



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**Does passion for wine matter? The effects of owner motivation in non-traditional
wine regions**

Jie Li

Graduate student

Charles H. Dyson School of Applied Economic and Management

438 Warren Hall

Cornell University

E: jl2522@cornell.edu

Miguel I. Gómez

Ruth and William Morgan Assistant Professor

Charles H. Dyson School of Applied Economic and Management

340D Warren Hall

Cornell University

E: mig7@cornell.edu

P: 607.255.8159

***Selected Poster prepared for presentation at the Agricultural & Applied Economics
Association's 2014 AAEA Annual Meeting, Minneapolis, MN, July 27-29, 2014.***

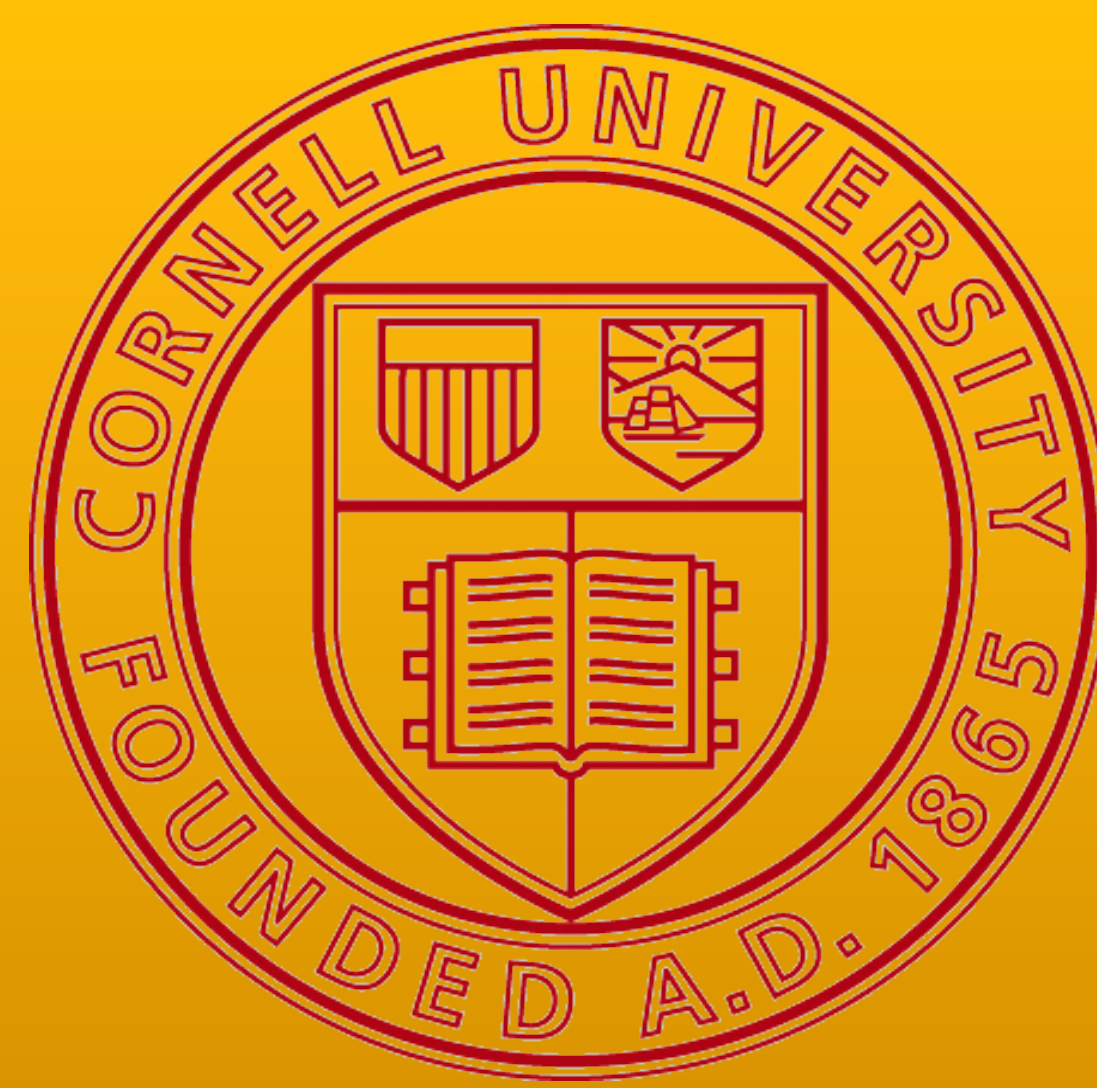
*Copyright 2014 by Jie Li & Miguel I. Gómez. All rights reserved. Readers may make
verbatim copies of this document for non-commercial purposes by any means, provided
that this copyright notice appears on all such copies.*

