STRATEGIES FOR BUILDING THE MARKET LEGITIMACY OF ENTREPRENEURIAL WINERIES IN A NASCENT WINE REGION

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ABSTRACT

STRATEGIES FOR BUILDING THE MARKET LEGITIMACY OF ENTREPRENEURIAL WINERIES IN A NASCENT WINE REGION

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New wineries operating in a nascent wine region need strategies to build market legitimacy and gain access to resources crucial to the survival and growth of the winery. Since most wineries in the cool climate wine region are less than 10 years old and produce less than 3,000 cases annually, these firms struggle to attract customers and sell their wine outside their own tasting room. Through surveying 113 wineries in Michigan, Missouri and New York, an overview of the current management and marketing strategies were captured in addition to defining eight indicators of legitimacy (the percent of wine a firm sells through formal distribution channels, obtaining external funding, number of employees hired, breath of trading network and having an arrangement with a tour bus company). Through bivariate and multivariate analyses, we found strong correlations among the legitimacy indicators and wineries' management and marketing decisions. The key strategies recommended in this thesis for new wineries is to, use more vinifera grapes, increase production, apply for and advertise awards, offer food products and club promotions, have a gift shop and utilize social media. Since new wineries often lack a performance record, our results show indicate that new wineries are not at a disadvantage in gaining external funding compared to older, more established wineries. The results and strategies are beneficial to new firms, supporting industries, extension efforts and academic research. Finally, the findings and strategies contribute to the literature on legitimacy, developing wine regions and strategies for entrepreneurial ventures in the agri-food sector.

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CHAPTER 1: INTRODUCTION

In the last decade, more grape vines have been seen across Michigan, Missouri and New York and more wineries are opening their doors to welcome visitors and potential customers. Michigan and New York are often referred to as the cool climate wine regions and Missouri as a continental wine region, but together these states are part of a relatively undiscovered wine producing area. Many of the entrepreneurs starting these wineries were once farmers, fruit growers (including grapes), or hobby winemakers in search of a business opportunity or rural lifestyle who decided to start a commercial winery. Together, this burst of new wineries and vineyards are creating a rapidly expanding industry leading to boosts in rural development and creating opportunities to foster the growth of collaborative industries like tourism. However, the majority of the wineries in this emerging wine region are less than 10 years old, and many of the grapes that grow best in the region are not well known among consumers today, therefore most firms struggle with the “liability of newness” (Stinchcombe, 1965) as they overcome challenges as a new firm but also as a firm operating in an emerging industry. Firms in emerging wine regions need to build legitimacy as a way to gain access to resources crucial to the firm and the region’s success.

Wineries in emerging wine regions struggle to access distribution channels. In a preliminary study done in 2012 by Michigan State University, the University of Missouri-Columbia and Cornell University, 86 wineries in this emerging wine region were surveyed, and wineries ranked managing distribution channels as their No. 1 marketing challenge. The wineries and the region need a strategy to overcome the barriers of distributing outside their tasting rooms. Researching the wineries' current management and marketing strategies is crucial in devising a plan to help overcome the wineries and region's shared, top three challenges, grape production, winemaking and marketing. Through first helping the firms and industry build legitimacy, wineries can leverage legitimacy as a resource to gain access to more resources like distribution channels, skilled employees and financing.

Even though these states are not often associated with wine making, all three states have grape growing and winemaking histories that date back past the last century. In the last decade, a national increase in the number of wineries has occurred. Between 1999 and 2010, the number of wineries in the U.S. rose from 2,688 wineries to 6,668, with the majority in California followed by Washington, Oregon and New York. Along with a national increase in the number of wineries, a few states emerged to form a new wine region, boosting local agri-tourism and opportunities for economic development. In the last decade, Michigan, Missouri and New York's wine industries grew dramatically.

Table 1: Emerging Wine Region Statistics

Response	MICHIGAN	MISSOURI	NEW YORK
Number of wineries	101 Up from 25 in 2000	88 Up from 31 in 2000	133 Up from 113 in 2000
Grape acreage (acres)	14,200	1,700	37,000
Wine Volume (2009, in million gallons)	1.4	1.1	28.7
Number of grape growers	711	393	1,438
Wine grape production (in tons)	93,000	5,200	188,000
Wine trails	7	11	8

Table 1: (Cont'd)

Wne industry economic impact	$790 million (in 2005)	$1.6 billion	$2.5 billion

Note: (1) For Interpretation of the references to color in this and all other tables and figures, the reader is referred to the electronic version of this thesis. (2) All data is current, unless noted. 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.

Together, Michigan, Missouri and New York share similar climate and soil characteristics that are unlike other wine producing regions in the U.S. Viticulture expert Paolo Sabbitini at Michigan State University explains that today wines are coming from all over the world and tasting the same. Sabbitini explains that unlike established regions like California that focus on producing the same wine each year because of their consistent weather, history of growing their grapes in a certain way and producing their wine the same way as well, the cool climate has established a different focus.

> "*In the cool climate we can play some with the game of the vintage effect, so every year the wines are different because the weather is different. So, winemakers have the chance to produce different wines every year and really work on the fact that there are no Rieslings from 2010 that are completely the same as a Riesling form 2012. Therefore, using that to build a recognition in the people that drink your wine with what*

they really want to test is the different vintages, and the climate of that year and to really enjoy the fact that we [the cool climate region] are producing distinctive wines every year," Sabbitini said, viticulture expert at Michigan State University.

The main types of grapes the region grows are in descending order of the most "cold hardy" meaning least susceptible to the winter injury, first are super hardy (i.e. Frontenac, St. Croix, etc.), second are native American grapes (i.e. Concord, Niagara, etc.), third are hybrids (i.e. Chambourcin, Vidal, etc.) and fourth, and the most susceptible to winter injury, are Vitis vinifera (Riesling, Cabernet Franc, etc.) grapes. According to the USDA, from 1999 to 2011, the percent of grape bearing acres increased 17.8 percent in New York, Michigan's grape bearing acreage increased 21.4 percent and Missouri's grape bearing acreage increased 113 percent.

Table 2: Percent of Top Three Varietals Planted by State

MICHIGAN	MISSOURI	NEW YORK
Concord (64%)	Norton (19.3%)	Concord (59%)
Niagara (24%)	Vignoles (13%)	Niagara (8.9%)
Other (3.4%)	Chambourcin (10%)	Catawba (3.8%)

Source: U.S. Department of Agriculture, Michigan State University Department of Horticulture

The region's cooler seasonal temperatures often produce wines that are unknown to most consumers like a semi-dry Vignoles, as most consumers are used to "Old World" wines like chardonnay or merlot. Therefore, as new firms work to survive, they also find themselves promoting a new product category. Further, the shift in the three states' development as a wine region comes from more wineries opening as well as advancements in viticulture and enology practices and changes in the climate across the region, like more wineries being able to grow more Vitis vinifera (Mediterranean climate) grapes. While the growth is dramatic, new firms still struggle to survive.

New wineries often struggle to obtain resources crucial to the firm's and the industry's future growth and success. Previous research shows, "that new firms have lower chances of survival in new industries, and suggested this might be due to the challenges of developing and legitimating a firm," (Dobrev and Gotsopoulous, 2010; Zuzul and Edmondson, 2010). New wineries in the cool climate region must build legitimacy to gain access to key resources.

According to Suchman (1995), legitimacy is a generalized perception or assumption that the actions of a firm are desirable, proper, or appropriate according to some social system of norms, values, beliefs and definitions. Firms can acquire or enhance the level of legitimacy they possess through different strategic actions. Legitimacy is a key resource that allows new firms to then acquire other resources like external funding or gain access to various distribution channels. Finally, building legitimacy and gaining access to key resources are crucial for new venture growth (Moolhuijsen and Boudier-Bakkerlaan, 2011). However, previous research also shows that often the industry must be deemed legitimate before firms can begin legitimizing themselves within that industry. This applies to the cool climate wine region where unlike established wine regions like Napa Valley, Calif., or Bordeaux, France, new firms must not only collaborate to increase the legitimacy of the emerging wine regions but also as a key step in legitimatizing their own winery. "That is, entrepreneurs can legitimate a nascent firm and industry simultaneously by relaying a consistent, symbolic story about the value of the industry while simultaneously emphasizing the privileged position of their own business," (Zuzul and Edmondson, p. 34). Identifying the best strategies for new firms and the industry to jointly obtain and build legitimacy is a crucial issue for emerging wine regions and therefore is the focus of this thesis.

