

# **Too Legit to Fail? Identifying the Influence of Legitimacy on the Success and Survival of Cool Climate Wine Producers**

**By**

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## Problem Statement

In the past ten years, there has been a significant increase of new small- and medium-sized wineries established in regions of the United States not traditionally associated with wine production. In particular, cool climate regions such as in the states of Michigan, Missouri and New York have experienced a dramatic growth rates of new wineries (see table 1, below). As these wine clusters emerge in each state, they have the potential to become vectors of economic growth as has occurred in the more established winemaking states such as California and Washington where related industries (e.g. tourism and hospitality) have benefited from the winemaker's success. However, as most of these cool climate wineries are relatively new (less than ten years old), small (between 1,000 and 3,000 cases) and fairly inexperienced, they often suffer from "the liability of newness" (Stinchcombe, 1965) and face substantial difficulties in acquiring resources, attracting new customers and developing relationships with distributors.

**Table 1. Emerging Wine Industries in Michigan, Missouri and New York**

	<u>Michigan</u>	<u>Missouri</u>	<u>New York</u>
Number of wineries (2009)	100 (up from 17 in 1995)	97 (up from 31 in 2000)	240 (up from 113 in 2000)
Wine volume (2009)	1.4 million gallons	1.1 million gallons	28.7 million gallons
Number of grape growers	711	393	1,438
Wine grape acreage	2,100	1,600	11,000
Wine grape production	5,300 tons	4,400 tons	172,000 tons
Wine industry economic impact	\$790 million (in 2005)	\$1.6 billion	\$2.5 billion

Sources: U.S. Department of Agriculture, Alcohol and Tobacco Tax and Trade Bureau, Michigan Grape and Wine Industry Council, Missouri Wine and Grape Board, and New York Wine and Grape Foundation.

There are two basic characteristics of new ventures that make acquiring resources and developing ties to trading partners difficult for entrepreneurs – uncertainty and information asymmetry (Shane, 2003). Entrepreneurial opportunities are, by definition, uncertain because the profitability associated with the new resource combination is unknown before the launch of the venture (Arrow, 1974). In addition, in an environment that does not fully understand or acknowledge their existence it can be quite difficult for new organizations to establish ties with the trading partners they need to organize their venture properly (Hannan & Carroll, 1992; Stinchcombe, 1965). These characteristics create what Stinchcombe (1965) has termed “the liability of newness” that is often a key contributor to the low survival rate of new organizations.

In particular, if a venture is perceived as lacking legitimacy, defined by Suchman (1995) as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" then it will be less likely for trading partners such as distributors, processors and retailers to invest time and resources in the new venture. This is because cooperation from such partners is often based on trust, reliability and reputation, which in turn are based on familiarity and evidence (Bateson, 1988). In situations where entrepreneurs have little evidence that their new venture will work out well, and the trading partners do not already have an established trust relationship, there is little reason for them to engage in the relationship (Aldrich and Fiol, 1994). Therefore, as Zimmerman and Zeitz (2002) have described, a new venture must engage in activities that foster legitimacy (especially those that cost little or no money due to the scarcity of resources most new venture have) in order to cross a certain

legitimacy threshold. If the new venture can cross this threshold and be “judged legitimate it can receive access to the capital and other resources it needs (e.g., Welbourne & Andrews, 1996; Deeds, Mang, & Frandsen, 1997) ... below which the new venture will probably perish,”(Zimmerman and Zeitz, 2002).

