The Empirical Analysis of Terroir Versus Wine Pricing Relationships- the Case of the BC VQA Wines from the Okanagan and Similkameen Valleys

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Introduction

In the Decanter’s article from August 2016, Steven Spurrier, British wine expert and merchant said that to him wine was about 3 Ps:

- The People
- The Place
- The Product

WINE

It has Spurrier ever wondered: What a customer really pays when buying a bottle of the BC Vintners Quality Alliance (VQA) wine?

If these questions run through your head while paying for the BC VQA wine, you are in the right place. The author of this research has been wondering about it since at least 2012. Is it terroir or something else that influences prices of the BC VQA wines?

The goal of this research is to examine how natural elements of a vineyard like soil, climate, elevation, rows direction, distance to lake, aspect, also known as terroir influence wine pricing of the BC VQA wines produced in the Okanagan and Similkameen Valleys of BC.

Methods

The British Columbia Liquor Distribution Branch (BCLDB) scanner pricing data set for years 2011-2015 was obtained. All BC VQA wine sales in BC together with accompanying wine attributes (e.g. alcohol, volume of sales, time of sales, vintage year, brand) were extracted.

33 Okanagan and Similkameen Valleys wineries agreed to provide data on the origins of grapes used for production of their VQA wines. After data collection 323 SKS1 numbers from the BCLDB data set were matched with specific vineyards that supplied grapes used for their production. Total number of wine observations: n=4675 (due to repeated purchases).

The specifics of terroir for each vineyard that sourced grapes for these 323 wines were collected using the Google Earth Pro software and included: soil type, rows direction, aspect, average elevation, distance to lake, temperature data (minimum and maximum temperature intervals).

Results:

Non-terroir variables

- Retail price
- bottle size
- producer’s brand
- wine type
- grape type
- vintage
- discount percentage
- volume of sales

Hedonic pricing methodology was used and regression of price on terroir and wine specific variables was implemented.

Formally, in the empirical analysis two specifications for hedonic models were employed and compared:

\[ \text{Price} = \alpha + \beta_1 \text{Terroir} + \beta_2 \text{Wine Specific} + \epsilon \]

Terroir variables

- Soil type
- Rows direction
- Aspect
- Average elevation
- Distance to lake
- Temperature data (minimum and maximum temperature intervals)

Final Conclusions:

- Role of terroir variables in pricing of the BC VQA wines is not as important as it could be expected
- The significance of terroir in influencing pricing is not as large as in non-terroir variables
- The newly proposed sub-appellations might prove to have more of a marketing impact than actual terroir variables
- The results of this research support findings coming from other research that sub-appellations improve wine pricing