The first goal of this thesis is to survey wineries in Michigan, Missouri and New York, an emerging wine region, to produce a complete analysis of the current status of the region through collecting data on the current production levels and techniques used, management decisions being made and marketing strategies used by the wineries. The second goal of this thesis is to identify key determinants of legitimacy for new firms (i.e. the wineries) operating in a new industry (i.e. an emerging wine region). After identifying the key indicators of legitimacy, those indicators will be used as quantitative measurements to analyze how the management and marketing decisions affect the individual firm's ability and level of legitimacy it acquires as well as the legitimacy of the overall region. Identifying the effects of the wineries' decisions on legitimacy is crucial information that can translate in to strategies that individual firms and the industry can adopt. In addition, showing the links between the wineries and the supporting industries and the effects that those links have on the individual firms as well as the region can serve as a key resource in helping formulate the collaboration strategies needed in the region as well as communicating the importance of collaborating. Since the industry is new, an exciting opportunity exists to guide the future of this industry into a successful wine region.

Through an extensive literature review on legitimacy, developing wine regions and collective behavior strategies, a structured and semi-structured interview instrument was developed in conjunction with Michigan State University, the University of Missouri-Columbia and Cornell University to gather data needed to address the research goals. The survey was used to interview winery owners in Michigan, Missouri and New York to gain an understanding of the cool climate wine region as an industry and to understand the status and behavior of the individual firms that comprise this rapidly growing industry. The survey analyzed winery practices for input procurement, wine production, firm structure and human resources, distribution, marketing and sales, networking and financing of the wineries. Descriptive analysis was completed as well as conducting quantitative analysis including correlations, t-tests, chi square tests, cluster analysis and one-way ANOVAs on the collected survey data to offer insights about the overall region and compute comparisons among the states. The empirical framework of this thesis was adopted from and expands on Zimmerman and Zeitz (2002) and Tornikoski and Newbert (2007).

The first section of this thesis reviews the previous literature on legitimacy, emerging wine regions, and developing new product categories. The second section describes the data collection process and methodology used. The third section encompasses two results sections, a detailed overview of the descriptive findings from the 2012 survey and a supporting section that conducts correlations, t-tests and chi-square tests to detect if relationships exist between the eight legitimacy indicators and a variety of management and marketing strategies used by the firms.

CHAPTER 2: LITERATURE REVIEW

Defining a "wine region"

A wine region comprises the characteristics of the soil, climate and surrounding environment. Previous research defines a "winescape" from just the attributes of a grape wine region and as the whole region and all its attributes (Peters, 1997, Alebaki and Lakovidou, 2011). Johnson and Bruwer (2007) broaden the term stating a wine region is "a held perception (or belief) about a bounded wine area space that is usually holistic and multidimensional in nature, the elements of which are 'glued together' by inter-related winescape elements and/or the people and natural and physical attractions within it," (Johnson and Bruwer, 2007, p. 277). Often the decision to visit a wine region can be the result of proximity to a city near an already planned trip destination like San Francisco and Napa Valley, or as a fun activity for a group of people (i.e. a bachelorette party) or a couple's getaway. Overall, I find most wine enthusiasts or people visit a wine region in search of an adventure or a fun activity and choose the wine region they want to visit based on the reputation of the region, suggestions on visiting the region from friends or from a desire to sample and learn about wine.

Getz and Brown (2006) developed a model of wine destination attractiveness that included three main features, the core wine product, the core destination appeal and the cultural product. The main components of the core wine product are the service attributes, the staff's knowledge and the welcoming of visitors. Interestingly, the authors' wine product does not mention many of the “core” features often associated with wine, including the grape varietal used to produce the wine, the wine’s bottling style (i.e. single varietal or blend), the wine’s price or any quality measures. The core destination appeal includes “attractive scenery, pleasant climate, moderately priced accommodation, easy to obtain information and well signposted wine trails,” (Getz and Brown, p. 155). The cultural product focuses on the locality of the region, “unique accommodation with regional character, fine dining and gourmet restaurants, and traditional wine villages,” (Getz and Brown, p. 155).

More simply stated, Bruwer and Lesschaeve (2012) tie the definition to the consumer’s motivation to visit a wine region as “impl[ying] motivation to partake in an intoxicating substance (wine), interaction with food culture, local people, and pleasurable leisure activities,” (Bruwer and Lesschaeve, p. 615). Further, understanding that visiting a wine region extends beyond consumers just touring wineries and vineyards but is more importantly the complete experience of the surrounding environment, regional culture, local wine and food, and scenery. I believe the combination of the geographical location of the region, the reputation and quality of the wine, the local culture and the organization of the region (i.e. ease of traveling in the region to wineries and restaurants) creates a well-defined wine region.

Building a wine region

Geoffrey Beames (2003) identified Bordeaux, France, Tuscany, Italy, and Napa and Sonoma Valley, Calif., as successful wine destinations because each region appreciates and understands the concept of wine tourism. Through consciously providing facilities for wine, food, lodging, attractions, other activities and history along with beautiful scenery. Further supporting the importance of wine tourism for an emerging wine region, Hall et al. (2000) identifies individual wineries' lack of investment in wine tourism as a key issue. Hall et al. (2000) finds wine tourism as falling second or third to other activities at wineries like wine making (Beames, 2003). Through interviews with industry experts, I learned that wineries and wine regions do not focus enough attention on adding tourism to their business strategy. Wine regions that work together to create easy signs to navigate the region, maps to help guide drivers, mobile apps to engage those tech savvy visitors or collaborate with local hospitality and services are losing a valuable opportunity. People search for authenticity, which can mean seeing the actual grapes, the physical plant and the staff that produce the wine (Brown and Getz, 2005). Finally, tourism, visitors and cellar door sales are often the economic bloodline of a small winery yet most lack an understanding of tourism, marketing and service standards.

Beames (2003) highlights Australia as a key example of a wine region struggling to overcome key development issues.

Table 3: Key development issues Australia faced

Australia's key development issues
• Lacking product focus
• Cottage-industry mentality of wine tourism
• Insufficient inter-industry collaboration between the wine and the tourism industry
• Incomplete tourism experience
• Lack of local planning and development consent and deficient investments funds

However, the Australian wine industry initially found success in producing wines of consistent quality yet low prices, as well as marketing the country as a wine-producing region. Now, Australia's strategy has shifted from low cost and average quality wines to higher priced and quality wines, “It is likely that Australian wines will be seen as more sophisticated, and that these more up-market wines will appeal to a wealthier and more educated market — people who are also more likely to be international tourists,” (Beames, p. 207).

A key development issue Beames points out is the mentality that wine tourism is still a “cottage industry”. Further, he acknowledges the efforts and support of establishments like local tourism offices or coordinated marketing efforts, the “main problem is that wine tourism has simply not been embraced by the rest of the travel industry,” (Beames, p. 208). Another study on wine tourism in Northern Michigan had similar findings.

McCole’s (2013) research on the Northern Michigan wine region revealed that wineries value collaborating with other wineries and organizations. The majority of the wineries felt collaborating with tourism organizations was more important to the success of their winery than collaborating with other wineries. This was a surprising finding in my literature review, most research suggests that the individual wineries do not often collaborate with the tourism industry or see collaboration with others in the region as an important business strategy. However, McCole’s study found more than three-fourths (77 percent) of wineries, in regions like Pennsylvania, Virginia, Missouri, Texas and North Carolina, collaborate with destination marketing organizations, restaurants and bed and breakfasts, 73 percent collaborate with hotels and motels, 68 percent with tour operators, 55 percent with retailers, non-grape agri-tourism and recreation providers, and 50 percent collaborate with other food and beverage organizations (McCole, 2013. However, when the tourism organizations were asked to what extent the wineries improve the tourism destination they operate in, the results varied. On a scale from one to 30, restaurants rated wineries' impact the lowest at 21.5, followed by hotels and motels (22.0), recreation providers (25.9), tour operators (26.1), bed and breakfasts (28.5) and destination marketing organizations (30).

While some of the tourism organizations do not feel the wineries have an impact, 31 percent of visitors to the Northern Michigan region said the wineries were very important in their decision to travel to that area. Another 24 percent of respondents said visiting a winery or wineries were somewhat important and another 18 percent said visiting the wineries was the only reason they decided to travel to that area (McCole, 2013). The study also revealed demographic and psychographic information about wine tourists visiting an emerging wine region.

McCole's (2013) study revealed that 26 percent of tourists who visits a tasting room in Michigan are on average 51 to 60 years old and 21 percent are 21 to 30 years old. Additionally, 61 percent of the tourists rate their own knowledge of wine in general as "somewhat knowledgeable", while 21 percent rate themselves as "knowledgeable". I believe how tourists view their knowledge of wine as an important finding for wineries and wine regions especially in how they interact with consumers and the branding and marketing strategies used. Overall, McCole (2013) finds that facilitating collaboration among wineries and the region is important in the development of a new wine region.

