc important de pouvoir déterminer quels sont les moyens de commercialisation de ces vins ; ces moyens de mise en marché relèvent de la problématique générale de la distribution (e.g. Bouzdine-Chameeva et Ninomiya, 2011; Cholette et al, 2012).

Ce travail porte donc sur l'identification des circuits de distribution empruntés par la filière viticole bio en France.

[9] *Par souci de simplification, les expressions « vin bio », « produit bio », « filière bio », etc., seront utilisées pour désigner à la fois les vins issus de raisins de l'agriculture biologique et les vins issus de l'agriculture biodynamique*

Consumer Perception on Wine's Label and Degree of Design Typicality: Are there Visual Neuro-Cognitive Differences on what Consumers Look on Wine Labels?

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Many studies have been done on how a product's image and design can influence a customer's perception and preference towards a range of products. However, many aspects remain unclear how the consumer's perception is processed and which elements or factors truly influence a person to chose a product over another. Although this research certainly doesn't intend to bring all the answers for these questions, it could help to explore further and gather more information about how consumers tend to process information when looking at a product, particularly in this case, wine labels.

This initial exploratory research uses the eyetracking technology to study the influence of product's image on the consumer's perception and gain a better understanding on what consumers look when seen a wine label. It explores possible cognitive differences in perception and preference of wine label among consumers in order to elucidate some of the cognitive process and variables that seems to influence a customer's perception, preference and intention purchase.

It looks like that cognitive attention and perception of wine labels may have small difference between men and women. Men would tend to focus a little more on the information and women a little more on the design / aesthetical harmony as a whole. Also, when presenting three different wine labels, one with a (a) classical / typical, (b) moderately atypical and (c) atypical design, subjects paid greater attention to the moderately atypical design. The visual response given to the atypical design didn't translate into willingness from part of the subjects in paying a higher amount for that wine. Intriguing responses were found between novices / wine amateurs and, so called "wine-experts", when confronted to some label information / design aspects.

The challenge with the information provided by the findings of this study in managerial terms would be how to address a different range of public with different demands and expectation when wineries have only one wine label to market their product. In other words, the challenge for marketing would be how address all these different wine public in one label or to use a segmentation strategy to better differentiate.

Keywords: Categorization, Eye Tracking, NeuroMarketing, Wine

Collective Action in the Wine Value Chain: A Case Study of Australia

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We identify and classify types of collective action in the Australian wine industry, and assess their usefulness and implications for different stakeholders. The industry continues to be adversely affected by the oversupply on global markets, resulting in marginal diminution in wine output from the peak year of 2005. This decline has been spread very unevenly across different geographic zones and stakeholders. Sheales et al. (2006, p. 3) recognised the looming magnitude of the problem of global wine oversupply and identified six strategies to improve competitiveness. These strategies can be summarised as:

1. increasing the average size of grower operations (partly through smaller operators leaving the industry) so as to realise scale efficiencies;
2. adjusting business models through more contracting, leasing, share-farming and cooperative arrangements designed to achieve better financial performance for growers and the industry as a whole;
3. maintaining or increasing investment in research and development (R&D) aimed at developing and adopting new technologies to increase on- and off-farm productivity;
4. developing improved relationships between wineries and grape growers to ensure that information flows will better equip industry participants to respond to new and emerging market trends;
5. maintaining an appreciation of global and domestic supply chain dynamics to allow growers and wineries to better position their businesses and products; and
6. developing value-adding opportunities that satisfy changing consumer demands.

The collective nature of all activities is immediately apparent. Recommendation 2 explicitly recommends an investigation of different types of collective action at different points in production. Recommendations 3, 5 and 6 involve the development of collective, or pooled, knowledge bases (one with respect to R&D examining both on-farm and off-farm activity; one with respect to global market trends; and one with developing opportunities for value-adding, an activity that is readily conceived as taking place involving a number of participants in the wine industry writ large). Recommendation 4 explicitly directs greater vertical cooperation between grape-growers and winemakers. Only recommendation 1 (consolidation) can be reasonably considered to fall within the ambit of particular producers. The question thus arises of how best to conceive of these types of collective arrangements.

Several conceptual and theoretical approaches can be identified to examine collective action in the Australian wine industry. The most salient of these is the cluster modelling approach. Recent examples have included a study of export linkages in the Australian wine industry by Aylward (2006, p. 424) who emphasised the distinction between clusters as 'spontaneous groupings of firms' and 'constructed clusters', such as industrial parks, that are engendered with a specific goal in mind. He used a similar approach to examine innovation

support among New World wine producers. More recent work has focussed on particular geographically defined wine clusters. See, for example, Wickramasekara and Bamberry's (2009) study of Stanthorpe in Queensland's South East, the investigation by Henderson et al. (2009) of the Hunter Valley wine region conceived in cluster terms, and the analysis by Sellitto and Burgess (2005) of 'virtual' clusters in the form of government-sponsored internet portals for regional wine groupings.

Nevertheless, arguably a lack of conceptual and theoretical rigour is characteristic of this work. For example, Enright and Roberts (2001) pointed out that if a definition of cluster types includes government-sponsored attempts at developing regional economic development centred on particular industries, it is clear that federal government policy has been directed to this policy goal since at least the mid-1990s. Kelly, Dollery and Grant (2009) identified what they referred to as three generations of federal government policy in this regard in the post-WW2 era. Further, the lack of conceptual and theoretical rigour found in this work renders it as descriptively sociological in nature, rather than investigating the types of collective and collaborative arrangements from a political economy perspective (for an exception, see Marsh and Shaw 2000).

We draw on the public economics literature, namely the work of Oakerson (1999), to provide a more taxonomically refined and economics-based account of collective action. Oakerson (1999, p. 7) distinguished between service 'provision' and service 'production' and demonstrated that different criteria apply to these conceptually different functions. The provision of services involves determining whether to provide a particular service, the regulation of activities, revenue-raising, the quantity and quality of services provided, and how these services should be produced. Alternatively, the production of services involves the creation of a product or the rendering of a service rather than its financial provision.

The conceptual separation of provision from production allows for choice between different vehicles for producing services. Oakerson (1999, pp. 17-18) identified several generic possibilities for linking provision with production. However, of these only 'coordinated production', 'joint production' and 'intergovernmental contracting' constitute shared services. By contrast, 'private contracting', 'franchising' and 'vouchering' do not meet the definition of shared services since they involve contractual, for-profit arrangements. It is on this basis, using the traditional distinction between horizontal and vertical types of cooperation, that we identify and classify types of collective action in the Australian wine industry.

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Friday September 6th, 2013

12:00 – 13:30

SESSION 6

CONSUMPTION

Can Wine Consumers Know What They Are Buying

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At the heart of any transaction is the good involved (perhaps both goods involved if we allow for barter). What is it that defines the nature of a good beyond the tautological definition of that which is transacted? Economists have identified different types of goods along a variety of dimensions—for example, their relationship to changes in market parameters (e.g., complements/substitutes, inferior/normal), to the nature of the parties transacting (final goods, intermediate goods), to the capacity to confine a transaction to a single buyer (public/private), and the transactors' information about and knowledge of the good. Moreover, beyond all these categories, goods can fall into more than one—for example, an inferior good that is a substitute for some other good.

Most of the world's wine production falls easily into existing categories because that is one goal in its production. "Commodity wine" is designed to be easily understood and identifiable, much like most of the beverages with which it competes. While it may potentially reflect some of the variations in characteristics that can contribute to the complexity of wine (e.g., differences in blends, differences reflecting changes in vintage and source), the goal is often consistency and homogeneity so that consumers know what they are buying. Some have derisively referred to it as "cola wine" (e.g., Aylward 2008).

At the other extreme of the variety of wines available, a small proportion of global production challenges consumers to know what they are buying: we shall call these "premium wines". The range of wines available in a major economy fall all along the spectrum from "commodity" to "premium" so the relevance of the discussion to any particular wine will be a matter of degree.

To some extent, understanding premium wines involves issues of asymmetric information where the producer knows considerably more about a wine's origins, production, and final characteristics than the consumer, and the consumer perhaps hopes to learn that information. Beyond that, however, some wines challenge the consumer's ability to know them and therefore to form a meaningful willingness to pay (WTP) for them.

In the present research, the distinction between information and knowledge is important.Much of the discussion of the consumer's problem in the wine market focuses upon the role of information. This paper argues that the challenge is (a), when the motive is one's own wine consumption, the consumer's lack of knowledge, and (b) discerning the consumer's other possible motives in buying premium wine.

Recognizing the challenge to the wine consumer's knowledge of what she is buying, some excellent research has seemingly turned to Nelson's (1970) concept of "experience goods"—goods that must be "experienced" before they can be accurately evaluated. Nelson's original concept of experience goods is that they are sufficiently complex that the consumer must experience them to gain knowledge of them. He uses examples like canned tuna fish and home appliances. He also allows for the importance of accessing expert opinion such as Consumer Reports.

Much of the wine research predicated upon the idea of experience goods looks at the relationship between some external measure of quality such as chateau reputation or expert

opinion and price (e.g., Hadj Ali and Nauges 2007; Hadj Ali, Lecocq, and Visser 2008): unable to know the wine before buying it, consumers use this external information to guide their WTP with better ratings correlating positively with price. However, while this information may influence WTP, it does little to improve the consumer's knowledge significantly. This may help explain why the evidence of the impact of expert opinion upon wine prices is mixed and positive correlations tend to be weak: this information may contribute little to the consumer's knowledge of what she is buying.

This paper questions the idea that premium wine is an experience good—not that it overstatesthe complexity of the consumer's problem but that it significantly understates it. For example, Nelson's original examples like home appliances are considerably easier to know than these wines. Once one buys a refrigerator, one understands it and most of its competing brands. Very few competing products represent a significant challenge to understanding all refrigerators—and similarly for the kinds of goods Nelson describes. The idea that one can know a type of wine by buying one in the same sense that one can know a type of refrigerator by buying one seems misplaced.

The paper considers and critiques the kinds of information available to the wine consumer and the extent to which they contribute to consumer knowledge at the time of purchase--information provided on the product, peer information (e.g., word of mouth, Cellartracker), information from the supplier, and especially expert information (e.g., tasting notes, ratings). For example, are experts that use potentially hundreds of scores (e.g., Parker with 50-100, ranges, plusses and minuses) more helpfulor less than experts that use three or four (e.g., Guide Hachette)? What is the relevance of price to scores (e.g., are two St. Emilion Grand Crus with Parker scores of 87 but very different prices equally good?). It also discusses the factors which, after the purchase, complicate the consumer's knowing what she will experience when she actually consumes the wine because of uncertainties such as travel shock, bottle variation, systemic flaws (e.g., brett), the conditions at the time of tasting, and the challenge of knowing how a wine will age. It asks: with all the uncertainty, how can the consumer know what she is getting when she opens a bottle of wine?

It argues that one consideration missing from our understanding of the wine purchase and consumption decision is its resemblance to playing a lottery, in part because of the degree of uncertainty we face in buying premium wines. The paper also considers evidence on consumer knowledge of wine—for example, Hodgson's research on judges at wine competitions (e.g., 2008, 2009) and the absence of data on successful blind tasters. If wine is an experience good, then those with vast experience should be able to identify the wines they are drinking just as they could identify and operate a refrigerator. It also considers a critique of blind tasting that highlights the complexity of knowing what we taste (Cohen 2011).As noted, the paper also considers motives for purchase other than own consumption (e.g., gift giving, status seeking) and how that might affect WTP.

The paper closes with a re-characterization of the consumer's wine purchase decision.