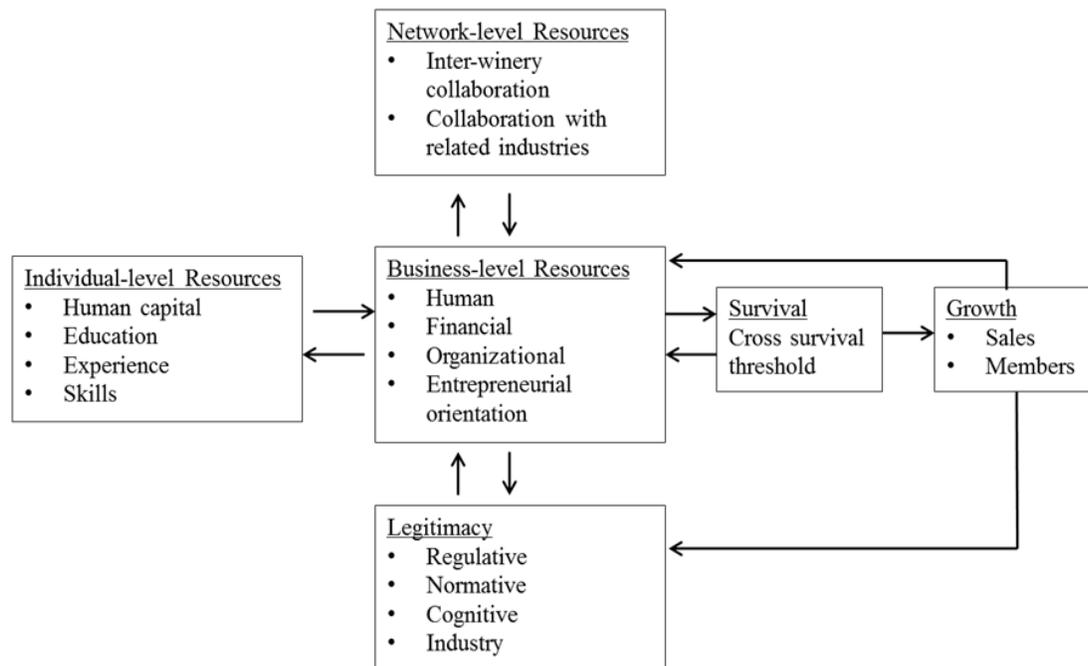
To overcome this “liability of newness” Zimmerman and Zeitz (2002) have suggested that organizations can build legitimacy, as a special type of resource, to allow them to access other resources that are needed to survive and grow. Given that new ventures often have few resources available to them, Zimmerman and Zeitz (2002) postulate that the degree to which new ventures can engage in legitimacy building strategies that cost little or no money, a certain threshold can be obtained that will allow them to access the capital and other resources it needs. Therefore, this paper will examine how the legitimacy building strategies utilized by entrepreneurs in these cool climate regions have affected their perceived legitimacy, access to resources and overall success and survival of their firm.

## **Objectives**

The objective of this research will be to identify small business development strategies that can enhance the growth of rural entrepreneurship through increasing the perceived legitimacy of the winery. In particular, this project will look to examine the effect that various strategic management decisions made by small- and medium-sized business owners have on overcoming distribution challenges of start-up wineries and increase their access to non-local markets.

This project is also being done as part of a larger research project that looks to develop a more inclusive conceptual model (see figure 1, below) that looks to identify a larger set of variables associated with new venture success adopted from Zimmerman and Zeitz's (2002) model for new venture survival and growth. This adopted conceptual model will then be used as an extension platform to communicate results back to the cool climate wine entrepreneurs with the long-term goal of increasing the success rate of start-up wineries in these emerging wine producing regions.

**Figure 1: Proposed conceptual model**



As can be seen from this model, legitimacy acts to influence the business-level resources available to the new venture, which in turn influences the survival and growth of the firm. This influence is not one-way, however, as the resources the firm has available and growth also influence the legitimacy of the firm. Therefore, if we wish to estimate the impact of a firm's

strategic decision making on their perceived legitimacy, we must account for these simultaneous effects that will otherwise bias our estimators.

## **Data**

A survey was mailed to 244 winery owners/managers in Michigan, Missouri and New York (Lake Erie Region) and Pennsylvania in May 2011. A total of 86 responses were received for a response rate of 35 percent. The survey focused on gaining demographic information on the wineries and their owners and/or managers. The next sections asked about the winery's management practices, how it procures grapes, markets its wine and what distribution strategy the winery utilizes. Then, the survey asks winery owners to select from a list of potential challenges in its wine region like, environmental or labor related issues as well as marketing challenges specific to the winery like, branding or segmenting the market. Finally, the survey analyzes collaboration in the industry through asking winery owners about their relationships and interaction with other winery owners and complementary businesses.

The four key characteristics that affect how a winery currently determines its distribution strategy are the winery's characteristics, its marketing efforts, vertical integration and horizontal integration. A winery's characteristics are determined by its production size (number of cases of wine it produces annually) and the number of years it has been in business. The marketing efforts analyze the promotion strategy and challenges. Vertical integration, in this study, analyzes the share of grapes that each winery produces. Finally, vertical integration considers the collaboration among other wineries.