Establishing and building a wine region requires collaboration among a variety of industry and non-industry members. Beames (2003) emphasizes the need of federal and state governments to make rural investments attractive to investors, banks and developers. Moreover, Beames (2003) clearly states that wine tourism needs to focus on understanding how it aligns with or connects to activities in a regional area through stating that, “Currently the term ‘new product development’ to a wine maker would probably be taken to refer to a new blend or type of cork,” (Beames, p. 209). Further, Beames (2003) and McCole (2013) both emphasize the importance of collaboration among wineries, and with organizations in the region as well as understanding how to offer consumers an “experience” when visiting their winery and region.

Mason (2008) is careful to note that collaboration is key for a new wine region but must be strategic. I found collaboration to consistently be supported as beneficial and crucial for wine regions throughout my literature review and interviews with industry experts. A wine and food trail should be structured as a tourist attraction like a cultural and heritage trail and less like a collaborative marketing tool. A wine and food trail should be “[…] a means of organizing the visitor experience by providing a purposeful, interpreted route that can be followed by foot, by car, bicycle or horseback and that ‘draws on the natural or cultural heritage of an area to provide an educational experience that will enhance visitor enjoyment,” (Beames, p. 3). While emerging wine region develop and new wineries open, the regions are also often operating in a new product category.

New grape varietals and wine blends

Locksin et al. (2006) states that wine is a very different product because of the great number of products available and the complexity of wine itself. To understand consumers’ purchase decision of wine, the study analyzed the label information on wine by using a market share simulator with a randomized first choice algorithm to understand how consumers use major cues when purchasing wine. The study revealed that awards had the greatest effect for low involvement consumers, price sensitivity varies between low and high involvement consumers and brand size and how well known the region is added important effects and changed across price points (Locksin et al., 2006). Although awards were shown as an important cue for purchasing wine, many contests exist and often are costly for new, small wineries to enter. I did not find a significant number of studies available on helping determine which awards are the most valuable for wineries to enter or which awards consumers reference the most. Along with other researchers, the paper notes that the reputation of the producer and wine traits like the vintage or region from which the grapes were sourced and the grape variety are significantly related to price (Locksin et al., 2006).

Building a market category

Navis and Glen (2010) investigate the temporal dynamics among legitimacy, identity, and entrepreneurship to create an encompassing framework that analyzes the emergence of new market categories during the development of a market (Navis and Glen, 2010). Establishing a collective identify creates a basis for the category's members to tailor their distinctive identities within the category and ensuing that an individual organization can then claim its individual identity but not differentiate itself and be an unrecognizable member of that category (Navis and Glen, 2010). A key point of Navis and Glen (2010) is "with legitimation, a new category requires less explanation; as a result, the focus of metaphors should shift from describing the category to describing the individual organizations and their distinctive membership in that category," (Navis and Glen, p. 443). Through a qualitative and quantitative research study with 16 years of data on the satellite radio industry, Navis and Glen found in the emergence period that firms claimed collective identities, described the category with linguistic framing (using analogies, metaphors or similes to give meaning around the category) and announced affiliations that sanctioned the category as a whole (Navis and Glen, 2010).

Developing a regional identity

Romanelli and Khessina (2005) argue that regions need a strong industrial identity and can do this when a large number of observers, inside and outside the region, discuss key features of the region's industrial activity (Romanelli and Khessina, 2005). A regional identity is when residents and external observers are aware of the features of life and work in a region, like knowing that Michigan produces wine. Building a regional identity then allows people to begin to associate an activity like winemaking with a region therefore leading to more resources being given to this particular industry (Romanelli and Khessina, 2005). This concept applies well to emerging wine regions, if a consistent message is relayed among all observers about the important features of the region and the wines for example, then outsiders will be able to distinguish the region better and resource gatekeepers may then view the region as a desirable investment.

Further, through surveying the winery owners in this region, we seek to understand how the current strategies of firm owners and their perceptions of emerging wine regions. "Thus, regions that convey a strong external identity are more likely to attract greater amounts of resources (e.g., from tourism, migration, and economic investment), than regions with weaker identities," (Romanelli and Khessina, p. 349). Further, the authors find determining the dominance and interrelatedness of the cluster as important aspects of regional industrial identity.

Romanelli and Khessina (2005) classify a cluster as large and dominate when it contributes significantly to the economic wealth of a region. Further, smaller clusters are those that contribute less economic wealth to a region, but can also attract attention (potentially through their relationships with other clusters in particular dominant clusters) (Romanelli and Khessina, 2005). The degree of dominance of a cluster is determined by the number of organizations proportional to employment in the cluster, therefore a high number of organizations with a significant proportion of the residents employed by those organizations indicate the dominance of the industry cluster (Romanelli and Khessina, 2005).

In summary, Romanelli and Khessina (2005) find a relationship between the strength and focus of a region's industrial identity, with both having a strong regional industrial identities both will attract a great amount of resources but a region with a more focused identify will attract more homogenous resources while a more generalized identity will attract more heterogeneous resources. This applies well to this emerging wine region, if the region associates itself with one grape varietal.

This emerging wine region needs a flagship varietal like Napa Valley, Calif., being known for cabernet wine, this could help the emerging wine region gain international recognition, attract attention of large, national distributors, create a strong regional brand that newer wineries could leverage legitimacy from, and allow wineries to more easily share equipment and knowledge when growing a similar varietal. In addition, building a strong, regional industrial identity could encourage financing agents to invest in the region and individual firms as well as.

Survival and growth require legitimacy

Survival is the most recognized effect of legitimacy followed by growth, efficiency, profit, size, liquidity, success/failure, market share and leverage (Zimmerman and Zeitz, 2002). The commonly recited survival rate of new ventures, reported by the Small Business Association, consistently shows that about half of all new ventures fail in the first five years of operation. The crucial time between failing and succeeding can often be the result of insufficient resources (Shane, 2000). Zimmerman and Zeitz (2002) identified two key issues for new firms, resource acquisition and growth.

New ventures can overcome their lack of resources through engaging in activities that signal legitimacy. Zimmerman and Zeitz (2002) identify the following activities as legitimacy building activities, establishing a credible management team, showing industry competence, obtaining endorsements and certifications, developing a network, and operating as a low-risk venture. The above activities' assistance in signaling legitimacy will help firms obtain more resources, like access to financing.

In this literature review, the goal is to understand the importance of obtaining legitimacy to acquire resources and encourage growth in new firms, but also to understand the challenges of building legitimacy in a newly developing industry. This is important because the literature suggests that, new firms have a lower chance of survival in a new industry compared to an established industry and is suggested to be the result of challenges in developing and legitimating a firm (Dobrev and Gotsopoulos, 2010). Further, the Zimmerman and Zeitz (2002) argue that whether a firm wants to grow or not, legitimacy is necessary in obtaining access to resources. First, we will define legitimacy, the types and strategies often used to build legitimacy. Next, we analyze the conformance strategy of obtaining legitimacy in detail. Then, look at Gartner's (1985) framework of how a new venture is established and how Tornikoski and Newbert (2007) applied Gartner's framework to entrepreneurs' decision to conform or act strategically to build legitimacy.

Defining legitimacy

Measuring legitimacy must first be explicitly addressed. In Suchman's 1995 article, he described the studies on legitimacy preceding his article as falling in two categories, strategic and institutional legitimacy. He describes previous literature's definition of strategic legitimacy as having a managerial perspective that focuses on how organizations "manipulate and deploy evocative symbols in order to garner societal support," (Suchman, p. 572). Whereas institutional legitimacy has a more broad view that analyzes the ways that sector-wide structuration dynamics can generate cultural pressures that exceed an organization's control. Hargreaves (2003) explains simply that the strategic school emphasizes behaviors and values and the institutional school emphasizes symbols and cognitive processes. Suchman's (1995) broad-based definition sought to combine the institutional and strategic school (Hargreaves, p. 1).

Suchman's often quoted (1995) definition refers to legitimacy 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," (Suchman, p. 574). He continues by saying that legitimacy is resilient to particular events yet dependent on a history of events meaning, an organization can stray from societal norms but still remain legitimate.

Suchman (1995) also states that legitimacy is possessed objectively yet created subjectively. For the emerging wine region this means that firms who often use strategies to obtain legitimacy, like planting more vinifera grapes, which can be objectively measured like acres planted, however how resource gatekeepers view the winery's decision to plant more vinifera grapes is subjective. Meaning, resource gate keepers may value a winery's decision to produce more wine using vinifera grapes or value the awards a winery has applied for and won, but their opinion is subjective and often more difficult to objectively measure. Understanding how legitimacy is possessed and created is an important concept and conveying that to wineries.

