The impact of the geographical reputation on the value created by small producers in Champagne

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Abstract
With asymmetric information, consumers need to rely on the reputation of a wine to define quality before purchasing. Among the tools available for improving reputation, geographic location appears to offer high potential. However, there can be variations in reputation between producers within one region. This paper aims to define the elements of geographic reputation which influence the price charged by growers in Champagne. Working on a sample of 416 growers, we show that the "echelle des crus", the distance from an urban regional centre and the most reputed négociant brands have a substantial and interactive effect.

Key word: Value, geographical location, reputation.

Topic area: The value of country of origin and region

Introduction

The perceived quality of a product depends on consumers' global evaluation according to the available information (Oude Ophuis & Van Trijp). Usually, the characteristics of a product used for this judgment are known through experience. This is specifically true for food products, with both direct experience (from the consumer him or herself) and indirect (from other people). This information comes from the interaction between affect and memory and exemplifies the learning processes of consumers (Bessy & Chateauraynaud, 1995). However, such experience is not always available to consumers, or they may feel unable, from lack of experience with a complex product, to make such judgments themselves.

In this context, geographical origin can affect wine purchase decisions. Consumers may pay much higher prices for a reputable location because they do not have sufficient information or they are uncertain about quality. Within the discipline of marketing most work has been carried out on the impact of country of origin on consumption (Schooler, 1965; Nagashima, 1970), including some research on wine. Some wines are seen to profit from a country's reputation (Hamlin & Leith, 2006) and some profit from the local reputation of one specific region or vineyard (Perrouty, d'Hauteville, & Lockshin, 2006). Consequently, we assume that the initial geographical situation can be either a cause of value or an obstacle to the creation of value.

In order to examine this issue further, and to consider some of the various components of geographical value, our study focuses on the champagne industry. The appellation comprises four sub-regions but two (the Montagne de Reims and the Cote des blancs) have especially high quality reputations, and are also close to the major centres of population – so receive a lot of attention from visitors. Adjoining these regions are the viticultural centres of Champagne - Reims and Epernay – with some of the larger, well-known négociants ('the houses') based in one or other of them. Therefore, we will analyse two issues: does geographical position and reputation have an impact on the value created by the champagne providers, and if so what?

Method

The measure of value is among the hardest tasks in economics. Usually, the value of goods depends on the characteristics which define their quality. From these characteristics, consumers offer a price to obtain a bundle of characteristics (Rosen, 1974). Eventually, price becomes the mirror of intrinsic quality (Lancaster, 1966, 1991). However, hedonic pricing approaches quickly showed the complex relationship between quality and price. Prices may not only reflect consumer preferences but also factors determined by production. To solve the identification problem, it is necessary to separate supply and demand conditions (Schamel, 2006). Several approaches have contributed in this way to the analysis of the bundle of factors which influence price (e.g. Nerlove, 1995; Angulo et al., 2000; Landon & Smith, 1997). Some of them detected intrinsic factors related to the consumer's behaviour over price: the role of reputation of a producer as signal of quality (Landon and Smith, 1998; Haeger and Storchmann, 2006) or the jury grade (Combris, Lecocq, & Visser, 1997, 2000). Others detected extrinsic factors such as regional reputation (Horowitz & Lockshin, 2002; Schamel & Anderson, 2003).

To measure these factors in Champagne we have used an explanatory sample of 416 providers of champagne who display a close statistical similarity to the overall structure of producers across the four sub-regions. Although the houses provide most of the largest and best-known brands of champagne, there are also over 4,700 small producers (known as vignerons or growers), and this study is especially concerned with the creation of value for them.

Firstly, we established four independent variables which constitute the geographical reputation in the region. The first one is a geographical variable defined by the *echelle de crus* of champagne, which is the local grading of vineyard quality. Individual villages are graded as *grand cru* (17),

premier cru (41) or unclassified (261). The second variable is the distance of the growers' location from one of the historical towns: Epernay or Reims. The third is the presence or not of a well-known producer – a négociant – quoted in the Hachette Wine Guide 2007 and belonging to the same village as the winegrowers of our sample. The last variable is the presence or not of other growers quoted in the Hachette Wine Guide 2007 and belonging to the same village as the winegrowers.

Secondly, we include the nationality of the main buyers at each grower, based on previous studies which show that foreign buyers at the cellar door are willing to pay more for a bottle of standard quality champagne than French purchasers (Charters & Menival, forthcoming).

These five independent variables are considered to explain the average price of grower wines sold to consumers in Champagne. Thus we obtain the measures following:

- APF: Logarithm of the average price
- SCA: an ordinal variable with three modalities: *grand cru*, *premier cru* and unclassified.
- N: a binary variable based on nationality with French as reference
- HCG: a binary variable with yes and no for the village when another grower is cited.
- HCN: a binary variable with yes and no for the village when a négociant is cited
- DFH: Logarithm of the distance of growers' location from one of the two historical towns.