Does passion for wine matter? The effects of owner motivation in non-traditional wine regions



Jie Li * and Miguel I. Gómez *

* Applied Economics and Management, Cornell University, Ithaca, NY



Introduction

Rapid growth of wineries in non-traditional wine regions

- The number of small and medium-sized wineries has increased substantially in recent years in non-traditional wine regions (Wine institute 2013).
- This entrepreneurial activity has important economic impacts and fosters economic development in rural areas.

Challenges facing wineries in non-traditional regions

- As the wineries grow, they need to sell through mainstream distributors to access non-local markets, therefore it is important for them to build relationship with distributors and wholesalers.



- Differences in quality-adjusted prices may be driven by differences in owners' motivations (e.g., profit-oriented owners versus passion-oriented owners) when entering the industry.

Research question

How does owner motivation affect winery pricing and quality decisions in non-traditional wine regions?

Theory

Following Morton and Podolny (2002), a dual maximization problem is developed:

- Utility maximizing winery owners:

$$\max U(p, s) = g(s) + h(t) + q(p, s) * p - C(q(p, s), s, t) \quad (1)$$

- Profit maximizing winery owners:

$$\max U(p, s) = q(p, s) * p - C(q(p, s), s) \quad (2)$$

- s represents wine quality,
- p is wine price,
- t is additional cost associated with passion,
- $g(s)$ is the utility gained by owners from producing premium quality wine,
- $h(t)$ captures the utility gained by owners from wine production activities and the associated lifestyle.

Under certain assumptions, the supermodularity of the utility function for the utility maximizing owners indicates that:

$\frac{ds}{dt} > 0$ → The more passion-oriented the owner is, the higher the quality of the wines that he/she produces.

$\frac{dp}{dt} > 0$ → The more passion-oriented the owner is, the higher the quality-adjusted wine prices that he/she charges.

Hypotheses

- **Passion-oriented owners** tend to produce higher quality wines and to set higher quality-adjusted wine prices compared with their profit-oriented counterparts.
- **Profit-oriented owners** are likely to select strategies geared towards lower quality wines and to set lower quality-adjusted prices.

Data and model

Data

- Survey data
244 surveys mailed in May-June 2011 to winery owners in New York, Missouri and Michigan; 102 complete responses received (42% response rate)
Includes: owner motivation to enter the industry and winery characteristics
- Secondary data---Brand wine quality score and price data
Wine Spectator: 302 wine brands (quality rating score, price, varietal, vintage and appellation) from 16 wineries.
Cellar Tracker: 702 wine brands (quality rating score, varietal, vintage and appellation) from 62 wineries.

Empirical models

- Principal components factor analysis to identify the owner's motivation, denoted as F_1 (passion-oriented factor score) and F_2 (money-oriented factor score).
- Regression analysis on quality choice model and price choice model at both winery level and brand level.