Wine Consumers of Lower Socio-Economic Sectors in the Metropolitan Region, Chile: A Segmentation Based on Attitudes

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In Chile was sold in 2011 about 303 million liters and it is estimated that sales in 2012 amounted to 339 million liters, reducing mass participation and currents wine sold in the domestic market under format bag in box and big bottles, from 84.80% in 2007 to 81.40% in 2011 and increasing the percentage share of premium wines by 22.4%. In the described context, the present work was to analyze consumer attitudes from low socioeconomic sectors to the current bottled wine (bag in box). For the development of this objective, a survey was applied to 400 people in one of the communes of Santiago de Chile with the highest proportion of people of low socioeconomic status, El Bosque. This instrument was developed with closed questions that looked sociodemographic, descriptive aspects of consumption and a set of statements about attitudes towards wine. The statistical treatment of the data was put into effect with univariate and multivariate statistics. With regard to the latter we used a combination of principal axis factor analysis with hierarchical cluster analysis; the latter was applied to the factors obtained. In descriptive terms, one of the main results is that the supermarket in people of low educational level is the main mall to buy wine. The liquor store is more important as a place to sell boxed wine bottled wine. Another result is related to those reporting not drinking boxed wine (57.0%) while those reporting not drinking bottled wine only reaches 31.0%. Regarding segmentation, we identified four market segments. One representing 54% of the total sample and is characterized in that it is concentrated consumers purchase and consumption frequency weekly report having mostly between 24 and 50 years and there is a high frequency level consumers title superior. Another of these segments is characterized by collecting a higher percentage of people who report eating boxed wine. In the other segments of consumer's frequency bottled wine consuming state is greater than the declared with respect to boxed wine. Regarding attitudes towards wine, it appears that there is a segment that has a favorable attitude towards the bottled wine.

Keywords: wine, segmentation, low income

JEL-Code: M31

Consumers' Attitudes towards New Products derived from Wine Dealcoholisation

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The wine industry is facing changes both due to the economic trends, such as reduced sales for certain types of products, and structural, as consumption in traditional producer countries decreases. In a global context, characterized by increasingly competitive non-European companies and competition from alternative products such as beer and soft drinks, companies face the difficulty of capturing the market signals to address the supply. Wine demand is moving toward consumption patterns characterized by the pursuit of both healthier and more hedonistic lifestyles; moreover, public opinion is trending toward responsible consumption of alcoholic beverages because of public health recommendations and national campaigns against alcohol abuse. Market trends are predicted to change in the near future because, after the consumer orientation toward the demand of barrel-aged and well-structured high alcohol wines, a new enthusiasm toward light wines that are low in alcohol is arising. Moreover, for the past several years there has been a steady increase of the alcoholic degree of wines because of climate change and the southwards shift of grape varieties from cooler areas, resulting more frequently in grapes that are very rich in sugar.

This scenario could offer the opportunity of new markets for products derived from wine dealcoholisation while preserving the health-giving properties of the original product (phenolic compounds, anthocyanins). Technological innovation has developed many new solutions, some involving grape growing techniques and some involving dealcoholization processes or partial removal of alcohol. For some companies the adoption of such technologies offers opportunities to develop new products for both traditional and new wine consumers, new consumption contexts, and new market segments such as consumers who for dietary, cultural, religious, or professional reasons cannot or will not consume wine.

The reduction of alcohol is a technique for correcting wines that traditionally has been motivated by winemaking technologies. Recently, interest in the production of drinks made by partial or total reduction of alcohol content in wine has increased, generating a debate involving public institutions, national and international wine producers, and scientific institutions. The group of products resulting from the reduction or removal of alcohol from wine is very heterogeneous in terms of presentation and labeling in different markets because of the differences in regulations regarding the definition of wine, the classification of alcoholic products, and the minimum alcohol level. Some countries do have a specific regulation for dealcoholised products, and terms such as 'alcohol-free wine' and 'alcohol-reduced wine' are differently appraised.

In the European Union (EU), the process of dealcoholisation is regulated by the wine CMO (common market organization), Reg. (Ce) 606/2009, and it is legal as an oenological corrective practice for reducing alcohol by volume up to 2 percent without changing its sensory profile. Products from partial or total dealcoholisation with alcohol level below the minimum of 8.5 percent are not called 'wine' in EU countries, but as alcoholic or non-alcoholic beverages that include wine as an ingredient. Only in Germany and in Austria, which have specific national regulations, it is possible to produce and sell alcohol-free wines and

dealcoholised wines. In the International Organization of Vine and Wine (OIV), the debate about the definitions of wine based products resulted in two draft resolutions which define two categories: Dealcoholized Wine, with an alcoholic strength by volume below 0,5%, and Partially Dealcoholized Wine, with an alcoholic strength by volume between 0,5% and the minimum alcoholic strength of wine established in the national legislation of the producing country.

This paper is the first attempt to investigate the attitude of consumers towards new products resulting from the process of dealcoholization as low-alcohol wines (9-11%), partially dealcoholized wines (5-7%) and dealcoholized wines (<0.5%), together with other traditional attributes which are important in purchasing wine. For such purpose the Best-Worst method has been adopted. This approach has been already applied in other studies about wine and it is suitable for studying the acceptability of new combinations of attributes or new products.

The research has been carried out submitting a survey to a sample of potential consumers who could be the target for such new products as people who do not drink wine for health reasons or dietary issues, pregnant women, people who work as drivers or cannot drink for job reasons, athletes, or those who cannot take wine for religious reasons. The survey was carried out in a selected area of Southern Italy (Puglia Region) and different consumer targets were considered: generation Y women, people with health concerns, athletes, people professing religions that prohibit alcohol consumption, drivers.

The obtained results show that consumers included in the sample are traditionalist in choosing some wine attributes. In fact, bottled wines in different colors and sparkling wines are preferred instead of sweet, flavored and packaged in cans wines. As expected, considering the chosen target groups characteristics, the consumers assign a great importance to health issues when they make wine purchase decisions. In response to these concerns, organic certification has been evaluated as the most preferred wine attribute. Regarding the alcohol content, the obtained results are complex and require a more detailed discussion. The interviewed consumers have positively evaluated partially dealcoholized wine (5-7%) while dealcoholized wine (<0.5%), as well as wine with reduced alcohol content (9-11%), received a negative assessment. Nevertheless, some differences occur among target groups: in particular, Gen Y women, people with health concerns and people practicing sport give a moderate positive evaluation for dealcoholized wine (<0.5%) while wine with reduced alcohol content (9-11%) received a positive assessment only by regular consumers. A possible explanation of these results can be that consumers, including those who should moderate or eliminate alcohol consumption, consider alcohol as an essential component of wine; in other words, wine without alcohol is considered an unpleasant beverage. In this case, a moderate consumption (or not consumption) of wine with alcohol is preferred instead of dealcoholized wine. On the other hand, consumers consider alcohol as a component that negatively affects human health. Therefore, partially dealcoholized wine (5-7%) is preferred instead of wine with reduced alcohol content (9-11%) particularly by consumer's segments who should moderate or eliminate alcohol consumption. In conclusion, these results would suggest that partially dealcoholized wine (5-7%) could have better market perspective compared to dealcoholized wine (<0.5%). Nevertheless, it is important to take into account that this analysis has the limit of the low number of respondents and it is referred to a specific area, the south of Italy, where traditional wine consumption is strongly rooted. Therefore, this research would need a follow-up by extending investigation to other areas of Italy and of other countries. For this purpose, Best-Worst methodology seems to be easily applicable to measuring and comparing style preferences for wine in different geographical contexts. Results of the study could be of

interest for marketers and policy makers of wine industry. Managerial implications could refer to the importance of wine attributes in influencing consumer drinks purchasing and to the opportunity for producers in investing towards new wine based products. Market implications could refer to segments of consumers interested in such new products perceived not as substitute of traditional wines but as substitute of other beverages. They could have the opportunity of consuming a product that retains the color and aroma of wine, ensures the intake of phoenolic acids, flavonoids, tannins and resveratrol, and also limits calories and alcohol.

Keywords: Dealcoholized wine, Best-Worst

JEL-Code: Q110, D120, L660

Household Consumption of Alcoholic Beverages: Estimation of Price and Expenditure Elasticities using a Demand System Model.

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The demand for alcohol is influenced by many different factors. Price and income are the most important; however, alcohol consumption is also influenced by taxation, advertising restrictions, minimum age requirements, health concerns and household demographic and socioeconomic factors like education, marital status, household composition and so on.

There has been a few studies in few studies treating the demand for alcoholic beverages in Argentina as a complete system and the estimation of expenditures and price elasticities using a complete system of demand.

The objective of this works is to estimate expenditure and price elasticity in different beverages purchased by household in Argentina. Beverages include: wines, beer, spirits, and others. The method used to estimate elasticity's is a system of demand using the Almost Ideal Demand System proposed by Deaton and Muellbauer (1980). A two-stage estimation procedure proposed by Shonkwiler and Yen is used . Data are draw from the National Expenditure Household Survey 2004-05, with a total of 21080 observations.

Results show that expenditure has a significant influence in alcohol consumption and the expenditure elasticities in wines are close to the unit, meaning that an increase of 1% in expenditure, increase also 1% in quantity. Beer has expenditure elasticity higher than wine, 1.13 and spirits show and elasticity lower than 1. Sparkling wine has a negative expenditure elasticity, having wrong sign, and one reason could be that only 0,2% of the household report a positive compunction of this alcohol beverage in the sample used.

The own-price elasticities are significant and with the expected sign. The own-price elasticity in low-quality wine is more inelastic than in high-quality wine. Beer has own-price elasticity less than the unity. In general, the alcoholic beverages studied respond more to total expenditure than prices.

Demographic variables included in the model show an important impact in the demand by household.

Table 1. Expenditure and Price Elasticities.

	Expenditure Elasticity	Own Price Elasticity
Low Quality Wine	.991** (.0084)	-.6292** (.1198)
High Quality Wine	1.021** (.0040)	-1.02** (.0036)
Sparlkling wine	-1.671** (.0765)	-7.37 (.360)
Beer	1.136** (.0144)	-.797** (.028)
Spirits	.8385** (.0086)	-.9294** (.0287)
Others alcoholic	3.370 (.0680)	3.88** (3.45)

Keywords: Alcoholic beverages, Elasticities, Household Consumption

JEL Code: D110, C340

The Economics of Wine in Brazil

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The wine consumption in Brazil has sharply grown in the last two decades. An important part of this consumption is coming from imported wine, mostly from Argentina and Chile, economic partners of Brazil. Imported wines are flooding the domestic market at very competitive prices against to the national ones. Data from SECEX, from 1995 to 2012, show that the importation increased at the rate of 10.7% per year, on average. In 1995, the importation of wine was US$ 58.7 million and ended up in 2012 to US$ 298.6 million.

From the consumption side, recent data, 2008/09, are showing that families are spending on alcoholic beverage around BRL7.30 (US$3.80) per month, on average. Most is on beer, about BRL5.35 (US$2.79) per month, followed by wine consumption, about BRL1.10 (US$ 0.57), and has been increasing ever since. These figures either from demand or supply suggest that wine, imported or national, has become a very important product among the alcoholic beverages and deserves further investigation.

The main objective of this paper is to analyze the consumption of wine10 in the Brazilian market and its recent changes in supply and demand. To our best knowledge, the dynamics of the wine consumption has not been well documented in the literature. Our major hypothesis is that the recent rise in the family income, promoted by the stabilization plan in 1994 and cash transfer programs, is substantially driving up the domestic consumption in all levels of income. On the other hand, there is also another important effect caused by the valuation of national currency that is lessening the prices of imported wine and becoming the domestic wine less competitive in the domestic market. The empirical strategy is based on the estimation of an Almost Ideal Demand System (AIDS) and Vector Autoregressive (VAR) models. The paper is divided in two steps, the first is to analyze the domestic demand on consumption of wine against other beverages since 1995; and the second is to investigate the influence of the exchange rate on the importation of wines.