A popular way to collaborate with other wineries is through creating or joining a wine trail. Eighteen of the Michigan participants said their state has established wine trails, and sixteen of the participants are members of a wine trail. Twenty-four of the Missouri participants acknowledged their state having wine trails, but only 19 of those participants were members of one. Finally, 22 of the New York/Pennsylvania winery owners acknowledged their state having wine trails, and 19 of those owners are part of a wine trail. Overall, more than three-fourths of all the respondents said their region offered a food or wine trail. And, 56 of the 82 respondents participate in a wine or food trail; therefore the result is surprising with the amount of concern from the wineries about marketing. Joining a wine or food trail can often bring in new customers, encourage repeat customers to try a new way to tour wineries, allow for collaborative marketing and advertising, develop credibility and recognition for the region and increase agri-tourism in the area.

The survey also asked wineries about their participation in wine associations and other associations. Seventy-three percent of the wineries surveyed are members of a wine association. Nineteen of the 22 Michigan respondents participate in a wine association, 25 of the 28 New York/Pennsylvania are also a member of a wine association and 25 of the 35 Missourians are members of wine association as well. The percent of wineries that are members of a wine association is similar to the membership rate of wineries to its Chamber of Commerce.

Seventy-nine percent of the wineries are members of their local Chamber of Commerce. Of the 22 Michigan respondents, 18 were a member of their Chamber of Commerce. The exact

number of Missouri wineries who are members of a wine association are also members of the Chamber of Commerce, 25 out-of-32. The responses from the New York/Pennsylvania wineries showed the wineries are more likely to be a member of a wine association than a member of the Chamber of Commerce. Twenty-two of the 28 respondents from New York/Pennsylvania were members of a Chamber of Commerce whereas 25 of the same 28 respondents were members of a wine association. This finding is not consistent with the overall responses from the other two states since more of the owners acknowledged their membership with the Chamber of Commerce than a wine association. Like many industries, businesses are encouraged to join associations and become a member of their local Chamber of Commerce to promote inter-collaboration within the industry and the community.

To elicit wineries motives for collaborating with other wineries the survey measured participants' collaboration through asking the participants about their current strategy for procuring the raw materials (i.e. grapes, grape juice and/or bulk wine) used in wine production. The survey asked what percentage of the raw materials was grown or produced on the winery's property, acquired in spot marketing as needed, procured via contractual relationships with suppliers and if they another procurement strategy was used.

Seventy-one respondents found the ability to share information and resources as the top reason to collaborate with other wineries. Almost the same number of respondents agreed that collaborating with other wineries helps promote the wine region. However, the No. 1 challenge in collaborating with each other, according to the wineries owners, is varying business philosophies. While two owners in each state find collaborating with other wineries

challenging because they view the other wineries as competition. Yet, when asked if they felt a lack of trust, only one owner from New York found that to be true while five owners in Missouri felt trust is an issue, (Michigan had zero responses to this question). With differing business philosophies identified as the main collaborating challenge, the second most selected challenge was many winery owners do not feel collaboration is a priority. Finally, the third most popular challenge was distance.

The survey asked about each winery's marketing strategy. Half of the New York/Pennsylvania respondents said its wineries have an arrangement with a bus tour company. Similarly, 46 percent of Michigan's wineries have established arrangements with a bus tour company. But, only 16 percent of Missouri's wineries have arrangements with bus tour companies. A bus tour allows wineries to offer group packages with transportation, build relationships with non-industry businesses and even create bus routes that stop at multiple wineries allowing more customer exposure to the various wineries and the region.

Along with developing partnerships with non-industry businesses, many wineries build a database of their customers. The databases all customers to identify the demographics of its customers, see if the customers are returning visitors, contact the customers, develop marketing different strategies to better target its customers and their needs as well as gathering basic data like the most popular products purchased. Eighty-six percent of all the wineries surveyed keep a database of their customers. Further, 54 percent of Michigan's wineries offer promotions for returning customers as well as 66 percent of Missouri wineries

and 57 percent of New York wineries. Through creating and updating its database, the wineries can also adopt new technology to better reach its audience.