Quality Choice Model

- Winery level:
 $Winery\ Quality\ Score = \alpha_0 + \alpha_1 F_1 + \alpha_2 F_2 + \alpha_3 Winery\ Size + \alpha_4 Percentage\ of\ Wines\ Bottled\ as\ Varietal + \alpha_5 Percentage\ of\ Estate-grown\ Grapes + \alpha_6 State\ Dummy\ Variables + \varepsilon_1 \quad (3)$
- Brand level:
 $Brand\ Quality\ Score = \alpha_0 + \alpha_1 F_1 + \alpha_2 F_2 + \alpha_3 Winery\ Size + \alpha_4 Varietal\ Dummy + \alpha_5 Vintage\ Dummy\ Variable + \alpha_6 Appellation\ Dummy\ Variable + \varepsilon_2 \quad (4)$

Price Choice Model

- Winery level:
 $Average\ Winery\ Price = \alpha_0 + \alpha_1 F_1 + \alpha_2 F_2 + \alpha_3 Winery\ Quality\ Score + \alpha_4 Winery\ Size + \alpha_5 Percentage\ of\ Wines\ Bottled\ as\ Varietal + \alpha_6 Percentage\ of\ Sales\ Occurred\ within\ the\ State + \alpha_7 Owner's\ Experience\ in\ Winemaking + \varepsilon_3 \quad (5)$
- Brand level:
 $Brand\ Price = \alpha_0 + \alpha_1 F_1 + \alpha_2 F_2 + \alpha_3 Brand\ Rating\ Score + \alpha_4 Percentage\ of\ Wines\ Bottled\ as\ Varietal + \alpha_5 Percentage\ of\ Sales\ Occurred\ within\ the\ State + \alpha_6 Owner's\ Experience\ in\ Winemaking + \alpha_7 Varietal\ Dummy + \alpha_8 Vintage\ dummy + \varepsilon_4 \quad (6)$

Results

Quality Choice Model Estimation Results

- Winery level (Tobit model, N=81)

Dependent variable:	Average winery rating	
	Coefficients	Marginal Effects
Passion factor	3.621***	1.690***
Profit factor	-2.062**	-0.963*

- Brand level (Clustered OLS)

Dependent variable:	Brand rating	Brand rating	Brand rating	Brand rating	Brand rating	Brand rating
	(Data from Wine Spectator, N=302)			(Data from Cellar Tracker, N=700)		
Passion factor	4.017***	4.182***	3.993***	0.644	0.615	1.000
Profit factor	-0.543*	-0.580*	-0.583**	-0.922**	-0.814**	-0.581*
Winery size	1.332	1.720**	1.864	0.039	0.038	0.275
Varietal dummy	yes	no	no	yes	no	no
Vintage dummy	yes	yes	yes	yes	yes	yes
Appellations dummy	yes	yes	no	yes	yes	no

Price Choice Model Estimation Results

- Winery level (N=83)

Dependent Variable	log average winery price
Passion factor	0.069**
Money factor	-0.024
Average winery rating	0.002

- Brand level (Wine Spectator database, N=233)

Dependent Variable:	log price	log price
Passion factor	0.124*	1.408**
Profit factor	-0.174***	-4.518***
Profit*Winery size	—	0.396***
Passion*Winery size	—	-0.094**
Quality rating score	0.025**	0.027**

The estimation results indicate that:

- Wineries owned by passion-oriented individuals tend to have higher average winery rating scores and brand rating scores.
- Wineries owned by profit-oriented individuals tend to have lower average winery rating scores and brand rating scores.
- Profit-oriented winery owners tend to charge lower prices of their wines, even after adjusting for quality differences.
- Passion-oriented winery owners tend to charge higher prices of their wines, even after adjusting for quality differences.

Conclusion

- The results confirm the hypotheses that owner motivation (profit-oriented versus passion-oriented) could lead to different wine pricing and quality decisions.
- Passion-oriented owners tend to produce higher quality wines and charge higher quality-adjusted wine prices.
- Profit-oriented owners are less likely to produce higher quality wines and tend to set lower quality-adjusted prices to target lower-end market.
- Quality-adjusted wine prices will decline as the winery grows larger in utility maximizing wineries.

Acknowledgements

The authors gratefully acknowledge the support of the National Institute of Food and Agriculture, U.S. Department of Agriculture, through Award 2011-68006-30815.