The data used in this study are from POF — Household Budget Surveys (1995/96, 2002/03 and 2008/09) executed by Brazilian Geography and Statistical Institute (IBGE, in Portuguese acronym) and the International Trade Secretary (SECEX, in Portuguese acronym). The POF covers a wide range of topics —household composition, health, education, income and expenditures — and compiles the data at the national level. SECEX covers data about all traded product for Brazil, including wine. The main variables include value and volume of import and export, origin and destination, country and economic block.

Preliminary results from the AIDS model show that the price elasticity of demand for wine is about 0.35, while the elasticities for other beverages is 0.89 and beer, 0.13. Regarding to the income elasticity we found 0.26 for wine, 0.17 for beer and 0.09 for other beverages. These results suggest that the income growth has more influenced the consumption of wine than other important beverages such as beer. To supply the domestic market, the process that drives the wine importation is not well known yet. As we showed, the importation of wine has been growing over the last decades under higher rates as is the consumption. To explain such

[10] The data for wine we refers include wine of fresh grapes and sparkling

behavior more deeply, we add to our initial hypotheses three other reasons. First, it may be due to the prices of imported wines that have been relatively low in the domestic market, which would be related to the exchange rate. Second, it is also possible that is, indeed, occurring changes in the consumption preferences of Brazilian consumers who could be putting more weight for the quality of the product instead of quantity and/or lower prices only.. Finally, this higher consumption may be also related to the income increases at real terms experienced in recent years motivated by stabilization of prices since 1994. The empirical strategy to corroborate these three hypotheses is based on a Structural VAR model. Under this approach it is possible to perform an analysis economically significant, by imposing a minimum number of restrictions that are consistent with a set of theoretical models to identify structural shocks, build impulse response functions and obtain the historical variance decomposition. The selected variables include the wine importation prices, the exchange rate and the national income and others. We will also test for the influence of some structural breaks in the Brazilian economy from 1995 to 2009. Our expected results (under investigation) intend to show that is the valuation of exchange rate the most important factor to explain the dynamics of growing wine importation in the recent years

Keywords: Brazilian market, demand, income, exchange rate

JEL Code: D12, Q11, C30, C22

Hedonic Prices for Rosé Wines in Italian Supermarkets

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The rosé wine market has increased in the last decade. In 2010, the rosé wines were about 8,5% of total world wine production (Fregoni, 2010). Europe produces about 3/4 of world production, mostly concentrated in France (30%), (21%) and Spain (18%); the Americas produces about the 23% of world production, especially in United States (18%).

The rosé wine production has been driven by a strong increase in consumption. Actually, the consumption of rosé wine is lower than other wines; notwithstanding, this market segment has reported a strong consumption growth at both Italian and international level.

At the end of 2000s, Italian sales of rosé wines grew by 6% in value and 5% in volume. An increase in quality of rosé wines has also been reported (Ismea, 2008) because of a shift from table to denomination of origin wines.

A survey carried out on Veneto Region (Boatto and Galletto, 2011) has depicted the shape of rosé wine consumer showing that the knowledge is fairly good (about 50% of people) often linked to some local or traditional sparkling rosé wines (eg. Rabosello, Lambrusco), the image of this wine is being young and appreciated by young people, the consumption is seasonal or occasional and mostly people drink rosé wine at home.

The increase in consumption has been accomplished by a greater self space devoted to rosè wines in supermarkets. Actually, the consumption growth of rosè wines attracts retailers which are looking for high turnover products, i.e., rosé wines are replacing many red or white wines which sales are weak. Accordingly, strategies for rosè wines have been extended to a wide variety of attributes (quality, origin, bottle, label, etc.) generating a large price range.

This paper presents results from a hedonic price analysis aimed to analyze factors affecting the mechanism of price fixing for rosé wines in Italian supermarkets. A large literature using hedonic price functions to estimate the relationship between price and wine attributes generally supports the idea that the price is affected by characteristics that are available to consumers before purchasing (Nerlove 1995; Landon and Smith 1997; Combris et al. 2000; Angulo et. al., 2000; Oczkowski, 2001; Schamel and Anderson 2003; Lecocq and Visser, 2006; Couto and Rodrigues, 2007; Almenberg J. and Dreber A., 2011).

So far, few studies have been focused on specific market segments such as rosé wines. However, hedonic price analysis is focused on marketing strategies adopted by producers without considering any consumer decision process about price and/or quality (Aubert and Meurio, 2009; Chironi and Ingrassia, 2009).

Methodologically, a survey has been carried out on retailers by collecting data about point of sale features, wine quality (grape variety, blend, vintage, regional origin, types, sugar content, alcohol content) packaging (bottle, tap, glass, label and back label), price, brand, price promotion strategies and visual merchandising (display, facing). An hedonic price analysis (using the natural log of price as dependent variable) has been carried out on 935 records by assessing four different models (all, still, semi-sparkling and sparkling wines). A preliminary analysis on data has shown a wide variability of prices going from over 50 Euros of

rosé Champagne to 2-3 euros of table rosé while correlation has allowed to focus attention on discriminating variables and to exclude not significant variables and outliers.

Results shows that retail prices are affected by the point of sale (big supermarkets vs. discount or small ones), certification of origin (denomination of origin vs. table wines), type of wine (still vs. sparkling), sugar content (brut vs. extra dry), alcohol content (with a maximum for medium level) packaging (bottle vs. bag in box; dark glass vs. light one), blend (blend wines vs. no blend ones), price promotion, shelf strategies (position on the shelf, facing). However, the analysis do not show significant price effects between domestic and international wines while the brand effect cannot be recognized because of scarce observations, i.e., dispersion among many brands.

Most of the previous variables show significant effects also in the sub-models such as still and sparkling ones.

Keywords: rosé wine, hedonic price, quality, extrinsic cues.

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Friday September 6th, 2013

14:30 – 16:00

SESSION 7

MODELLING

Alternative Measures of Technical Efficiency and Unobserved Heterogeneity: Evidence from a Cross Section of Chilean Wine Grape Producers

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This paper extends previous work focusing on the analysis of technical efficiency (TE) for a sample of Chilean wine grape producers. We estimate a series of commonly-used panel data (repeated cross sections over time) models using a dataset which contains repeated cross sections over space (multi-block observations for individual farms). The results show that when the individual blocks are treated as independent, the average estimated TE scores are lower than those estimated when it is recognized that the blocks belong to a particular farm and that central (farm-level) management influences block-level production. This points to the importance of accounting for unobserved heterogeneity using panel data specifications. Regional location was also found to matter for grape production. Moreover, agro-climatic conditions were also found to be highly influential on production levels where grape farms located on cooler zones produce significantly less than their counterparts in warmer zones. Overall, our estimations show the importance of accounting for both farm heterogeneity and agro-climatic conditions when analyzing TE in grape production.

Keywords: Fixed and Random Effects, Stochastic Frontiers, Cross Sectional Data, Technical Efficiency, Unobserved Heterogeneity, Wine Grapes, Chile

Influence de l'ouverture au changement et le dépassement de soi sur le consentement à payer dans le cas du vin biologique

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La littérature reconnait deux grands arguments individuels pour l'achat des produits biologiques : premièrement, la santé y compris l'aspect de salubrité et nutritionnel ; deuxièmement, des aspects liés au goût naturel des produits à causes de leurs qualités organoleptiques (saveur naturelle, sans arômes et /ou colorants artificiels et sans additifs) (Stolz, Stolze, Janssen, & Hamm, 2011). D'autre part, on trouve aussi que les consommateurs réguliers des produits biologiques ont des motivations environnementales et sociétales, contrairement aux consommateurs irréguliers seraient surtout attirés par des motivations individuelles (Shaw Hughner, McDonagh, Prothero, Shultz, & Stanton, 2007; Torjusen, Sangstad, Jensen, & Kjaernes, 2004).

Inutile de rappeler l'importance des attributs organoleptiques associés à la consommation du vin. Pour cette raison le vin biologique est un cas très particulier, d'abord parce que les consommateurs les perçoivent comme des vins à mauvais goût donc moins de plaisir (Remaud & Sirieix, 2012), et deuxièmement parce que le vin biologique, malgré être issu de l'agriculture biologique, reste une boisson alcoolisée, pourtant pas bonne pour la santé. Même s'ils existent des opinions favorables à sa consommation, en quantités modérées, pour la santé, notamment à niveau cardiovasculaire (« the french paradoxe ») (Broustet, 2006). Cependant, il faut dire aussi dire qu'il y a des consommateurs de produits biologiques qui ne consomment pas du vin biologique justement à cause de sa composition alcoolisée (Cerda Urrutia, Torres M., & García P., 2010).

Etant donné que le vin est un produit lié au terroir, la nature, la tradition, nous considérons que les motivations du consommateur à acheter et, d'ailleurs, à payer plus pour un vin biologique ne correspondent pas aux motivations de santé des produits biologiques typiques, ni aux motivations gustatives des vins conventionnels, cela nous amène à penser que se con d'autre type de motivations qui déclencheraient leur achat et consentement à payer plus.

Objectifs et hypothèses

Ainsi donc, pour essayer de répondre au pourquoi un consommateurs serait prêt à payer pour un vin biologique, nous prenons la théorie des valeurs de (Schwartz & Bilsky, 1993) comme un point de référence, largement mobilisée dans l'étude de la consommation des ressources naturels, énergies renouvelables et la consommation des produits biologiques. Dans la littérature sur la consommation des produits biologiques, on trouve que pour certains auteurs ce sont les motivations individualistes plus fortes que les motivations altruistes ou collectivistes (Aertsens & Verbeke, 2009), cependant il y a une autre point de vue qui explique que les consommateurs commenceraient à consommer des produits biologiques d'abord à cause des motivations altruistes et ensuite ils adaptent leurs goûts individuels (Thøgersen, 2011). Dans notre travail nous considérons que si les motivations individuelles liées aux propriétés bienfaisantes des produits biologiques typiques ne sont pas complètement présents dans le cas du vin, et d'autre part les qualités organoleptiques d'un vin conventionnel ne sont pas non plus évidents, cela pourrait indiquer une prédominance des motivations sociétales, dans le cas du vin biologique.

Nous envisageons d'analyser l'influence des valeurs personnelles de l'individu sur sa disposition à payer pour un vin biologique. Mais, nous regardons davantage, l'ouverture au changement et la capacité de dépassement de soi de l'individu, pour éviter la dichotomie altruisme-individualisme. De cette manière nous envisageons construire un profil individuel à deux axes : ouverture et dépassement, en prenant les deux grandes dimensions qui organisent la structure des valeurs de Schwartz (2006). Ainsi, la première dimension oppose l'ouverture au changement (liées à l'autonomie et la recherche de stimulation et l'hédonisme) à la continuité (liée aux valeurs telles que la sécurité, la tradition et la conformité). La deuxième grande dimension oppose l'affirmation de soi (la recherche du pouvoir et la réussite personnelle) au dépassement de soi (basées sur la quête de valeurs telles que la bienveillance et l'universalisme).