Zimmerman and Zeitz (2002) further define legitimacy as (1), a social judgment of appropriateness, acceptance, and desirability, and (2) as a key resource for new ventures in gaining access to resources and for future growth. Moolhuijsen and Boudier-Bakkerlaan (2011) support Zimmerman and Zeitz's definition and add that the legitimacy process is "repeated again and again whereby feedback loops continuous change strategic actions, legitimacy and resources acquired what ultimately result in various growth rates," (Moolhuijsen, p. 27). Three types of legitimacy have been defined and are still referred to and used in current research.

Types of legitimacy

Suchman (1995) defined three types of organizational legitimacy strategies: pragmatic legitimacy, moral legitimacy and cognitive legitimacy. Similarly, institutional literature refers to those three external sources of legitimacy as: sociopolicitical regulatory, sociopolitical normative, and cognitive legitimacy.

Regulative legitimacy

First, regulative legitimacy can be derived from “regulations, rules, standards, and expectations created by governments, credentialing associations, professional bodies, and even powerful organizations (such as those manufacturing companies requiring their suppliers to have some sort of "quality" certification),” (Zimmerman and Zeitz, p. 418). The main idea of regulative legitimacy is to show the firm is operating lawfully and fairly. Finally, obtaining regulative legitimacy often indicates to stakeholders that, “the new venture is acceptable to the various regulatory agencies, even when little is known about how effective the rules, regulations, standards, and expectations are in meeting the desired ends,” (Zimmerman and Zetiz, p. 419). The second type of legitimacy is normative legitimacy.

Normative legitimacy

Normative legitimacy derives from the norms and values of society. Zimmerman and Zeitz (2002) state profitability, fair treatment of employees, endorsements and networking as examples of norms and values that aid in gaining access to resources while also emphasizing the important role of networks, both internal and external to the firm. Networks help “aid the survival of the new venture by providing credibility, contact, and support for the entrepreneur; building a positive image of the new venture; and facilitating access to resources (Ostgaard & Birley, 1996; Westhead, 1995; Zhao & Aram, 1995), (Zimmerman and Zetiz, p. 419). The third type of legitimacy is cognitive legitimacy.

Cognitive legitimacy

Cognitive legitimacy derives from following the goals and activities that are deemed appropriate and desirable. Johnson, Dowd and Ridgeway (2006) describe cognitive legitimacy as deriving from the occurrence of comparable organizational actors that then provide templates for organizational structures and actions. Cognitive legitimacy can be obtained through “endorsing and implementing methods, models, practices, assumptions, knowledge, ideas, realities, concepts, modes of thinking,” that are all widely accepted to signal that an organization is acceptable and desirable (Zimmerman and Zeitz, p. 420). Along with the different types of legitimacy, three strategies are often referred to in building legitimacy.

Key strategies used to achieve legitimacy

Firms typically seek these three types of legitimacy through the following strategies proposed by Suchman (1995): conformance, selection and manipulation. Zimmerman and Zeitz (2002) propose creation as an additional strategy because of new ventures’ development of new government rules or regulations, norms, values, and models that may shock society but ultimately cause change.

Zimmerman and Zeitz (2002) describe the four strategies. Conformance applies when a firm “follows the rules”, when a firm does not question, change or violate the social structure. Selection focuses on finding a desirable environment. Manipulation focuses on innovating and/or leaving a prior practice but is the most difficult for ventures. Creation involves developing societal rules, norms, values, beliefs, models, etc., and is the most strategic of all the strategies.

Zuzul and Edmondson (2012) stress the importance of managing both the external and internal journeys and identifying the ways they conflict may be the essential challenge in growing a new business in a nascent industry. For example, wine regions are often associated by the grape that wineries in the region predominantly produce, therefore if the wineries in the region are producing all different varietals, this can be more difficult for consumers to establish an association with that region. Clercq and Voronov (2009) address entrepreneurs' decision to conform or transform while acknowledging the resulting pressure to obtain legitimacy.

Deciding to "fit in" or "stand out" is a difficult decision for entrepreneurs. "The ultimate challenge for entrepreneurs is to cope with the simultaneous demands to use methods, procedures, or technology that are somewhat consistent with existing practices and produce outcomes that are innovative enough to warrant the generation of unexploited economic profit in their domain of activity (Atuahene-Gima 2005; Suchman 1995; Dowling and Pfeffer 1975)," (Clercq and Voronov, p. 404). Based on Bourdieu's theory of practice in examining entrepreneurs' success of resource acquisition in a power-ladden, socially embedded process, Clercq and Voronov (2009) add to the entrepreneurship literature through analyzing entrepreneurs' need to fit in and stand out. The authors argue that the ability to fit in signals that someone is serious and understands the field's rules therefore making them a trustworthy recipient of resources (Clercq and Voronov 2009; Lounsburg and Glynn 2001; Ring and Van de Ven 1994). While the ability to stand out shows the entrepreneur has something novel or previously unexploited in the particular business field therefore resources given to the entrepreneur will likely produce superior returns (Gartner 2003; Clercq and Voronov, p. 407).

Conformance, "fitting in", as a legitimacy strategy

Conformance literally means an organization that is in compliance with the demands and expectations of an already established social system. Again, because most new ventures do not have the resources or established legitimacy initially, the new ventures are likely to follow or adapt to the industry's current rules, norms, values and models (Zimmerman and Zeitz, p. 422). Suchman and Zimmerman and Zeitz, recommended two steps that new ventures can take to gain legitimacy, first is changing the firm itself and second, changing its environment and other organizations within that environment (Suchman, 1995) (Zimmerman and Zeitz, 2002).

Conformance is often the recommended strategy for a new venture that plans to operate in a well-established industry. Zimmerman and Zeitz (2002) stated that generally new ventures have little power and few resources to challenge the established social structure. Further, conformance involves the least amount of external change relative to the other three legitimacy strategies making the strategy the easiest to execute as well.

Further, Gartner (1985) describes the creation of a new venture through a framework of four dimensions: the *individual(s)* who started the new firm, *organization* meaning the kind of firm started, the *environment* that surrounds and influences the new firm and finally, the *new venture process* in terms of the actions the individual(s) took to start the firm. Further, Gartner argues that all four dimensions must be analyzed to understand organizational emergence.

Tornikoski and Newbert (2007) applied Gartner's framework and contend that the likelihood of a nascent organization forming is a function of whether the firm "(1) possesses those characteristics deemed credible by the society in which it operates, or 'conforming legitimacy'; and (2) engages in activities aimed at convincing external audiences that the organization is operational, or 'strategic legitimacy'," (Tornikoski and Newbert, p. 312). Now a more detailed look at, similar to Tornikoski and Newbert's (2007) paper, that applies Gartner's framework to analyze a nascent firm's decision to conform or act strategically in its search to build legitimacy.

Collaboration

Collaboration has been widely studied and recognized as a crucial strategy for an emerging firm and industry. Getz and Brown (2006) state that collaboration is necessary in creating the wine tourism experience and while wineries are the main attraction, they cannot stand alone. Hall et al. (2000) finds the lack of inter-industry collaboration among the wine and tourism regions is the resulting lack of three factors (1) the relative infancy of wine tourism which leads to poor communication of information and research regarding wine tourists and wine tourism, (2) not as important to the individual winery, and (3) wine makers' lack of experience with tourism (Beames, p. 209). In attempting to offer consumers a complete experience, Beames (2003) stresses the importance of local councils, businesses, restaurants, lodging, wineries and activities operators in a developing region to work together and ultimately bring prosperity, employment and growth to rural areas.

Acting strategically, "standing out", as a legitimation strategy

Legitimacy can increase when new ventures take strategic actions (Zimmerman and Zeitz, 2002). Zimmerman and Zeitz (2002) find that new ventures can use a combination of the four strategies but when growth or survival is potentially compromised, manipulation may be needed. Tornikoski and Newbert (2007) describe activities that new firms can do to demonstrate resource combination behavior when focused on using and transforming those resources that they possess or have an impact on production. Zimmerman and Zeitz (2002) describe improvising activities like starting marketing efforts, opening a bank account and projecting financial statements as behaviors that affect legitimatizing new firms.

The individual

Gartner's (1985) first dimension is the individual, the person(s) who started the firm. Baron and Markman (2000) argue that a having a high level of social capital can often help entrepreneurs gain access to venture capitalists, potential customers, information and markets. The authors note that a high level of social capital can be built on a favorable reputation, relevant previous experience, and direct personal contacts. Further, Baron and Markman (2000) state that entrepreneurs can increase their social skills through training and that an increase in social skills will likely lead to more success and social capital.