The survey revealed a significant number of wineries executing their marketing strategies through individual websites, newsletters and social media. All of the wineries have a web site and 95 percent of them use social media sites like Facebook, Twitter, Groupon, etc. Only 68 percent of the wineries use a newsletter and even less (38 percent) offer club promotions. However, 94 percent of all the wineries offer price discounts. The wine industry's dominant use of social media over print and club promotions is a positive sign that the industry is developing marketing strategies that focus on advertising with new media. While marketing is noted earlier as a struggle for the industry and the individual firms, the wineries use of social media indicates its willingness to try to new tactics to reach its customers. Further, social media can allow the wineries to easily interact and collaborate with other industry and non-industry members. Finally, social media can help customers see the wine industry's collaborative efforts through Facebook pages for the wine trails, wineries and wine associations.

### **Methods and Preliminary Results**

In order to estimate the impact of firm strategy on the perceived legitimacy of a firm, we must determine what an appropriate measure of legitimacy can be used. Perceived legitimacy is not observable, however, and therefore is not able to be directly modeled. Instead, if a suitable proxy variable can be obtained that theoretically can be hypothesized to be directly correlated to a firm's perceived legitimacy it can be used to test the impact of strategy choice. The variable this paper will consider as such a proxy will be total number of

cases of wine sold through formal distribution channels. The justification for this validity of this variable lays in the theoretical underpinnings of the Zimmerman and Zeitz (2002) model. Namely, if firms are below the threshold of legitimacy required to form successful trade relationships with distributors, then one would expect to see zero cases of wine sold through the formal distribution network. However, after crossing the threshold, Zimmerman and Zeitz theorize that a firm's perceive legitimacy can have an incremental effect in its ability to acquire resources, new customers and trade relationships. Therefore, as legitimacy increases above the threshold level, wineries will have incrementally more cases sold through formal channels.

To see if this variable has some empirical justification, we can look to see if the percent of total production of a winery is at all correlated with a measure of growth, such as average production growth of the winery calculated as current production level (in cases) divided by years of business. We can see (table 2, below) that indeed percent sold through distribution seems to significantly correlate with average production growth.

**Table 2: Linear regression of average production growth and percent sold through distribution**

Source	SS	df	MS			
Model	2438069.57	1	2438069.57	Number of obs =	84	
Residual	50806932.1	82	619596.733	F( 1, 82) =	3.93	
Total	53245001.7	83	641506.044	Prob > F =	0.0506	
				R-squared =	0.0458	
				Adj R-squared =	0.0342	
				Root MSE =	787.14	

avgprodgrwth	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
persolddist	1060.377	534.5545	1.98	0.051	-3.021752	2123.777
_cons	464.1462	95.10679	4.88	0.000	274.9485	653.3439

However, percent sold through distribution does not take into account the size of the business, and a small operation with a few cases sold through a distributor would not be expected to

have the same perceived legitimacy as a comparatively larger operation with a similar percent of production sold through distribution. With this in mind, another variable can be created, as was proposed above, that would represent the total number of cases sold through formal distribution channels (as percent sold x total case produced), which can serve as a potential proxy for perceived legitimacy. Then, given the truncated nature of this variable, then a left-hand censored Tobit can be employed to estimate the impact of key strategic choice and control variables of interest on perceived legitimacy as is done below (**table 3**).

**Table 3:** Left-hand censored Tobit of total distribution on explanatory variables

Tobit regression	Number of obs	=	84
	LR chi2(6)	=	42.39
	Prob > chi2	=	0.0000
Log likelihood = -270.54994	Pseudo R2	=	0.0727

totaldist	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
yrsinbiz	276.7965	114.4341	2.42	0.018	48.97563	504.6174
tastingroom	-26226.51	9771.578	-2.68	0.009	-45680.22	-6772.788
tourbus	7442.653	2924.263	2.55	0.013	1620.894	13264.41
externalrisk	-5506.686	1351.972	-4.07	0.000	-8198.256	-2815.116
externalinvt	4396.133	1409.533	3.12	0.003	1589.968	7202.298
avgprodrwth	6.391526	1.518456	4.21	0.000	3.368513	9.41454
_cons	11210.52	10485.84	1.07	0.288	-9665.19	32086.23
/sigma	9112.667	1345.604			6433.776	11791.56

Obs. summary:	60	left-censored observations at totaldist<=0
	24	uncensored observations
	0	right-censored observations

However, average production growth can be expected to be correlated to total distribution in formal channels as both are composite variables that were created using the data on total production. Holding those variables constant, as well as the perception of the external risk environment and investing environment there still appears to be strong evidence that some of the choice variables such as having an arrangement with tour bus companies (positively correlated) and having a tasting room (negatively correlated) does impact overall

perceived legitimacy. None of the other choice variables listed above in the survey were found to have any significance.