Notre travail a deux objectifs, (a) établir le lien entre le profil de l'individu (ouverture au changement - dépassement de soi) et leur disposition à payer pour un vin biologique, et (b) dévoiler la perception et motivations pour acheter un vin biologique, mais surtout la potentielle influence du mindset[11] (abstract vs concret) du consommateur sur leur perception. Pour cela, dans une première partie nous avons conduit un questionnaire avec la technique d'association libre des mots, tenant comme premier stimulus le mot « citoyen » et comme deuxième stimulus le mot « consommateur ». Pour le traitement nous avons codifié et regroupé les mots afin d'établir des profils individuels, et de construire des indicateurs d'ouverture au changement et du dépassement de soi qu'ensuite nous avons utilisé pour construire un modèle logit-probit en prenant la déclaration de consentir à payer plus pour un vin biologique comme variable dépendante et les indices d'ouverture et dépassement comme des variables indépendantes.

Dans une deuxième partie, nous présenterons les profils des consommateurs des vins biologiques et vins conventionnels, qui ont été obtenus par la technique de « shoping liste » de Haire, en montrant les arguments à faveur et en contre d'acheter un vin biologique à partir d'une analyse sémantique et en le contrastant avec la classification des valeurs universelles de la personne de Schwartz (2006), et en associant chaque expression ou mot énoncé à un type de valeur de la personne. Pour tester l'influence du mindset de la personne sur leur perception, nous avons divisé notre échantillon en deux : pour le premier sous-échantillon nous avons demandé aux participants de fermer les yeux et d'imaginer ce qui pour eux serait un « bon vin » (mindset abstrait) ; pour le deuxième sous-échantillon nous avons demandé aux participants de fermer les yeux et d'imaginer une situation concrète de consommation du vin « une réunion entre amis et collègues » (mindset concret).

Dans cet ordre d'idées nous avons considéré les hypothèses suivantes : Pour la première partie, (H1) l'ouverture au changement et le dépassement de soi influencent positivement le consentement à payer pour des vins biologiques ; pour la deuxième partie (H2) la perception des listes sont influencées par le stimulus (abstrait= « bon vin » ; concret= « réunion entre amis »).

Résultats

Pour l'instant les résultats sont encore en cours d'être analysés. Ci-dessous, nous présentons un avancement de premières découvertes.

[11] En psychologie sociale, un *mindset* (état d'esprit) peut être définit comme un ensemble de processus cognitifs et des critères de jugement qui, une fois activés, peut influencer des décisions et des tâches non liées (Gollwitzer, 1990).

Première partie : représentation social et profil des répondants

Pour la première question ayant le mot « citoyen » comme stimulus montre une perception fortement positive, ainsi nous avons obtenu un indice de polarité de 0,875, ce qui est cohérent avec l'indice de neutralité de -0,475, qui montre une faible neutralité, ce mot est associé à des expressions comme droit, devoir, ordre, République. Contrairement, le couple de mots « consommateur-client » obtient un indice de polarité négative (-0.112), ce qui montre une connotation négative associée notamment à des expressions comme le marché, le système capitaliste, etc.

Pour calculer nos estimateurs nous avons choisi deux modèles : logit et probit, où la variable dépendante est le consentement à payer déclaratif (l'intention comportementale) dichotomique (oui=1 ; non=0) et nous incluons comme des variables « dummy » (ouverture ou changement, continuité, dépassement de soi et affirmation de soi).

$$P(CAP_i = 1) = \beta_0 + \beta_1 Dco_i + \beta_2 Dch_i + \beta_3 Daf_i + \beta_4 Dde_i + \beta 4 Dco2_i + \beta_5 Dch2_i + \beta_6 Daf2_i + \beta_7 \text{Activite}_i + \beta_8 \text{Etudes}_i + \beta_9 \text{FPbio}_i + \beta_{10} \log\ (Revenu) + \mathcal{E}$$

Les résultats obtenus avec le modèle Logit montrent que les variables explicatives dans son ensemble sont significatives pour expliquer le CAP du consommateur. Le test de Wald nous a permis de rejeter l'hypothèse nulle H0 : tous les coefficients sont égaux à zéro. Individuellement nous trouvons significatif les coefficients suivantes : Daf (p-value=0.0054), Dde (p-value=0.0525), Activite (p-value=0.0745), Etudes (p-value=0.0227), F_Pbio (p-value=2.30e-05). Les deux modèles (logit et probit) montrent un pseudo-R de McFadden au-dessus de 0.22, ce qu'indique un bon ajustement des modèles.

Deuxième partie : perception et représentation de la consommation de vin biologique

Nous avons trouvé que la Liste 1 avec du « vin conventionnel » est fortement et positivement appréciée (IP=0,451) ce qui est cohérent avec son faible niveau de neutralité (IN=-0,188). De l'autre coté, la Liste 2 avec le « vin biologique » est aussi connotée positivement, mais avec un indice de polarité plus bas (IP=0,142) et une plus forte neutralité négative (IN=-0,554) ce qui rendre contradictoires les résultats.

Le shoping liste 1 avec du « vin » est mieux appréciée par rapport à celle avec du « vin biologique ». Les mots énoncés pour le shoping liste avec du « vin » conventionnel nous rendent une image associée à la simplicité, la tradition et du bon vivant. Dans le ca du shoping liste avec du « vin biologique » qui nous présente une image liée à l'écologisme, d'un consommateur aisé, étrangeté-curiosité et dans moindre mesure de santé.

Nous ne trouvons pas de différences par rapport à la façon de présenter la question (abstraite ou concrète) dans le cas du shoping liste 1 « vin ». Contrairement, le shoping liste 2 contenants du « vin biologique » montre au moins une catégorie différente. Après tester les catégories individuellement nous trouvons que « jeune » est la catégorie que présente plus de différences, ce qui pourrait indiquer que les répondants considèrent que la liste 2 avait été rédigée par un jeune. Finalement, on a trouvé aussi des différences dans la catégorie « Autres ».

Keywords: comportement du consommateur, vin biologique, consentement à payer, théorie de valeurs, mindset theory, techniques projectives

JEL Code: D030, M300

Wine Grape Price Variability as an Indicator of Fruit Quality: Evidence from a Sample of Chilean Vineyards

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Abstract:

The determination of the factors that influence wine grape quality is an important concern for vineyard managers seeking to maximize the success of their operations. In this paper we argue that grape quality is reflected in the market price paid by wineries to farmers and can be explained by various vineyard production factors, as well as certain unobserved vineyard characteristics or heterogeneity, sometimes referred to as the terroir. The objective of this study is to quantify the relative importance of alternative production factors that significantly influence wine grape quality and thus prices. Because these factors are subject to managerial control, their identification can provide important insights for vineyard operators.

Cross-sectional data by vineyard blocks collected for the 2008 growing season are used in the analysis. A total of 103 block-level observations are included in the dataset coming from a total of 27 vineyards in 11 producing regions (valleys) in Chile. Observable production factors include vineyard size, type of grape, planting characteristics, vine training system, irrigation, pruning systems, labor, machinery, chemical and overhead costs, as well as geographical location.

The analysis is done using two estimating procedures, a standard OLS model and a Tobit model, and two functional forms, linear and Cobb-Douglass, resulting in a total of four sets of estimates. Tobit estimation is used in order limit the distribution of wine grape quality to non-negative values; specifically it is truncated at a lower-bound of $0. Both models indicate that the parameters associated with several of the variables are statistical significant significance. In particular, the parameters for labor, yield, plant density, irrigation and grape color are statistically significant and exhibit the expected sign. However, as might be expected, some of the results are sensitive to model specification and estimation approach. The results are generally consistent with the literature and thus provide additional relevant information to the field of vineyard management.

Keywords: wine grape prices, Chile, vineyard management, regression analysis

Is Gravity Pushing Argentinean Wine Exports? A Gravity Model Applied to Argentinean Export

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The Argentinean wine industry has incredibly grown in the last decade mainly driven by the the expansion of international trade. Total exports have increased fourfold in the last 6 years, accounting for more than 723 million dollars in 2011. The average price has shown the same trend, increasing year by year as the recognition of wine quality has increased. The number of export wineries has more than tripled, increasing from 139 in 2003 to more than 380 in 2009 and the share of exports over total sales rises up to 90% in some cases.

The destination of these increasing wine exports has changed, even if concentration is still the main descriptive characteristic. North America and Europe account for more than 75% of all wine exports, the United States being the most dynamic and important market. Latin-American countries and Asian countries are increasing their participation, showing great dynamism in the last years. The intense competition of the world wine industry defines the need for a better understanding of the elements influencing exports.

Through a gravity model, originally proposed by Tinbergen (1962) and based on the use of proxies of trade costs, we have analyzed the impact of distance, gross domestic product, domestic wine production, tariff barriers and common language on export value. By selecting a representative sample of countries we intend to include all possible market differences. The selected countries were: the United States and Canada for North America; the United Kingdom, Germany, France, Italy and Spain for Europe; Brasil, Paraguay Chile for Latin-America; and Japan, China and Australia for Asia-Oceania.

Results indicate that the greatest impact on trade corresponds to variations in tariff barriers, even if this proxy has been largely ignored in gravity model literature. According to our estimations, a 1% increase in tarrif barriers could define a reduction of imports of 3,1%. In an scenario of worldwide tariff barrier elimination our model estimates that Argentinean exports could raise up to 11,3%. The impact of gross margin product was found to be positive, with an elasticity of 1,41 on Argentinean exports. The effect of distance was, as expected, negative with an elasticity of 1,41. In terms of domestic production, we found that a 1% increase in production in one of the selected countries lead to a 0,57% reduction of Argentinean exports to this country. The search for diversity among consumers and export oriented wine industries can possible explain this phenomenon. Surprinsingly, specially in terms of marketing, coefficientes for common language were not significantly different from zero.

Overall, our results suggest that international negotiations over tariff barriers can be central for the growth of world wine trade. Even if we could not assess in this research non tariff barriers, we expect similar or stronger results.

Análisis de la competitividad relativa de la vitivinicultura Argentina y Chilena

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Abstract

Los conceptos de ventajas comparativas, que los economistas clásicos asociaban en un sentido mas estático a la riqueza de recursos naturales de un determinado país; y el de las ventajas competitivas, que a partir de los estudios de Michael Porter es utilizado como una expresión mas dinámica del flujo de bienes y servicios entre países que comercian entre sí, son utilizados para evaluar el desempeño de las exportaciones vitivinícolas de Argentina y Chile en el marco del contexto actual del comercio global de vinos embotellados. Concretamente las ventajas comparativas de un país respecto de otro quedan por definición expresadas por un concepto relativo, y pueden calcularse como el cociente entre los costos de producción, servicios vinculados a la exportación, transporte interno e internacional, y seguros; que una empresa exportadora deberá incurrir, en comparación con su competidora, para colocar un determinado producto en condiciones CIF, en el país de destino.

Con el avance de la globalización del negocio del vino se escucha hablar cada vez más frecuentemente de la competitividad de la empresa o del sector vitivinícola, frente al resto de los sectores de la economía nacional o frente al mismo sector de otro país. Así, por ejemplo, en los dos últimos años y debido al impacto creciente que la inflación está teniendo sobre los costos internos, se ha instalado en el ámbito vitivinícola argentino una permanente discusión acerca de la pérdida de competitividad, tanto de la empresa como del sector vitivinícola en su conjunto.

Dada la importancia que tiene mantener la competitividad de dicho sector para que sea sustentable en el largo plazo, se hace cada vez más imprescindible analizar con minuciosa rigurosidad los costos de producción propios de la empresa, como así también los factores ajenos a la misma que afectan su rentabilidad. Estos últimos, por lo general vinculados a la política macroeconómica incluyen entre otros, el balance fiscal, la emisión monetaria, la fijación del tipo de cambio, o el clima general de negocios que caracteriza el entorno socioeconómico de la empresa.

El problema de la falta de competitividad actual de la vitivinicultura argentina es mucho más complejo y en consecuencia su solución requiere de un conjunto de medidas complementarias, para que gradualmente la empresa exportadora recupere su rentabilidad y el sector vitivinícola en su conjunto retome el crecimiento sostenido de las exportaciones en sus distintas modalidades.