Baron and Markman (2003) then analyzed the importance of social competence and its role on a firm's financial success. In their study, two groups of entrepreneurs, one in the cosmetics industry and one in the high-tech industry, completed a questionnaire about their social competence as an individual. Next, a third group of entrepreneurs were surveyed but to increase the validity of the entrepreneur's self reporting, Baron and Markman had someone who knows the entrepreneur well rate their social competence. Then, the researchers linked the data through parallel and factor analysis to their firm's financial success through averaging the firm's income from several years. Social perception, how one accurately perceives others, was the only variable that was positively linked to financial success in both groups, (Baron and Markman, 2003). Additionally, social adaptability, the ability to adapt to a wide range of social situations, was related to financial success for entrepreneurs in the cosmetics industry, and expressiveness, the ability to appropriately express emotions and feelings, was linked to the same success for entrepreneurs in the high-tech industry.

Previous literature focuses on varying aspects of the individual entrepreneur's role in a nascent firm. Packalen (2013) formulates a framework that analyzes how an organization's initial legitimacy and its proceeding ability to obtain resources are derived from the interaction among specific characteristics of a founder's background. Through simultaneously analyzing the industry status, entrepreneurially relevant demographic characteristics and social capital the author finds that one type of capital may reduce the dependence on or need for others.

Van de Ven et. al (1984) paper studied 14 U.S. courseware companies in 1983 to understand the factors that influence the startup success. The survey found that startup success and company stage of development are positively related to a broad set of skills and expertise of the entrepreneur, explained further by how the entrepreneur of a small business must often act as main brain and agent. In addition, the education level of the entrepreneur is strongly and positively correlated with company development yet prior experience in small business was negatively related to the stage of development (Van de Ven et. al, 1984). Additionally, this survey revealed that start-up success was positively correlated with the founding team's education and experience. Tornikoski and Newbert (2007) state that a nascent organization's legitimacy maybe in part determined by the collective ability of its founding team or its organizational capital.

Finally, in Kundu and Katz (2003) study of 47 born-international small and medium sized businesses used Katz and Gartner (1988) framework and found that resources, most importantly the human capital of the owner was significant in predicting the exchange of their dependent variables, exports (Brush et. al, 2008).

Organization

Van de Ven (1984) describes the organizational approach as looking at the overall network of people involved in the creation of an organization and "examines the series of events, planning processes, and structural forms that emerge to mobilize collective action," (Van de Van, p. 88). As Zimmerman and Zeitz (2002) argue that ventures can project desirability through highlighting the management team's credentials and industry competence. Further stated, without conforming to institutionalized expectations like possessing a management team with significant education and professional experience, a nascent organization may struggle to gain access to resources necessary for operating (Tornikoski and Newbert, 2007). In addition, to the individual and the organization, the environment that venture emerges in is important to consider.

Environment

The environment, its growth rate, level of competition or demand, can all affect the ventures that operate within. Schumpeter (1934) described entrepreneurs in an emerging industry as having to change the current equilibrium by assembling factors of production in novel ways to create "new combinations". Examples of that could include exploiting a new source of supply or technology, developing a new product, or tapping a new market (Low and Abrahahsmon, 1997). Additionally, Low and Abrahamson (1997) note that in an emerging industry, the key challenge is achieving legitimacy, through building cooperative relations with legitimated forms adds credibility.

Low and Abrahamson (1997) state that when an industry is in a growth phase, competition is low because some form of the entrepreneur's venture or product already exists and some degree of legitimacy has been achieved. Therefore, entrepreneurs can prevail against the competition by recognizing a new form or moving quickly to capture a significant piece of that potential (Low and Abrahamson, 1997).

Finally, in a mature industry, competition is intense and businesses compete based on "superior execution, local market knowledge, or by adopting state-of-the-art technology and business practices," (Low and Abrahamson, p. 444). Strong ties to an individual industry are needed in a mature industry, however, identifying the determinant of success become easier (Low and Abrahamson, 1997).

The process

Behavior influences how firms obtain legitimacy, more specifically increasing the actual or potential compliance to institutionalized expectations. According to Tornikoski and Newbert (2007), new firms can strategically build legitimacy through at least three key types of behavior, improvising, resource combination and networking. First, improvising behavior is used when firms try to make their firm look like a more functioning, established firm, even if they are not. Delmar and Shane (2004) highlight that during the early months of a new venture's creation, most firms cannot be evaluating their historical performance because that data may not exist therefore external stakeholders make their decisions based on their perceptions of the new firm's legimacy, (Delmar and Shane, 2004). Often, "the result of this 'impression management' tactics is that these external parties are likely to respond to the nascent organization 'as if' it were an existing organization by granting them access to these resource," (Schlenkler, 1980) (Tornikoski and Newbert, p. 318). Further, the authors describe improvising behaviors as doing tactics that are similar to existing firms like creating a business plan, lobbying, advertising, event sponsorship or conducting scientific research, however often impression behavior is simply creating an impression or illusion that the firm is fully operational therefore, not producing tangible outputs unlike the second type of behavior. Further, "good story telling is useful to obtaining legitimacy because stories are evaluated on their internal coherence rather than on external validation," (Fisher, 1985) (Delmar and Shane 2004, p. 390). Finally, the goal of these different perception tactics is to convince others that the new firm is functioning and moving forward.

Resource combination is the second type of behavior used to build legitimacy. This type of behavior focuses on developing outputs like products or services to "provide resource gatekeepers with a tangible assessment of whether or not the nascent organization is actually capable of doing what it is organized to do," (Tornikoski and Newbert, p. 319). Delmar and Shane (2004) find firms that obtain inputs like raw materials are less likely to disband than other firms. Further, the authors find firm survival to increase in relation to the timing it takes a new firm to complete the new product development process.

The third behavior is networking, which Tornikoski and Newbert (2007) state as an important method in building legitimacy because it enable nascent organizations to actually manipulate the environment and change external parties' perception of their firm. In support, Delmar and Shane find generating social relationships early in the firm's development with its potential customers as important and a way to learn about the firm's customers' needs and demands and to utilize their customers' social network, (Shane and Delmar, p. 396). Further, the authors find that firms that network with potential funders through early in the firm's development process asking potential financiers for funds significantly reduce the likelihood that the firm will fail. Finally Tornikoski and Newbert (2007) emphasize that firms who network and interact with resource gatekeepers will increase the opportunities to convince those parties that their new firm is legitimate and therefore increasing the likelihood that the new firm will obtain access to those parties' resources.

CHAPTER 3: RESEARCH METHODOLOGY

Survey Instrument

A semi-structured survey instrument was used to gather data on this emerging wine region. The survey questions analyzed the individual firm and the industry activities through eliciting responses on management practices such as procurement, production, marketing practices, industry collaboration and innovativeness, as well as management challenges and constraints. The survey is comprised of 63 questions. The survey was pre-tested with a subset of wineries and researchers from the three states then revised before the being emailed to winery owners. Finally, this survey instrument will be relevant to the academic and practioner communities.

Data Collection

We surveyed winery owners and managers to collect primary data on the wine industry in Michigan, Missouri and New York. Beginning in April and May 2012, the survey was first sent to 318 wineries: 88 in Michigan, 116 in Missouri and 114 in New York. The data was collected as part of an inter-collegiate project among Michigan State University, the University of Missouri-Columbia and Cornell University to study an emerging wine region in those Universities' states.

The questionnaire was converted for Online use through the Internet-based survey tool Survey Monkey (SurveyMonkey.com). An email with a link to the survey was first sent to the winery owners. In the email as well as on the first page of the survey was information to legitimize the study and encourage participation through describing the Universities involved in this research project, the purpose of project, the survey's content, the confidentiality of the survey and respondents' rights to voluntarily participate in the survey. In addition to collecting surveys through Survey Monkey, in June and July 2012 field visits were made to visit winery owners and conduct in person interview using the same survey. In total, 88 wineries in Michigan, 116 wineries in Missouri and 114 wineries in New York were contacted to participate in the study.

The surveys completed Online and through the different modes were then loaded directly into Microsoft Excel for analysis. "The use of two or more survey modes in a single data collection effort raises the possibility of improved response rates being achieved," (Dillman et al., p. 16).

Table 4: 2012 Survey Response Rate

States surveyed	Surveys collected	Surveys sent	Response rate (%)
Michigan	40	88	45%
Missouri	40	116	42%
New York	33	114	29%
All states	113	318	36%

Methodology

The following methodology was used to statistically analyze the data, (1) descriptive statistics (2) correlations (3) t-tests (4) chi-square tests and (5) ANOVA tests (analysis of variances). The data was cleaned in Microsoft Excel and the bivariate analysis was done in STATA.