Due to the mix of the nature of measures and the necessity to evaluate the possible impact of the interaction of the independent variables, we decided to use a Univariate General Linear Model.

Results

According to type I error of 5%, one can observe that the initial model cannot allow inferences and must be reduced by an iterative process until the *Student* test is guaranteed for all the explanatory variables.

The final model allows us to keep the *echelle de crus*, the presence or not of négociants quoted in the Hachette 2007, the distance from one historical towns and the interaction of the *echelle de crus*, the presence or not of négociants quoted in the Hachette 2007 and the presence or not of other growers quoted in the Hachette 2007 (table 1).

Table 1: Tests of Between-Subjects Effects with APF as Dependent Variable

Source	Sum of Squares	df	Mean Square	F
Corrected Model	.705(a)	10	.070	39.563
Intercept	229.127	1	229.127	128621.884
SCA	.038	2	.019	10.608**
HCN	.031	1	.031	17.382**
DFH	.018	1	.018	10.170**
SCA * HCG * HCN	.050	6	.008	4.662**
Error	.734	412	.002	
Total	2728.851	423		
Corrected Total	1.439	422		

**p < 0.01

This model has a good fit, with an adjusted R square of 0,477 and shows that the higher the level of *cru* is, the higher the price. In addition, the presence of quoted négociant brands also increases the price. Otherwise, the farther the growers are from one of the two historic centres (Reims and Epernay), the cheaper their product is. However, eventually, the positive impact of the presence of quoted négociants' brands is substantially reduced when it interacts with the presence of other growers quoted (table 2). This negative shift increased with the degree of the *echelle de cru.* The higher this grade is, stronger the reduced impact of having a négociant in the village. As table two shows, the distance from one of the historic centres of the region is apparently much less significant. However, given that the *grands crus* are all situated fairly close to those two towns there may be an element of confusion in the results.

Table 2: Parameter Estimates of the final model with APF as dependent

Parameter	B
Intercept	2,510
[SCA=0]	,085
[SCA=1]	,022
[SCA=2]	0[a]
[HCN=0]	,079
[HCN=1]	0[a]
DFH	-,002
[SCA=0] * [HCG=,00] * [HCN=0]	-,053
[SCA=0] * [HCG=,00] * [HCN=1]	,005
[SCA=0] * [HCG=1,00] * [HCN=1]	0[a]
[SCA=1] * [HCG=,00] * [HCN=0]	-,037
[SCA=1] * [HCG=,00] * [HCN=1]	,034
[SCA=1] * [HCG=1,00] * [HCN=0]	,033
[SCA=1] * [HCG=1,00] * [HCN=1]	0[a]
[SCA=2] * [HCG=,00] * [HCN=0]	,000
[SCA=2] * [HCG=,00] * [HCN=1]	,015
[SCA=2] * [HCG=1,00] * [HCN=1]	0[a]

a This parameter is set to zero because it is redundant.

Conclusion

These results are a first step in defining the elements of geographical reputation in Champagne and its impact on the value created by the growers. They highlight the impact of the presence of the most renowned négociant brands, the importance of the distance from the historical towns and the *echelle de crus* on the average price of champagne of growers; all of these have a positive impact on

price. Distance, whilst less important than some of the other factors, is interesting. Its presence as a factor determining price tends to challenge traditional notions that terroir is the overriding determinant of reputation in French *appellation contrôlée* wine regions. This is reinforced by the positive weighting afforded to the négociants, whose blended, heavily branded wines are stylistically determined by the house rather than place; this result thus places emphasis on production technique as a factor in the development of reputation as much as place.

Further, the results highlight the role of the psychology in the definition of price by the growers. This is shown by the reduction of the positive impact of most renowned négociant brands in a village when at least one other grower is quoted in the guide. Whilst initially surprising, this clear result could be explained by the perception growers have of négociants. Indeed, previous studies (Charters & Menival, 2008; Menival & Charters, 2008) have shown the complexity of the growers' perceptions of the concept of marketing and price. They are influenced by the position of négociants, supposing they are more focused on effective marketing and thus worth a higher price. This relationship may explain the positive impact of the most renowned négociants on the average price of growers because négociants are not considered as competitors but as some superior brands to be followed. But this perception could be modified if other growers are quoted. These latter are direct competitors, without the reputation of targeted and complex marketing techniques, and there presence consequently inhibits higher prices, and counters the influence of the presence of a more renowned of négociant. In this case, the psychological impact is reduced by the economic question of competition. The non-quoted growers have to maintain lower prices to still attract the non-connoisseurs.

The results also demonstrate that for smaller, less well-known producers, being situated in less reputable villages or further away from the key regional centres makes adding value to their product harder. The result may be that other solutions (targeted promotions, wine tourism, selling to consumers with less detailed awareness of the specifics of the region) are necessary to increase sales and add to the potential value of the product.

The results finally show that there is an interactive effect, which adds to the complexity of understanding how reputation is created. They encourage us to develop the research into other elements to develop a more advanced model for a better understanding of the pattern of geographical reputation.

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