El presente trabajo parte del concepto de Ventajas Comparativas, tal como fue definido con anterioridad, desagregándose luego los costos de manera tal de poder visualizar el impacto de la inflación sobre el tipo de cambio real y la rentabilidad de la empresa exportadora.

Posteriormente se analiza la importancia que tiene la inversión en I&D + i en la diferenciación de producto y la internacionalización de la empresa vitivinícola, con la recomendación de que dicha acción se incorpore a su estrategia exportadora como un instrumento que le permita desarrollar ventajas competitivas.

La investigación y desarrollo tecnológico, y la innovación, podrán orientarse a aumentar la productividad, con la consecuente reducción de los costos de producción, o a la mejora continua de la calidad del producto, dando así sustento a un incremento de sus precios de venta. Para hacer referencia a un caso concreto de interés sectorial, se presentan brevemente los resultados del ***programa de selección clonal del cultivar Malbec*** *desarrollado durante los últimos 12 años por la bodega familiar Tempus Alba.*

Finalmente se analizan dos casos en los cuales mediante la utilización de argumentos ambientales es posible justificar la ***aplicación de una normativa ambiental común (NAC)*** *referida a la* ***huella hídrica*** *por ejemplo, o desvirtuar las implicancias de la* ***huella de carbono****, cuando la misma se convierte en* ***una medida para-arancelaria*** *que restringe el libre comercio, al penalizar la exportación de vinos embotellados de los países del Hemisferio Sur. Se demuestra como, para el caso concreto de las exportaciones de Chile y Argentina, ambos países pueden beneficiarse en el primer caso y verse perjudicados en el segundo.*

Respecto de los resultados numéricos del trabajo, se demuestra que la rentabilidad negativa de la exportación de vinos argentinos, no es un caso hipotético sino real, y que se viene dando en los últimos dos años con los vinos embotellados argentinos, especialmente aquellos que se exportan a menos de u$s 36 la caja de 9 litros. Según las estadísticas oficiales de exportación, en ese rango de precios, el año 2012 cerró con una caída de las exportaciones del orden de un millón de cajas de 9 litros. Estos datos numéricos son compatibles con los resultados de un análisis econométrico realizado por el autor para el año 2011 y su proyección al 2012, y que se resumen a continuación:

Εp = - 1,50
ΕI = 0,38

Εpch = 0,55 *Sustitución a nivel marca, al incrementar el precio promedio de exportación de los vinos embotellados chilenos un 1%, las exportaciones de vino embotellado argentino crecerán 0,55%.*

Εexpo de Chile= 0,32 *Complementariedad a nivel país, al aumentar las exportaciones promedio en volumen de los vinos embotellados chilenos un 1%, las ventas de vinos embotellados argentinos al exterior crecerán un 0,32%.*

De estos resultados se deduce el carácter de sustitutos (Εpch=0,55) que tienen los vinos argentinos y chilenos cuando ambos compiten por marcas y por precios, y por otra parte el carácter de bienes complementarios (Εexpo de Chile=0,32) cuando en conjunto compiten con las exportaciones del Viejo Mundo. Esto último abre un espacio de cooperación para la realización de actividades de promoción conjunta que no siempre es bien aprovechado por las empresas exportadoras de ambos países y que es un campo de trabajo propio del ámbito académico que debería involucrar fundamentalmente a las universidades, centros de investigación o foros de discusión como el de hoy.

The Moderate Effect of Wine Knowledge and Involvement on Consumer Self-Confidence and Loyalty Intentions: The Case of the Use of a SST in Supermarkets

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More than 70% of the off-trade wine distribution in France is done through supermarkets, where there is a large offer and the service level to help the consumer choose wine is limited. This situation results in the fact that very often the consumer is alone to purchase wine and has difficulty to choose efficiently wine that will respond to his/her needs such as food and wine matching, budget... For many consumers, buying a bottle of wine in a supermarket is a difficult task. Barber, Almanza and Dodd (2008) examine how involvement and consumer self-confidence have an impact on wine purchasing via information cues described on packaging. They found that consumers don't use the same information if they are more or less involved and self-confident. Varietal and vintage are used by involved and self-confident consumers, price and advice by the other. In this paper, we want to study the moderate effect of wine knowledge and involvement on consumer self-confidence and loyalty intentions. Data are collected through a survey addressed to wine consumers purchasing wine in a supermarket in France, where an interactive wine selection Self-Service Technology (SST) has been implemented.

Self-Service Technology (SST) is defined as technological interfaces enabling customers to use a service independent of direct service-employee involvement (Meuter *et al.*, 2000). Service companies have shown an interest in customer participation in self-service activities. This interest is driven by both economic and marketing considerations. Cermak *et al.* (1994) found that the customer willingness to participate in self-service activities has a positive impact on satisfaction, perceived quality and repurchase intention (Marzocchi and Zammit, 2006). People who have a lifestyle interest in wine, want to learn about wine (Lockshin and Hall, 2003) and enjoys for that. **Wine knowledge** refers to product knowledge which has 2 dimensions (Brucks, 1985): objective knowledge (products attributes, uses of the products...) and subjective knowledge (consumer's own assessment of their knowledge). **Involvement** is defined as an enduring level of personal importance and interest evoked by a product of a product category (Zaichowsky, 1994). Higher involved consumers utilise more information and are interested in learning more, while low involved consumers tend to simplify their choices and use risk reduction strategies (Lockshin, 2003). Low involved consumers rely more on well-known brands and lower prices, while high involved consumers use region and middle range prices to select their wines (Lockshin, 2003). Analyses of consumer behaviour associate **Consumer Self-Confidence** (CSC) with peoples' perceptions of their product knowledge (Bearden, Hardesty, and Rose, 2001). The literature is divided on whether CSC, generally defined, encourages or inhibits consumers to acquire information; yet, this act has been hypothesized as a key predictor of high-quality decisions, and, presumably, positive marketplace experiences (Loibl et al., 2009). The growth and profitability of a retailer depend on its capacity to acquire new customers but also to develop loyalty (Reicheld and Schefter, 2000). Customer loyalty is "a deeply held commitment to rebuy or repatronize a preferred

product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour" (Oliver, 1997, p. 392). In this article, we focus on **customer loyalty intentions**, which is defined as "an individual's intention to recommend a retailer, visit that retailer' shop, and purchase from it in the future" (Mathwick, 2002).

In order to test the relationships between the variables presented above, data were collected in a French supermarket who has implemented a self-service technology (called “Max le sommelier”). helping wine consumers purchasing wine. Each consumer enters criteria such as the meal, the price and the type of wine and “Max le sommelier” selects 3 wines with their location in the shelves. 470 respondents filled out our questionnaire (36% were men, 32% were under 40 years old). The questionnaire includes a measure of subjective knowledge based on Bruck (1985), involvement based on the Personal Involvement Inventory (Zaichkowsky, 1994), consumer self-confidence based on Bearden et al. (2001) and a measure of loyalty intentions adapted from Mathwick (2002).

In order to analyze the multivariate effect of subjective knowledge, wine involvement, the SST use (Max User) on consumer self-confidence and loyalty intentions (using MANOVA), we carried out M of BOX that verify the homogeneity assumption of covariance matrix of dependant variable (M=111.744; P=0.178). Multivariate tests of significance using Wilks’ lambda are significant at the 0.05 level only for subjective knowledge (Lambda 0.932; F=10.963; P=0.000) and involvement (Lambda 0.937; F=10.090; P=0.000). The Levene’s test of equality of error variance indicates that the homogeneity assumption was met for loyalty (Levene 0.773; P=0.708) and consumer self-confidence (Levene 1.674; P=0.050). The results revealed a main effect of subjective knowledge (F=20.589; P=0.000) on consumer self-confidence. The more the subjective knowledge of the customer is high, the more the customer will be self-confident in his/her choice. Wine involvement has a positive effect on consumer self-confidence (F=10.663; P=0.000) and loyalty intentions (F=16.440; P=0.000). The more the consumer is involved in wine, the more he/she will be self-confident in his/her wine choice and the more his/her loyalty intentions will be high.

Subjective knowledge with SST use (Max user) have an effect on consumer self-confidence (F 4.150; P=0.020). If the subjective knowledge of the consumer is high, he/she will be more self-confident in his/her wine choice if he/she uses the SST. On the other hand, if the consumer subjective knowledge is low, he/she will be less confident in his/her wine choice if he/she uses the SST (figure 1). This result means this SST should not be recommended by wine consumers with low subjective knowledge (novice consumers). Indeed, novice wine consumers who were interviewed mentioned the importance of the reliability of the SST in order to feel confident by using this tool.

In our study, we demonstrate the moderating effect of subjective knowledge and involvement on consumer self-confidence. These results are consistent with Barber, Taylor and Dodd (2009). However, the use of the SST by novice consumers contributes to decrease their self-confidence. Indeed, because of the complexity of the choice for wine, novice consumers may not be ready yet to use such a technology and prefer human contact. However, this research doesn't evaluate the performance of SST in terms of cognitive effort and resources needed, interactivity, comparative information. Also, this research doesn't take into account personal’s tendency to adopt new technologies. These are avenues for future research.

Keywords: wine knowledge, wine involvement, consumer self-confidence, loyalty, self-service technologies, retail

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Friday September 6th, 2013

16:30 – 18:00

SESSION 8

PRODUCTION

Organic Viticulture in the Czech Republic

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Organic farming is based on perfect knowledge of the needs of plants, animals and landscapes. The aim of organic farmer's effort is to produce, but in a sustainable way, which promotes diversity and sustainability of the cultural landscape.

There were 37.2 million hectares of organic agricultural land in 2011 in the world. The regions with the largest areas of organic agricultural land are Oceania (12.2 million hectares), Europe (9.3 million hectares), and Latin America (8.6 million hectares). The countries with the most organic agricultural land are Australia, Argentina, and the United States. Currently 0.9 percent of the world's agricultural land is organic. However, some countries reach far higher shares: Falkland Islands (35.7 percent), Liechtenstein (26.9 percent), and Austria (18.5 percent). There were 1.8 million producers of organic products in 2009, there was an increase by 31 percent since 2008, mainly due to a large increase of organic farming in India. Czech Republic has lived to see the popularity of organic farming at the beginning of 21st century. It started to develop after 1989 and is becoming more and more popular. After a strong increase in organic food market in 2005-2008 occurred stagnation in recent years. The main reason for stagnation in retail turnover in 2010 was the reduction of organic food prices throughout the lower raw material prices and lower customer demand during the economic crisis. In 2011 and 2012 is expected to moderate growth in consumption. The total turnover of organic food of Czech entities in 2010 amounted to around 2.1 billion. The total area of agricultural land in the CR is according to the CSO 3.55 million hectares. Regarding the area of land cultivated in ecologically friendly manner, the total area of organically farmed area increased to a total of 482,984 hectares, representing almost 12% of the total agricultural area of the CR. The share of organic farming areas in the Czech Republic ranks among the leading countries in the world. In the Czech Republic, 3920 organic farms dealt with organic farming and organic production by the end of 2011 (recently joined the 579 organic farms, 175 ended its activities). Over 12% of agricultural entrepreneurs in the country farmed using organic method. The number of producers of organic food is slightly increasing. At the end of 2011, there were 422 registered organic food producers, compared to the end of 2010, when there were 404 registered manufacturers. Their number rose by 4.5%. During the year 2011 began with the production 73 new organic food companies, 55 ended its activities.