The statistical analysis performed on the data was divided in two parts. First a descriptive analysis on the current status of the emerging wine region and the individual firms (i.e. the wineries) is presented to provide an overview of the current management and marketing practices used. The descriptive analysis also includes comparisons among the three states. The second part of the results provides a quantitative analysis of the market legitimacy of wineries in the emerging wine region, examining strategic management and marketing decisions made by wineries and the eight legitimacy indicators. The bivariate analyses result in differing findings, and were selected based on the types of data collected from the survey including, continuous, binary and categorical. Correlations were run between two continuous variables and describe the strength and direction (positive or negative) between the two variables of interest. Independent two-sample t-tests were run between binary and continuous data, the results analyze the means of two different variables and whether the difference between the means is significant. Please note, all t-tests were initially tested for equality of variance assumption, for those that violated this assumption Welch's test was then run to correct for the violation. Chi-square tests were run when two binary variables were present or a binary and categorical variable were being studied. This test results highlight the differences among groups and whether the differences are by chance or are related. Finally, the following results are highlighting these types of bivariate analyses between the legitimacy indicators and the strategic management and marketing strategies used by wineries in the region were conducted.

All of the strategic management and marketing decisions were tested against all eight of the legitimacy indicators, which are based on research by Zimmerman and Zeitz (2002), Tornikoski and Newbert (2007) and Delmar and Shane (2004). From the literature, the indicators previously noted or used to measure signals of legitimacy are hiring an employee, making a sale and obtaining external funding. Adding to those measures, this thesis extends the previous research and adds variables to help signal legitimacy and measuring those indicators specifically for the emerging wine region. Listed in the table below are the variables used to signal legitimacy and the variables were measured based on data from a 2012 survey of Michigan, Missouri and New York wineries.

Table 5: Legitimacy variables

Legitimacy variables	How measured	Signals of legitimacy
Full time, year round employees	Nominal scale – actual number used	+
Full time, seasonal employees	Nominal scale – actual number used	+
Percent sold through liquor stores	% of total wine volume sold through liquor stores	+
Percent sold through restaurants	% of total wine volume sold through restaurants	+
Percent sold through distributors	% of total wine volume sold through distributors	+
Arrangement with tour bus	Dichotomous variable – Yes counted	+

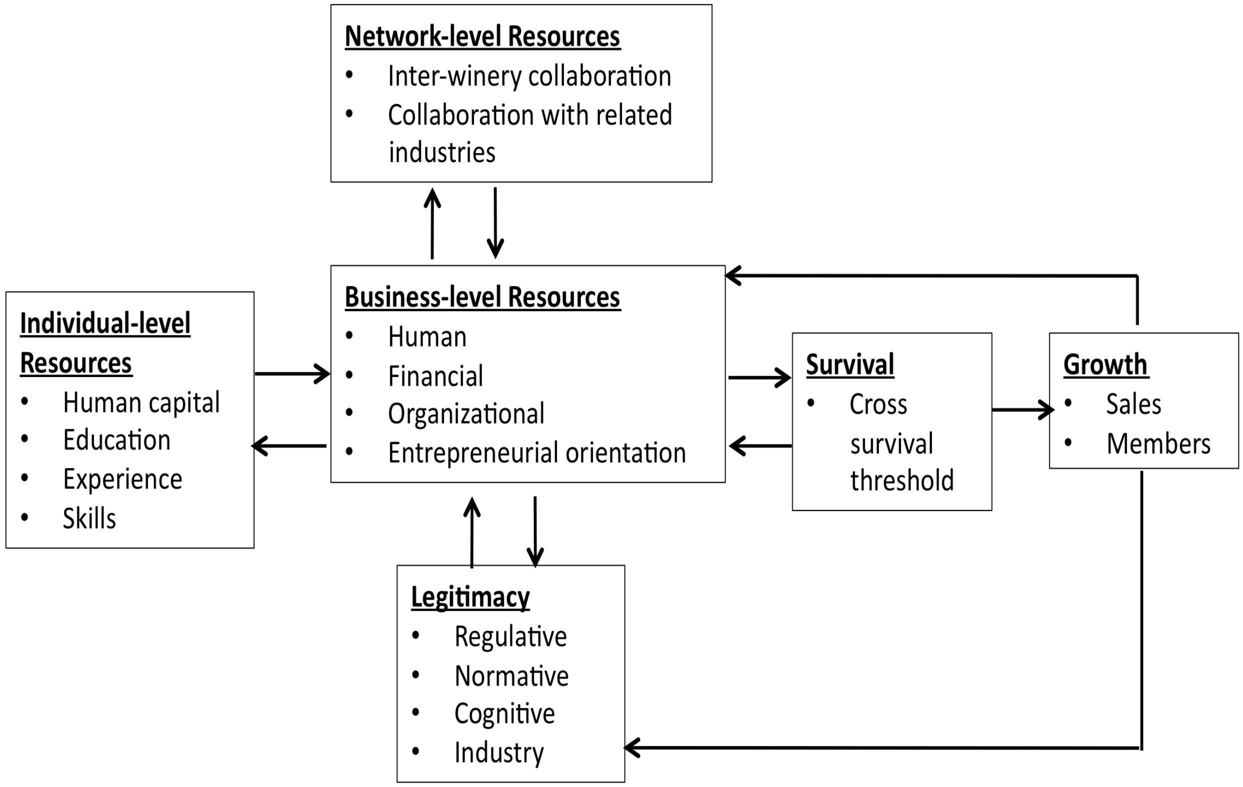
Table 5 (Cont'd):

Large trading network	Created dichotomous variable from an ordinal scale with a score of four to seven on a scale of one, being interacts with few trading partners, and seven being interacts with large number of trading partners.	+
Obtained external funding	Dichotomous variable – Includes those that use external funding or a combination of self-financing and external financing	+

Relationships

Through reviewing the literature and doing in-depth interviews, we learned the importance of the volume of wine a firm can produce and how this affects a firm's ability to gain access to certain resources. "To establish a reputation it is necessary to have a certain size, a certain critical mass. Critical mass delivers shelf space," (Easingwood, p. 8). Further, Ling and Lockshin (2003) found smaller wineries (producing less than 2,500 tonnes) charge more for their wines (and consumers are presumably willing to pay more) than for wine from larger sized wineries (producing more than 10,000 tonnes). Taplin and Breckenridge (2008) however note that large wineries can increase the quality standards for grape growing since in the initial years they were most likely forced to procure their grapes locally to meet their firm's production needs. This concept applies well to the emerging wine region, understanding the effects of large and small wineries in a wine region area, like improving the skills of grape growers, educating local financers and engaging the community.

Figure 1: Legitimacy Model of Emerging Firms Framework



Analyzing the age of the wineries can serve as an important characteristic to compare the states and individual firms to each other and analyze against legitimacy indicators like distribution and breath of trading network. Current research does not offer conclusive findings on how the age of the winery affects the winery's brand, reputation or product, as shown through Ling and Lockshin's (2003) paper that found unequal price behaviors according to the vintages of the wine. Through reviewing the literature, a significant number of studies focus on studying what effects correlate or affect the price of wine however few studies seek to understand the key factors affecting a winery's start-up and growth. Leading us to our first relationship and interest of study.

Relationship 1: The relationship between the number of cases a winery produces and the number of years a winery has been commercially producing wine will both have strong, positive correlations with all eight legitimacy indicators.

Torniskoski and Newbert (2007) found through analyzing human capital, that managerial experience related to many emergence factors yet industry experience and having a college degree were unrelated to whether a firm emerges (makes a sale, obtains external funding, etc.). However, the authors' study does suggests that, "Engaging in improvising and resource combination behavior, potential customers, employees, and financiers may perceive the nascent organization to be legitimate and, in turn, be more willing to enter into resource exchanges with them," (Torniksoski and Newbert, p. 313).

However, through previous literature, we learned that during the start-up phase and sometimes for a few years most wineries do not have any employees, "In many cases, the owner is the only full-time employee and assumes multiple roles such as the viticulturalist, mechanic, chemist, farm laborer, purchasing officer, and salesperson," (Edwards, p. 14). Therefore, employing individuals serves as a strong legitimacy estimator indicating that a firm has surpassed the initial start-up phase.

Finally, we want to analyze human capital because of links to other interesting variables like a winery's trading network, in which Webb et al. (2009) found a significant link between a winery owner's personal network and the access the firm obtained to information, employees, suppliers and customers. In addition, Taplin and Breckenridge (2008) found winemakers from large, established wineries often assume leadership positions in grape growing organizations and extend their knowledge to improve the quality standards and industry efficiencies. Therefore, we think wineries that have credible, established owners, winemakers, grape growers or tasting room staff will lead to strong, positive correlations with all eight legitimacy indicators.