In addition, as average growth and years in business in the model not only act to increase legitimacy but are also expected to simultaneously be increased by the firm's legitimacy as mentioned above, then the endogeneity of these variables need to be accounted for. To do so, an Instrumental Variable approach can be utilized.

For an instrument to be valid it must correlated with the offending explanatory variable but not correlated with the uncontrolled elements of the explained variable. In this case, two such instruments are proposed. For the average production growth, total number of SKUs will be tested as an instrument. The reasoning behind this is that increased product lines can be expected to be correlated with increase growth (see table 4, below) but not necessarily with perceived legitimacy (see table 5, below). After all, one very successful product line can be viewed as much more legitimate than a variety of not very successful ones. The following regressions were done to check the validity of this:

**Table 4:** Linear regression of average production growth on total number of SKUs sold

Source	SS	df	MS			
Model	2390486.56	1	2390486.56	Number of obs =	84	
Residual	50854515.1	82	620177.014	F( 1, 82) =	3.85	
Total	53245001.7	83	641506.044	Prob > F =	0.0530	
				R-squared =	0.0449	
				Adj R-squared =	0.0332	
				Root MSE =	787.51	

avgprodgrwth	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
skus	16.29535	8.300004	1.96	0.053	-.2160046	32.8067
_cons	310.2647	147.3132	2.11	0.038	17.21178	603.3177

**Table 5:** Linear regression of total production sold through formal distribution on total number of SKUs sold

Source	SS	df	MS			
Model	19519682	1	19519682	Number of obs =	86	
Residual	4.4375e+09	84	52826840.4	F( 1, 84) =	0.37	
Total	4.4570e+09	85	52434991.5	Prob > F =	0.5449	
				R-squared =	0.0044	
				Adj R-squared =	-0.0075	
				Root MSE =	7268.2	

totaldist	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
skus	46.46646	76.44173	0.61	0.545	-105.5463	198.4792
_cons	866.8447	1345.921	0.64	0.521	-1809.667	3543.356

Similarly, total number of SKUs can also be expected to be correlated with years in business as a business will be more likely to add product lines as it grows older, whereas the logic still holds about how this will not necessarily improve legitimacy. A test of this hypothesis (see table 6, below) also indicates that it can be a valid instrument (along with table 5, above) for years in business:

**Table 6:** Linear regression of years in business on total number of skus produced

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. regress yearsinbusiness numberofdifferentskusproduced
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Source	SS	df	MS			
Model	1082.66296	1	1082.66296	Number of obs =	86	
Residual	10865.2823	84	129.348598	F( 1, 84) =	8.37	
Total	11947.9452	85	140.564062	Prob > F =	0.0049	
				R-squared =	0.0906	
				Adj R-squared =	0.0798	
				Root MSE =	11.373	

yearsinbus~s	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
numberofdi~d	.3460588	.1196146	2.89	0.005	.1081921	.5839255
_cons	6.777926	2.106071	3.22	0.002	2.589772	10.96608

In fact, this effect is even more significant than for the average production growth. Unfortunately, with two key endogenous covariates and only one potential instrument, obtaining exogeneity is not possible, and unfortunately no other potential instruments in the sample data could be found. Furthermore, there is some concern regarding the strategic choice variables as endogenous as unobservable variables such as the tacit knowledge and skill of the

winery owner might influence both the strategic decisions they make and the perceived legitimacy they have with distributors.

### **Implications**

It appears that total production marketed through formal distribution channels can be viewed as potential candidate to proxy for the perceived legitimacy of a firm. However, more work will need to be done to overcome the rather significant simultaneity and endogeneity issues inherent in this (or any) such measure of legitimacy as one would expect from the proposed conceptual model that is ripe with double arrows. There is also support that total number of SKUs used by a firm can be a potential instrument for growth and/or survival, but more instruments are needed to mitigate the endogeneity associated with both variables. In addition, a survival analysis cannot be done on this current data set as there is a lack of firms who have not survived in order for the model to run. Also, more information will need to be collected on the experience and social capital of the wine owners to separate the impact of these variables from the survival one as years in business otherwise conflates the three. With this in mind, more data is currently being collected on the wine owners for use in expanding this model to obtain clearer results as to which strategic choices directly impact a firm's legitimacy and then how legitimacy impacts overall performance.

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