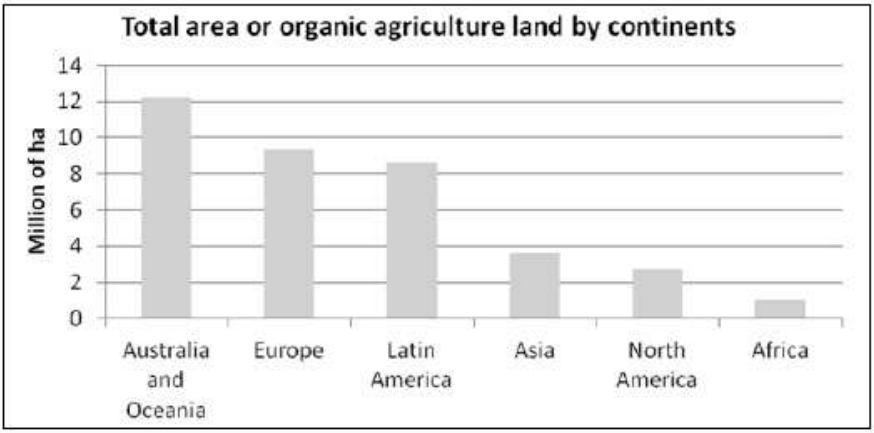

Fig. 1 Total area of organic agriculture land by continents

Source: own elaboration based on: Thermogroup. Promotional products: ODM group [online]. Promotional Bottle Neckersideal for GWP Promos, 2012 [cit. 2012-04-23]. Available from: http://theodmgroup.com/2011/04/08/promotional-bottle-neckers-ideal-for-gwp-promos/

"Biowine" (or organic wine) belongs to the system of organic farming, where currently 450.000 hectares are cultivated – which represents 10.5 % from the total agricultural area in the Czech Republic. Czech Republic is from this point of view above the European average. It means about 3500 agricultural companies of different sizes. There exist some small eco-farms which has the area e.g. 5 hectares, or former cooperative farms or state farms with the area more than 1000 hectares on one subject. Czech Republic has the leading position in organic farming among new members of EU. The number of winegrowers which entered the organic farming has increased in the recent 2 years and it is supposed this growth will continue. The reason of this interest, are vacant vineyards on the organic-wine market and the possibility to export.

Tab. 1 Trend in organic vineyard area in the Czech Republic

Trend in organic vineyard area in the years 2010-2015 (in hectares) in the Czech Republic							
Years	**2007**	**2008**	**2009**	**2010**	**2011**	**2013**	**2015**
Total area	245	408	645	1100	1300	1500	1700

Source: Ústřední kontrolní a zkušební ústav zemědělský

Keywords: organic production, organic viticulture, branch environment, macro environment

The Standing Committee on Organic farming has agreed on new rules for labeling bottles containing wine from organically grown grapes. From the harvest in 2012, growers are able to mark a bottle as 'organic wine'. The European Commission also approved 30 certification agencies worldwide to work under this equivalence with the EU regulation.

Czech organic wines have much to offer to consumers. They have received many prestigious awards at international competitions but the foreknowledge of customers is very low and organic wine is drunk mostly by regular consumers. The popularity of organic wine is expected to grow mainly on foreign markets.

Intangible Assets as a Driver of Growth: The Case of the Chilean Wine Industry

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The Chilean wine industry has experienced an spectacular growth in the last decades and emerged as a significant player in international markets. While in 1997 the industry exported USD 393 million of bottled wine, by 2012 exports reached USD 1.35 billion, both expressed in real (December 2012) values. This growth is the result of an increasing recognition of the quality of Chilean wine, which has contributed to a greater market share in international markets. The industry has responded by investing in new plantations and technology. The area planted more than doubled from 1997 through 2012, from 64 to 130 thousand hectares, a change that has been accompanied by the introduction of modern technology in the wineries, and joint private and public investment in the promotion of Chilean wine in international markets. Among the many changes that have occurred, the increased presence in global competitive markets and the need for specific marketing identity have motivated the industry to invest in more sophisticated management tools (e.g. software and computerized systems) and brand equity, two intangible assets of growing importance for the industry.

This research quantifies the relative importance of computerized systems and brand equity in the growth of the Chilean wine industry. The period of analysis is 1997 through 2012. Time series data were compiled on exports of bottled wine and area planted, a proxy for investment in physical assets in the industry. These series were complemented with an enterprise survey carried out in January-April 2013 on a random sample of the industry that allowed estimation of the equity accumulated in trademarks and software in each of the years of the period of analysis. A Cobb Douglas production function was estimated to decompose the contribution to growth of three explanatory variables: area planted (our proxy for investment in physical capital), brand equity, and software and computerized systems. Our findings highlight the importance of investing in intangibles.

Análise Histórica da Indústria Vitivinícola no sul do Brasil: um olhar à luz da Nova Economia Institucional à Teoria dos Jogos

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A ideia principal deste artigo é apresentar os elementos formadores da indústria vitivinícola do sul do Brasil, em especial no estado do Rio Grande do Sul (RS), a partir de uma discussão institucional, historicamente localizada entre 1875 a 1930, a partir da chegada dos primeiros imigrantes italianos no RS. O objetivo é apresentar a importância de aspectos institucionais e históricos como elementos explicativos tanto da formação das firmas vitivinícolas na região, quanto da coordenação de decisões no sistema econômico da época (que influencia a coordenação das atividades empresariais do setor até os dias de hoje). Para tanto, percorreu-se o caminho histórico do início da imigração italiana, marco do surgimento das primeiras firmas produtoras de vinho no estado. O papel dos imigrantes como um todo no processo de industrialização brasileiro é bem difundido pela historiografia econômica. A intenção aqui é apresentar questões preliminares à constituição de instituições que estimularam o crescimento do setor vitivinícola, notadamente os estímulos emitidos pelo estado, seja na esfera Central, seja Provincial (no presente artigo ambas serão denominadas estado), através de um conjunto de ações governamentais, edições de leis e criação de institutos que tinham por finalidade, inicialmente, reter o imigrante nas regiões a eles demarcadas e, posteriormente, desenvolver um mercado produtor de bens agroindustriais que provessem as necessidades dos primeiros núcleos urbanos do RS.

Em termos metodológicos, o pano de fundo deste trabalho é o conjunto de conceitos e formas de pensar o desenvolvimento econômico (ou até seu subdesenvolvimento), a partir da Nova Economia Institucional (NEI), em especial os trabalhos de Douglass North. O artigo tem por objetivo analisar como o estímulo estatal ao surgimento de indústrias no RS (em especial a vitivinicultura), nos termos da NEI, ou seja, como uma mudança institucional pôde alterar o desempenho econômico, afetando a constituição de segmentos industriais importantes para a economia do RS. A análise é feita com o auxílio de um modelo de teoria dos jogos que sintetiza as escolhas possíveis para os agentes econômicos e seus possíveis resultados de equilíbrio, num jogo sequencial de informação incompleta. Para a construção dos payoffs, utilizou-se uma construção esquemática, semelhante à empregada por Pesavento e Monteiro (2006), quando da tentativa de explicar os estímulos da Coroa Portuguesa à diversificação agrícola do Rio de Janeiro, no período de 1750 a 1800. Importa informar, desde já, que diversos dados estatísticos que serviriam para tornar o jogo mais completo não existem, cabendo aqui um exercício empírico e pouco dinâmico das diversas possibilidades de decisão que poderiam ser tomadas pelos agentes econômicos envolvidos à época.

O estudo do surgimento da indústria vitivinícola no sul do Brasil e os processos de imigração, procedentes das diversas regiões da Itália, demonstra o quão apropriado é a utilização dos recursos lançados pela NEI. O surgimento deste segmento no RS se dá, inicialmente, por uma questão eminentemente de costume e tradição dos imigrantes da região do Vêneto e da Lombardia, regiões reconhecidamente produtoras de vinhos na Itália, e que se caracteriza, não somente no setor vinícola, mas em diversos outros segmentos industriais, pela existência de pequenas firmas, focadas na produção regional. Também, importa ressaltar que estes imigrantes trouxeram consigo hábitos culturais e sociais vinculados ao associativismo, que posteriormente viria introduzir no RS o germe dos sistemas

cooperativados de produção. Outra característica importante, presente entre os imigrantes italianos, é a permanente especialização da produção, que acabou por acelerar o progresso tecnológico na região, bem como o crescimento das empresas.

Em boa parte, percebe-se que o crescimento do segmento vitivinícola brasileiro, em especial no RS, ao longo do tempo, pode ser compreendida pela ação (conjunta ou isolada) de arranjos institucionais. A hipótese principal nesse artigo considera que não apenas aspectos tecnológicos foram "importados" com a vinda dos imigrantes italianos, mas também aspectos sócio-culturais que moldaram as organizações e as instituições da região. Analisando a formação da indústria vitivinícola no sul do Brasil fica claro que arranjos institucionais se desenvolvem como padrões históricos de relacionamentos e organizações. Tais padrões se transformaram ao longo do tempo, respondendo às necessidades de coordenação do setor.

O artigo conclui, a partir dos conceitos principais da Nova Economia Institucional, que o desenvolvimento do setor vitivinícola do sul do Brasil (especialmente do RS) está estritamente vinculado ao desenvolvimento de instituições que promoveram sua maior coordenação, através de uma estrutura de incentivos à interação política, social e econômica dos agentes envolvidos.

Keywords: *Dealcoholized wine, Best-Worst*
JEL-Code: *Q110, D120, L660*

Temperature Patterns along International Wine Supply Chains and their Effects on Perceived Wine Quality

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Wine is a temperature sensitive product that is mostly shipped internationally in non-refrigerated containers. In this research we explored the following questions: What happens to the product along the supply chain from when the product leaves the winery until it is bought by the consumer? To what conditions is the product subjected during its transportation? Do the temperature profiles have any patterns that can help minimize the risk of exposure to extreme temperatures? Finally, do those conditions affect the perceived quality of the product?

For over 5 years we have tracked the temperatures of shipments of wine from vineyards and have recovered more than 1000 temperature data-loggers from 3 different wine-producing regions --- Argentina, Australia and Chile --- to more than 42 different states of the US. Results show that a significant number of the shipments of wine have been exposed to temperatures of at least 30 °C during transportation. We correlated tracking information this data with the temperature to determine where the wine is at greatest risk of exposure to extreme temperatures (from winery to port, at sea, during transshipment and from destination port to the importer). We also measured the regulating effect over temperature of using thermal blankets, by setting devices inside and outside the blanket. Finally, to explore whether typical shipping temperatures will damage wine during transport, we built a heating/cooling device to re-create the temperature trajectories recorded in actual shipments. This enables us to directly compare two bottles of the same wine, one exposed to the re-created shipping temperatures and one not. Five different panels of wine experts blind-tasted such pairs of bottles to see whether they could perceive any differences.

Keywords: International supply chain, wine supply chain, wine transport, temperature during transport, thermal liner, effect over perceived quality

Spacial Exploratory Analysis of Wine's Culture: The Case of State Rio Grande do Sul

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The state of Rio Grande do Sul has assumed leadership position both in the production of grapes and in the production of wine, during the last decades in Brazil. The structure of the grape production is concentrated in regions more suited to the topographic and climatic issues of such activity, as is the case of Serra Gaucha where more than 80% of the farms belong to wine producers. The fact is that there are other neighboring regions to the region of Serra Gaucha which are also identified as equally important to wine production. This relation may represent an inter-regional association in the production of grapes and wine accordingly. Therefore, the hypothesis of this study is that there exists a pattern of regional concentration in which the quantities produced and the amounts of grape production of certain municipalities are able to influence the surrounding municipalities at low or high magnitudes. To verify the existence or nonexistence of this regional pattern this study uses a descriptive analysis of grape production, harvested area and production value of grapes data, collected for the state of Rio Grande do Sul, as well as techniques of exploratory analysis such as the Moran's I statistic and the LISA indicator. The results indicate that there is a pattern of regional concentration between the municipalities of Rio Grande do Sul, and that implies on the existence of global autocorrelation between the municipalities and on the formation of various clusters of grape production.