Relationship 2: Human capital will have a strong, positive association to all eight legitimacy indicators.

Thode and Maskulka (1992) studied geographic origin and the location of a critical ingredient(s) in a product. Through applying this concept of "place-based" marketing which is a way of identifying a consumer product with a geographic location, however, results showed that a marketing strategy alone cannot match vineyard-designated wines and grape varietals to the soil, often this depends more on how important consumers think relating place and grapes is.

Relationship 3: Firms with a greater percentage of vinifera grapes and grapes procured from their own estate will have a strong, positive association with all eight legitimacy indicators.

Table 6: Type of grape and how it signals legitimacy

Legitimacy Signals	Vinifera grapes	Estate grown grapes
Full-time, year round employees	+	+
Full-time, seasonal employees	+	+
% of total wine volume sold to liquor stores	+	+
% of total wine volume sold direct to restaurants	+	+

Table 6 (Cont'd):

% of total wine volume sold through distributors	+	+
Arrangement with a tour bus company	+	+
Obtained External Financing	+	+
Large Trading Network	+	+

Note: All associations are anticipated of having a p-value less than 5 percent. The + sign indicates those variables are positively correlated with a legitimacy indicator, - indicates those variables are negatively correlated with a legitimacy indicator.

Wineries that use a high percentage of vinifera grapes in their total wine production will positively link with the signals of legitimacy. Wineries that use hybrid grapes are less likely to positively signal legitimacy. Bruwer and Johnson (2005) identified grape variety, style, region and country of origin, peer influence, food pairings and price as strongly influences on consumers' purchasing decision of wine.

Through analyzing how firms procure their grapes, through their own vineyard, spot/cash markets, verbal (handshake) agreements or written contracts may offer insight on the development of the individual firms and the overall region. Taplin and Breckenridge (2008) found through surveying firms that larger wineries are adding more detail specifications to contracts and working with growers throughout the season to educate them and maintain a dialogue. Further, the authors find this behavior influences the efficiency and product quality of a region's wine and increases the network of knowledge, which ultimately supports how the trust building institutions that local government agencies and industry organizations operate.

Finally, Fernandez Olmos' (2010) study on the implications of buying and growing decisions on a vineyard's performance showed that a widespread belief exists that sourcing strategies have significant direct effects on performance but their paper found that was not true. Therefore, we want to test using our study's legitimacy indicators if a potential relationship exists with the procurement strategy a winery uses.

Relationship 4: Wineries that procure their grapes from their own estate or through a written contract will have a strong, positive correlation with the eight legitimacy indicators.

One of the most important choices for an agrarian firm manager is the decision to integrate or outsource one or more stages of the production process (Fernandez Olmos, 2010; Butler and Carney, 1983; Leiblein et al., 2002; Díez-Vial, 2007). Trejo-Pech (2011) interviewed 12 winery owners in Baja, Calif., to determine if the region qualifies as a wine cluster. Through this study the researchers noted that most of the time wineries in the area hire enologists while other firms outsource enology services because in Baja many winery owners feel there is either no enological technology development occurring or that the technology or services are insufficient. As researchers weigh if Baja is a developing region, this indicates that emerging wine regions may face a similar situation. Through determining the percent of wineries that are outsourcing their winemaking as well as the potential effects that this management decision has on the industry is important.

Relationship 5: Firms that outsource their winemaking have a strong, positive correlation with obtaining external funding, having a large trading network and all the distribution channels.

O'Neill et al. (2002) found that a significant majority of the Australian wine industry consists of medium and small wineries that predominantly sell through their cellar door. The paper suggests that for the Margaret River Valley alone, cellar door sales account for 34 percent of wineries' sales revenue and 15 percent of the wineries in the region say cellar door sales account for 80 percent of their sales revenue. This applies to this emerging wine region because the majority of the wineries are new and producing a small number of cases each year therefore understanding the effects of their management and marketing decisions on where they sell their wine is crucial in helping wineries make decisions and how to realign them better to gain access to other resources like different distribution channels and help the wineries build their future plans.

Relationship 6: Firms that derive a high percentage of their gross revenue from wine sales have a strong, negative correlation with all three distribution channels, having a large trading network and obtaining external funding.

Research shows that most new wineries sell the majority of their wine at their winery, through their tasting room, gift shop, restaurant or through events at their winery. For wineries seeking to grow, extending their wine sales beyond their cellar doors is crucial. We want to analyze what management and marketing decisions help wineries increase their sales through other distribution channels and understand if differences exists between wineries that sell a high majority through their tasting room and those that sell a high percentage through other channels.

Relationship 7: Firms that derive a high percentage of their gross revenue from wine sales will have a strong, positive correlation with hiring full-time employees and having an arrangement with a tour bus company.

An overwhelming number of studies researched the pricing of wine in relation to consumers' view on wine's quality as well as how consumers view a winery, the type of grapes used and the overall region. We instead what to understand if how a winery prices their wine relates to a winery obtaining resources. Understanding if relationships between charging a higher amount for their wine and whether that relates to the firm obtaining external funding, or selling their wine to restaurants versus distributors? As Meijer Grocery's wine buyer Mark Esterman noted, retailers often use price as an indicator of quality because they know many of their customers do. Therefore, considering price is an important aspect to understanding the effects of a winery's management and marketing decisions on their firm's strategy.

Relationship 8: Firms that charge more for their wine have a strong, positive correlation with the legitimacy indicators.

Winning an award is often a goal of many wineries and a signal to consumers that a winery is producing a high quality product. Often awards can build a winery or region's reputation quickly on a global level. Gaining recognition from an outside party that is already deemed legitimate is a key concept and strategy for firms to obtain legitimacy, and often entering a wine competition can help firms do that. Lima (2000) tested a variety of wine competitions to see which competition measures a wine quality the best and the effects of winning for a winery. The results found that winning certain competitions is associated with a higher price for the winning wine and a higher quality given to that wine. Further, an important consideration noted by the authors are consumers, they often place a high value on awards and use the awards as signal for quality. This leads to an important point to study, not only what correlates with winning an award but what type of award is most important, leading to potential recommendations for winery owners as what type of competition to enter, since often entering a competition is costly for a winery financially and in of their time.

Also, attending competitions can be a way to network with other legitimate bodies. Pereira and Goldsmith (2013) note that, "These professional associations not only establish norms and reflect changes over time, but may also serve as a legitimating body," (Pereira and Goldsmith, p. 11). In support, Webb et al. (2009) found entrepreneurs that belonged to trade or business organizations as well as community, political, religious and alumni organizations, were positively related to a firm progressing.

Relationship 9: Firms that have won awards have a strong, positive correlation with the legitimacy indicators.

Marketing and building a brand is highly stressed for new firms to strategize and consistently maintain. Further, branding is highly important for a region. Understanding what types of media correlate with a winery's strategy is highly important as a preliminary study done by Michigan State University, University of Missouri-Columbia and Cornell University conducted in this emerging wine region indicated that marketing is the No. 3 challenge for the individual wineries and the region.

Relationship 10: Firms that use promotional activities will have a strong, positive correlation with all eight legitimacy indicators.

Offering a variety of products and services relates to a winery being able to provide the complete "experience" for consumers. Nowak and Newton (2006) stress that a winery must have enough staff to handle high volumes of people, otherwise not enough staff can be detrimental to a winery and highly disappointing for the consumers. The authors stress however that offering consumers a positive experience at their winery can lead consumers to have an increased perception of the wine's quality, a greater repurchase intent and an overall stronger commitment to the winery's brand. This experience at the winery is what Esterman often looks for when deciding whether or not to sell a winery's products, he finds consumers that have already had that "experience" at winery leads them to demand that wine and already have a connection that he does not have to work on building.

Further, firms that work include working with the media in their marketing strategy can often obtain attention from local, national or international media. This is important strategy for both the individual wineries and the regions since the press often benefits both. This emerging wine region has been highlighted in the media through stories like USA Today's, "6 great American wine regions," which showcases the Finger Lake regions in New York and the Leelanau Peninsula in Michigan, and another USA Today article titled, "Exploring Missouri Wine Country."

In addition to articles discussing what cool climate wine are like, many articles highlight the economic benefits of the wine industries in these regions like Metrofocus' article, "Pour New York?: The Economics of New York State Wines," or St. Louis Post-Dispatch's article, "With 108 wineries, is Missouri tapped out?" or the Traverse City Record-Eagle's article "Wine is a star in Michigan economy."

Relationship 11: A strong, positive correlation exists between offering all of the products and services and the eight legitimacy indicators.