Contribution a la caractérisation phrénologique et agronomique des vitis vinifera l.ssp vinifera autochtones d'Algérie

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Cette étude porte sur quarante et un (41) cultivars de vigne autochtones correspondant au matériel végétal récupéré et conservé dans la banque de germoplasme de l'ITAFV (Institut technique d'Arboriculture et de Viticulture de Benchicao à Medéa. Ce matériel génétique n'a fait l'objet d'aucune étude d'évaluation de leur qualité agronomiques et technologique pour une éventuel valorisation au détriment des cultivars étrangers largement cultivés (ex: Red Globe, Muscat d'Alexandrie, Dattier de Beyrouth, Dabouki (sabel) etc…)

Différents paramètres phénologiques et agronomiques tels que les différents stades végétatifs et le rendement par cep et la taille des grappes, des baies et des pépins, le nombre de baies par grappe et de pépins par baie, le rendement en moût, le degré alcoolique probable, l´acidité totale du moût, ont été étudiés.

Sur les deux plans phénologique et agronomique, chacun des cultivars étudiés a présenté des caractéristiques différentes. Ces résultats corroborent à la précédente caractérisation moléculaire effectués à l'UMR.DGPC.INRA de Montpellier a permis de déterminer que la collection comporte un nombre important de cultivars de vigne totalement inconnus et uniques menacés d'extinction car ils se trouvent dans une parcelle de vignes agées et mal entretenue.

Les résultats montrent un bon groupage et une bonne classification des cultivars, ce qui permet d'examiner le nouveau matériel et de résoudre certains problèmes d'homonymie et de synonymie. Enfin, on examine les caractères les plus discriminants dans la classification des cultivars.

Mots clés: *Vitis vinifera, germoplasme, phénologique, agronomique, homonymie et synonymie*

L'économie du vin en Tunisie (1881-1956) Entre production mondialisée, et ancrage local

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Inscrit en thèse à l'Université Paris I Panthéon Sorbonne, sous la direction de M.Pierre Vermeren, j'étudie au cours de mon doctorat la vigne et le vin en Tunisie sous le protectorat (1881-1956).

Si la production de vin en Tunisie est multiséculaire, elle prend un nouveau tournant avec l'arrivée des colonisateurs français en 1881. L'objet de cette communication, est de montrer que la production de vin entre 1881 et 1956 obéit à un double mouvement : le vin est de plus en plus considéré comme un produit spéculatif, destiné à être exporté à l'international. Mais cet accès à la mondialisation ne se fait pas sans une tendance de plus en plus affirmée à ancrer la production dans un terroir local, et ainsi s'orienter vers un régime d'AOC, propre à mieux répondre à la demande des consommateurs.

L'objet de notre propos sera d'abord de décortiquer les mécanismes de mise en place d'une économie compétitive, ancrée dans la mondialisation.

C'est d'abord en consacrant d'immenses ressources en espaces, en hommes et en capitaux que l'économie du vin en Tunisie a pu s'orienter vers l'international. La superficie du vignoble passe de 1100 hectares en 1881 à 45000 hectares en 1934. Le pic de production est de 1,7 million d'hectolitres en 1935 (53000 en 1890). Si l'implantation de vigne est particulièrement dense dans la région du cap bon et de Nabeul, beaucoup de raisins sont également présents dans le sud. Très vite, la production de vin devient, comme l'huile d'olive, une culture spéculative, et la Tunisie exporte au maximum, quitte, comme dans l'après-guerre à faire venir du vin de Yougoslavie, moins cher, et bénéficier ainsi d'une marge. Grâce aux archives du commerce extérieur, au centre des Archives Diplomatiques de Nantes (CADN), nous savons qu'en 1950, le vin est le quatrième type de produit exporté en million de francs, après les céréales, les phosphates, l'huile d'olive. Mais en réalité, c'est une culture à deux vitesses qui voit progressivement le jour, au moins jusqu'à la seconde guerre mondiale, avec d'un côté une vingtaine de viticulteurs qui exportent jusqu'à un million d'hectolitres à l'étranger, et de l'autre deux tiers des viticulteurs (environ 2000 sur 3000) qui possèdent moins de 10 ha.

Si ces investissements en capitaux et en homme ont pu être possibles, c'est qu'ils répondaient à un besoin. Un marché intérieur émerge certes, avec l'arrivée de colons français, mais c'est surtout vers le marché extérieur, avec l'ouverture du marché métropolitain, suite à la crise du phylloxéra dans les années 1890, que se tourne le commerce tunisien. Les vins tunisiens, fortement alcoolisés, sont complémentaires des nouveaux plans de greffe américains plantés dans le Languedoc, plus résistants, mais possédant un degré d'alcool plus faible. Les actions de l'Institut Pasteur dans la fabrication de nouveaux vins plus alcoolisés, ont été déterminantes.

Enfin, le vin ne peut être un commerce compétitif à l'international, sans l'abaissement des tarifs douaniers. Si dans la régence de Tunis, au XIXème siècle, les alcools étaient parmi les seuls produits particulièrement taxés à l'importation, différentes lois (10 juillet 1890, 30 mars 1928 28 juillet 1933) tentent de corriger cette tendance, sous le protectorat. C'est grâce aux

journaux officiels du protectorat, et aux archives de la résidence générale au CADN que nous pouvons décortiquer ces informations.

L'une des marques de la tentative de main basse de l'Etat sur le contrôle de la production de vin, est la création de l'office du vin, en 1927. Au départ, cet office effectue des recherches et des statistiques sur la production et la vente de vin, mais rapidement, il obtient une fonction de conseil auprès de gouvernement, et se charge de la lutte contre la fraude. Enfin l'office du vin est le bras armé du gouvernement dans sa conquête des marchés extérieurs, notamment dans la construction d'opérations de propagande et de publicité. Pour financer ses activités, cet organisme est notamment alimenté par un prélèvement de 0,45 par hectolitre produit.

Après la guerre, l'Office du vin perd son service commercial et de propagande (désormais davantage confié à un autre organisme, le GOVPF), et accentue son rôle de contrôle de la qualité du vin et de la lutte contre les fraudes.

Dans un deuxième temps, nous souhaitons montrer que la production de vin en Tunisie au cours de cette période est de plus en plus liée à la notion de terroir.

Cette tendance trouve tout d'abord son fondement au cours de la crise des années 1930. Avec la crise économique en Europe, le marché porteur de la Tunisie tend à se rétracter. Par ailleurs, avec l'arrivée du phylloxéra en 1936, l'Etat ordonne l'arrachage de 15% des plants environ, soit 8000 hectares. Grâce aux rapports sur la vie chère, au CADN, nous savons que le prix du vin, de 15 francs le litre en 1900, qui était monté jusqu'à 168 francs en 1928, est divisé par deux dans les années 1930. Si la production chute pendant la guerre, elle reste dans les années d'après-guerre, relativement limitée, le système de taxation restreignant la production, par crainte d'une surproduction.

Particulièrement visible dans les archives de l'office du vin, la volonté d'orienter la production vers la qualité passe d'abord par un arsenal d'opérations législatives. Dès les années 1930, l'Etat ordonne une obligation de 11° minimum pour les vins exportables. En 1947, est créée l'appellation « vin muscat de Tunisie », et en 1948 de l'appellation « vin supérieure de Tunisie ». Chaque année les vins présentés sont soumis à l'examen d'un comité de dégustation et à l'avis d'une commission de classement, qui accorde ou non l'appellation aux vins.

Cette orientation vers la production de qualité répond aux attentes des producteurs et des consommateurs. Le goût des Européens délaisse progressivement les vins de table. Le vin tunisien devient alors un produit vitrine de l'agriculture tunisienne, comme en témoigne les différentes foires, après la seconde guerre mondiale, où le muscat de Carthage, aux côtés des dattes et de l'huile d'olive, est le produit le plus mis en avant.

Le vin, par ailleurs, devient un objet de fierté pour les producteurs, les colons français. Des lois répétées, dans les années 1940, à l'application aléatoire, interdisent la vente d'alcool aux musulmans. Les archives de justice mettent en avant l'idée le vin est contraire à la loi musulmane, et donc à l'univers indigène. Le vin est un clivage avec l'univers des colonisés, et des témoignages de colons, particulièrement fier de leur vin comparent le goût de leurs rosés aux vins de la vallée du Rhône. Le vin est d'ailleurs aussi un enjeu identitaire pour la communauté juive, qui produit et achète du vin cacher, notamment dans les années 1930.

Enfin, si tendre vers la production de qualité est sans doute une fierté, l'appellation d'origine contrôlée, offre également des avantages fiscaux dans la France de l'après-guerre, notamment une réduction de 30% de taxes.

VIRTUAL SESSION

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Conditions favorables pour la réussite des stratégies d'expansion des exportations de vins chiliens en Europe

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Ce que l'on appelle la globalisation économique, commencée lors des dernières décennies du siècle passé, a modifié bien des règles, des idées et des comportements, et ce dans la plupart des sphères d'activité. Celle qui concerne la production, la distribution et la consommation du vin n'échappe pas à ce phénomène. Si nous nous plaçons du point de vue des sociétés européennes, et notamment de celles de l'Europe de l'Ouest, on peut constater un certain nombre d'évolutions qui se sont produites au niveau du marché du vin (et sans doute d'autres boissons alcoolisées). Mais avant d'aborder ces mutations, il me semble important de faire trois remarques liminaires.

D'abord, le marché européen est loin d'être homogène, même en le limitant aux pays faisant partie de l'Union européenne. Du point de vue de la consommation de vin, il faut au moins distinguer trois types de pays : ceux de l'Europe centrale et orientale, que l'on nommait naguère « l'Europe de l'Est », la Russie et les autres États de l'ex-Union Soviétique y occupant une place un peu à part ; ceux dits de l'Europe occidentale qui ne sont pas (ou très peu) producteurs de vin ; enfin, les pays de l'Europe occidentale qui sont de grands producteurs de vin, avec à l'intérieur de ce sous-ensemble une distinction à faire entre ceux qui sont traditionnellement de grands exportateurs (France, Italie, Espagne, Portugal et, à un moindre degré, Allemagne) et les autres. Toute analyse des importations de vin en Europe doit au moins prendre en considération cette « typologie », voire l'affiner davantage. En second lieu, la consommation de vin par habitant tend à diminuer dans tous les pays où la consommation de vin était plus ou moins élevée (et plus fortement dans les pays producteurs que dans les autres), même si le budget consacré au vin reste stable ou progresse (on pourrait dire qu'on boit moins mais mieux), tandis qu'elle tend à s'accroître là où elle était peu (ou très peu) présente. Ceci a, bien entendu, des conséquences pour les pays exportateurs et, plus particulièrement, pour la profession dans ces pays. Enfin, le vin suit l'évolution des modes de vie (et surtout des styles de vie) : à travers le vin, s'expriment d'autres dimensions et formes culturelles, de telle sorte qu'un vin doit répondre à des attentes qui ne sont pas les mêmes qu'il y a seulement une trentaine d'années, me semble-t-il. Bien sûr, c'est d'abord la qualité du produit qui est recherchée, et son bon rapport prix/plaisir, mais on sera davantage attentifs à la publicité qui le promeut, aux explications fournies, à des considérations esthétiques sur la forme de la bouteille ou de l'étiquette, etc. Et ce qui est vrai y compris pour les vins du pays lui-même, le sera a fortiori pour les vins étrangers.

Revenons donc à notre propos initial. La première chose qui me semble à prendre en considération, ce sont les évolutions dans le profil du « consommateur/acheteur-type » : de nos jours, il s'agit davantage d'un citadin, avec un niveau d'études plus élevé que par le passé, ayant plus de chances d'avoir voyagé à l'étranger (voire dans des pays et des continents éloignés), et (last but not least) les femmes sont beaucoup plus nombreuses à être le principal ou le seul acheteur de leur foyer. Si nous ne prenons pas en compte ces modifications (qui sont parfois des bouleversements) on risque de ne pas comprendre les changements et donc d'avoir des formes de sollicitation ou de réponse inadaptées. Ensuite, il y a les effets de la crise économique qui affecte l'Europe depuis plus de cinq ans, mais aussi les effets de la crise de

l'emploi et de la montée d'une certaine précarité, phénomène qui remonte au début des années 1970 (une quarantaine d'années, ce n'est pas rien). Enfin, cette liste n'étant pas limitative mais je n'ai guère le temps pour aborder d'autres évolutions qui me semblent avoir un certain impact sur le sujet qui nous occupe ici, il y a le fait que, par les évolutions aussi bien des réalités matérielles que des styles de vie dont je parlais à l'instant, l'achat de vin connaît des évolutions : à côté des vins que l'on achète pour de grandes occasions ou quelques repas plus solennels, on consomme le vin de façon moins régulière et avec des repas plus variés et, dans l'ensemble, moins « lourds » que par le passé, on stocke moins souvent le vin soi-même, on boit plus de vins plus jeunes, même si pour les vins de prestige l'âge est une donnée qui est prise en compte. Voilà encore une illustration du fait qu'il faut suivre les évolutions du marché, qui sont elles-mêmes en lien avec des transformations plus globales, pour accompagner (et de temps en temps anticiper) celles-ci dans l'offre faite à tel ou tel marché ou segment de marché.

J'arrive, enfin, au point qui est en lien avec l'intitulé de ma communication. Qu'en est-il de la nécessaire évolution des stratégies exportatrices vinicoles chiliennes, en tout cas à destination de l'Europe ? D'abord, il faut dire que le vin chilien, notamment au cours, disons, des vingt-cinq dernières années, a pu récolter des succès importants dans ce continent (et surtout dans les pays ouest-européens) parce qu'il présentait un certain nombre d'atouts : d'abord, sa qualité (ça reste, heureusement, une condition nécessaire pour cette réussite !), ensuite son bon rapport qualité/prix, qui rendait plus forte son attractivité, mais aussi la bonne image du Chili à l'étranger (et en Europe, notamment), comme un pays qui avait retrouvé la démocratie, l'État de Droit, réputé stable et plutôt paisible. Les succès spectaculaires du vin chilien sur des marchés de pays non-producteurs (Belgique, Pays-Bas, Grande Bretagne, pays scandinaves), ne doit pas nous faire oublier ses progrès sensibles dans des pays producteurs (et exportateurs) comme la France ou l'Espagne. Non seulement il y a eu une augmentation en quantité mais aussi, et plus fortement, en valeur, car le vin exporté en vrac et mis en bouteille dans le pays importateur est aujourd'hui de moins en moins fréquent, ce qui est aussi une preuve de plus de l'évolution en matière qualitative.

Mais alors, pourquoi changer une formule qui a du succès, me direz-vous ? D'abord, plus que de la changer je propose de réfléchir à son actualisation. Ensuite, les évolutions correspondent à ce besoin, vin chilien ou pas. Par exemple, hormis les éléments vus ci-dessus (féminisation du public acheteur, plus souvent urbain et plus éduqué, notamment), il y a des mutations d'ordre plus idéologique : le souci écologique, la préoccupation environnementale et des principes éthiques sont aujourd'hui plus présents chez le consommateur. Si au niveau éthique le Chili échappe au soupçon du travail forcé ou du travail des enfants, la question écologique et le respect des normes de production dans certaines catégories de produit a pu avoir des effets très négatifs pour certaines exportations chiliennes (et je pense ici d'abord au saumon). Par ailleurs, il faut (pour le vin chilien comme pour bien d'autres) moins formater le produit, laisser plus de place à la diversité, à la fois pour des raisons matérielles que par une plus grande curiosité des consommateurs, même dans des pays où une tradition de consommation du vin n'existe pas ou ne concerne qu'une petite minorité de la population.

En somme, une évolution des pratiques dans l'élaboration, mais surtout dans les stratégies publicitaires, dans l'information des intermédiaires et des consommateurs, et un souci de préserver les acquis, car ils sont nombreux et il faut, ici aussi, éviter de « jeter le bébé avec l'eau du bain » !

Alcohol Consumption and Food-at-Home Dietary Quality

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There is no shortage of research in disciplines ranging from epidemiology to wine economics investigating the impacts of alcohol consumption on health. While much discussion and debate remains in identifying the key linkages and causal mechanisms in this area of inquiry, researchers have largely agreed upon two conventions. These are: 1) Wine, particularly red, imparts health benefits to drinkers due to specific biological components that are not found in beer or spirits, and 2) The relationship between wine consumption and health outcomes follows a parabola or "U-shaped curve," whereby consumption up to a certain moderate amount improves cardiovascular health and possibly other factors, but past that point can damage health due to the well-understood effects of excessive alcohol intake.

Two studies in particular have raised questions regarding the purported health benefits of wine consumption by suggesting that dietary quality may be a confounding factor in understanding alcohol consumption. Gronbaek (2003) performed an extensive review of the literature to date on the health effects of wine and alcohol consumption and argued that wine consumption, more than beer or spirits consumption, is likely to be correlated with the regular consumption of foods generally considered to support cardiovascular health, such as fish, nuts, fruits, and vegetables. Breslow, Guenther, and Smothers (2005) used self-reported consumption data from the National Health and Nutrition Examination Survey (NHANES) and demonstrated a strong link between dietary quality and alcohol consumption patterns. That is, people who report drinking small quantities of alcohol with high frequency typically consumed significantly healthier diets than do people who consume large quantities of alcohol at lower frequencies (consumption approximating binge drinking).

Our study uses the Nielsen Homescan database to investigate the potential relationship between alcohol consumption and dietary quality further. The Homescan data consist of the self-reported purchases of a nationally-representative sample of over 40,000 households from the years 1998 through 2009. While the Homescan database does not include health indicators such as BMI and only include food and alcohol purchases for at-home consumption, it has a number of advantages over NHANES that enable us to advance the literature. The longer time series and repeated participation of many households enables us to exploit the panel nature of the data, thus controlling for time-invariant unobservable characteristics, most importantly household fixed effects. Also Homescan data clearly differentiate between beer, wine, and spirits, allowing for an examination of how food consumption differs by alcohol type as well as by consumption patterns. The Homescan data include extensive demographics at the household level.

The empirical approach of the paper has two stages. In the first stage, we stratify the Homescan households according to both the type of alcohol consumed and by alcohol consumption patterns, focusing the frequency and magnitude of alcohol purchases. We make explicit assumptions as to the relationship between the purchase and consumption of alcoholic beverages and subject these assumptions to a sensitivity analysis to lend robustness to our results. We measure food purchase basket healthfulness in three distinct ways, each drawn from USDA Healthy Eating Guidelines, which, among other factors, emphasize the consumption of fruits, vegetables, and whole grains while penalizing added sugars, refined

grains, and packaged snacks. The analysis controls for extensive demographic factors as well as regional and time effects.

The second stage of the analysis, still ongoing at the time of writing, attempts to seek out and identify a causal mechanism driving the relationship between alcohol consumption and dietary quality. This stage is rooted in a fixed-effects panel approach, using only those households participating in the Homescan survey for repeated years. Granger causality tests do not sufficiently construe the issue of dual causality linking alcohol and food consumption, one suggested by standing theoretical and empirical evidence as well as the results of the first stage of the analysis. We also identify households that have undergone significant shifts in alcohol (food) consumption and test for resulting shifts in food (alcohol) consumption. Ultimately we construct a highly flexible healthfulness score for alcohol consumption, calculated using both the quantity and variety of alcohol consumed, and merge this with our food quality measures for overall metrics of healthfulness in consumption. We then analyze these while controlling for extensive demographics as well as household, time, and spatial fixed effects.

The results of the study indicate that alcohol consumption and dietary quality are intimately linked. A causal relationship between the two is difficult to pin down, but there is a clear connection between wine consumption and more healthful foods. Heavy beer consumption is linked to the least healthful overall diets. Income and education are strongly linked with improved overall healthfulness in consumption, including more healthful food, low to moderate alcohol intake, and wine chosen over beer or spirits. Significant differences persist across regions, with the South and Midwest consistently underperforming the Northeast and West. We expect our results to contribute to the fields of epidemiology, nutrition, health economics, wine economics, as well as marketing and food retail given the linkages in purchase and consumption.

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The New District of Prosecco: A Choice Experiment

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Abstract

The organization of the Prosecco wine market has been drastically modified by the Ministerial Decree of 17th July 2009. The Protected Designation of Origin area (PDO) was extended and now encompasses nine provinces belonging to Veneto and Friuli Venezia Giulia. The designation of historical area was changed from PDO to PGDO (Protected and Guaranteed Designation of Origin).

The aim of this work is to assess whether Prosecco consumers are able to understand differences which became current by the Ministerial Decree of 17 July 2009, and especially to understand which characteristics are taken into account by consumers when they decide to buy wine. To this end, we developed a Choice Experiment and collected 440 data using face-to-face interviews from three supermarkets in two provinces of the Veneto region. Five attributes were considered: using grapes from local biotypes (prevailing, partial or absent), the protection of traditional vineyard landscape (yes or no), traceability (yes or no), the place of production (PGDO, PDO and other) and finally the price (3, 5, 10 € per bottle). These attributes have been studied taking into account their different levels. Using latent class as methodology has enabled us to emphasize the existence of heterogeneity between preferences, and different market segment has been highlighted

The results show that the sample can be divided into three classes. The first 45% of the sample is composed by consumers who seem to show an importance to the preservation of the cultural identity of the wine and attribute importance to the production area. The second class 36% consists of consumers quite undecided on the characteristics of Prosecco they could buy, and the third class includes 19% of consumers who are related to the origin of the wine and its quality. Consumers seem to require the existence of a historical and welded link between the wine and the territory. This is an element which should ensure, even in a future time, competitive advantage in the former areas of distribution of wine as the area of the DOCG Conegliano and Valdobbiadene.

Keywords: choice experiment; wine marketing, latent class, Prosecco

JEL Code: $C8_1$, $C8_7$, $C0_1$

Le nouveau district du Prosecco: Une expérience de choix

Abstract

L'objectif de ces travaux est d'évaluer si les consommateurs du Prosecco sont capables de comprendre les différences qui sont entrées en vigueur par le Décret Ministériel du 17 Juillet 2009, et surtout de comprendre quelles caractéristiques sont prises en compte par les consommateurs lorsqu'ils décident d'acheter du vin. À cette fin, nous avons développé une expérience de choix et récolté à l'aide d'interviews face-to-face 440 données auprès de trois supermarchés de deux provinces de la Vénétie. Les résultats montrent que l'échantillon peut être subdivisé en trois classes. La première avec 45% de l'échantillon est composée de consommateurs qui semblent montrer une importance à la préservation de l'identité culturelle du vin. La seconde classe 36%, est constituée de consommateurs assez indécis, et la troisième classe 19% regroupe les consommateurs qui sont liés à l'origine du vin et à sa qualité.

Mots clés: *Prosecco, choice experiment, Classes latentes*

JEL Code: *C81, C87, C01*

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