CHAPTER 4: RESULTS

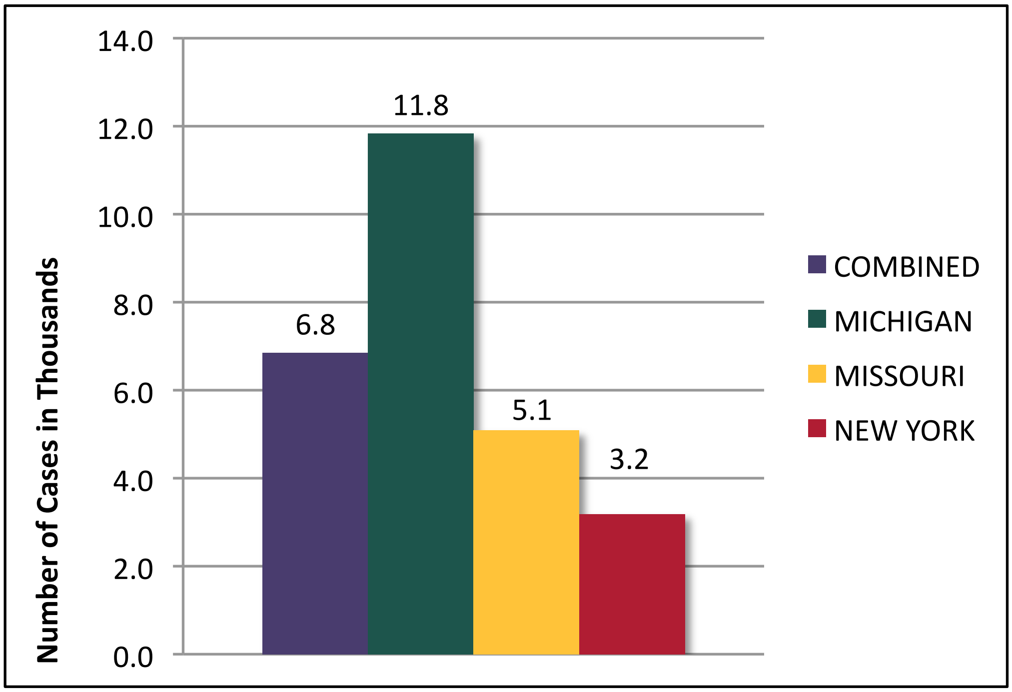
Descriptive Results

Age of wineries

The average winery in this emerging wine region has been in business for almost a decade (9.87 years). The value is measured by the first year the winery began commercial wine production until 2012. The median value is six years, which is lower than the average but can be explained by the dramatic range in wineries' establishment with the oldest winery in the survey operating for 91 years to almost half (46.9 percent) of the wineries sampled who have been in business less than five years. About 13 percent of the wineries in the region have been operating for one year or less (N=113). Finally, on average, Michigan wineries have been commercially producing wine for 11.95 years, Missouri for 9.42 years and New York for 7.91 years.

Volume produced

Figure 2: Average Number of Cases Produced by Wineries in 2011

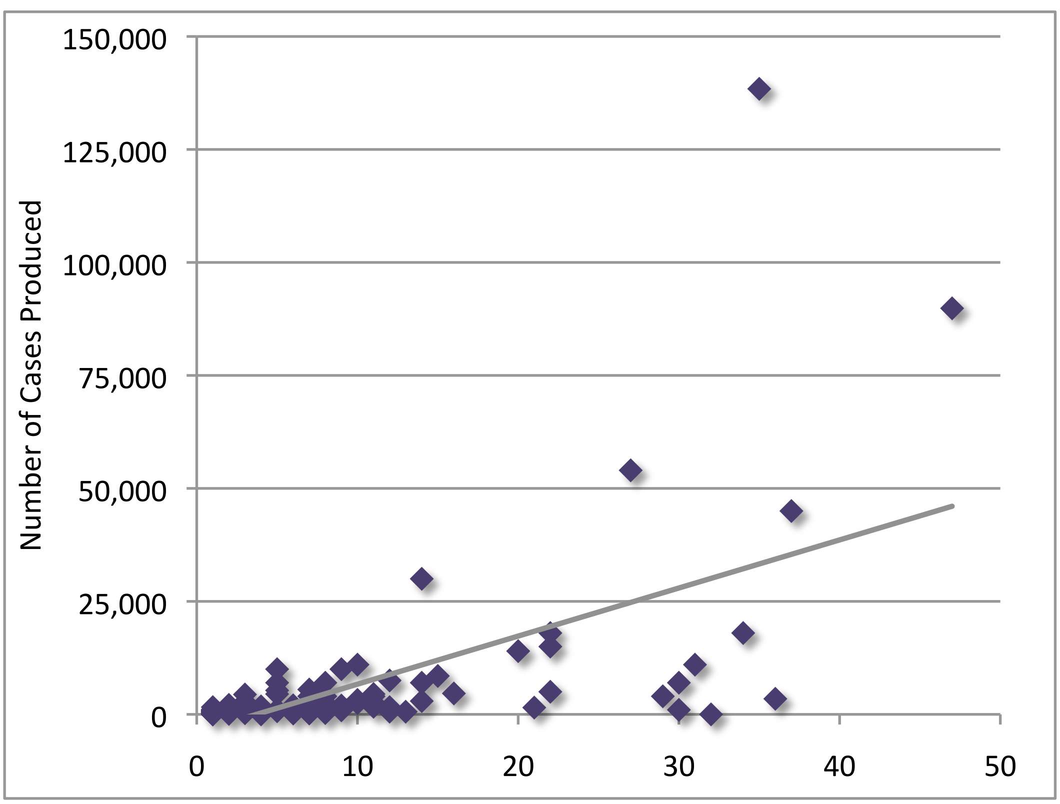


The average number of cases being produced by a single winery in this emerging wine region is 6,910 in 2011. The survey results indicate Michigan produces the most cases of wine (11,834 cases) followed by Missouri (5,089 cases) and New York (3,185 cases).

The median shows a lower production value of 1,500 cases for the region than the average at 6,910 cases. The difference in the mean and median values can be explained by the wide range of production levels occurring in each state. Michigan has the most dramatic range with the mean (11,834 cases) being more than five times the amount of cases produced as the median indicates (2,236 cases). The maximum number of cases produced by a single winery in the state was 138,416 cases while the minimum one winery produced was 240 cases. The significantly lower median highlights the large range indicating that a few major wineries are producing the majority of the state's wine. This is a current characteristic of this emerging wine region, that a few large wineries are producing more than 100,000 cases while the majority of the wineries are producing significantly less.

Finally, of the wineries surveyed, about half (51.3 percent) said their wine production increased from 2008 to 2011. While 9.73 percent said their production decreased and 20.4 percent said their production had remained stable during that time. Among the 58 respondents that increased their wine production, the average increase was 68.7 percent. However, the median suggests the percent increase is closer to 25.5 percent. Only seven of the 11 respondents whose production decreased stated the actual percent decrease, which average to be a 2.45 percent decrease from 2008 to 2011.

Figure 3: Production in 2011 and Number of Years Firm has been Commercially Producing Wine, R=0.60



Main ingredient or inputs used to produce wine

The survey asked respondents to select the main input or ingredient used to produce their wine: grapes, grape juice, bulk wine or other. An overwhelming 87 percent of the region uses grapes as the main input in producing wine (N=112). "Other" was selected as the second most common input, followed by grape juice and finally bulk wine. While the question asks for the main input or ingredient individual firms use to produce wine, more analysis was required to understand the responses since most owners selected multiple inputs. The chart below shows the inputs and combinations of inputs that the owners use to produce wine.

Table 7: Number of Firms that use a Single or Combination of Main Inputs to Produce Wine

Input	**Number of wineries**
Grapes	38
Grape juice	2
Bulk wine	0
Other	7

Input Combinations	Grape juice	Bulk wine	Other
Grapes	12	7	20
Grape juice	-	3	0
Bulk wine	-	-	1

Finally, seven wineries use a combination of three inputs, grapes, grape juice and bulk wine. Six wineries use grapes, grape juice and other. Two wineries use grapes, bulk wine and other. While, four wineries use all of the inputs listed, grapes, grape juice, bulk wine and other to produce their wine. In summary, the majority of wineries in the emerging wine region produce their wine with only grapes (42 percent), another 38.4 percent use two inputs, while 13.4 percent use three inputs and 3.6 percent use four inputs (N=112).

The survey then asked winery owners about the percentage of total wine volume produced from grapes, grape juice, bulk wine and other. In this emerging wine region, 69.3 percent of wineries use grapes, 16.2 percent use other, 8.4 percent use grape juice and 6.1 percent use bulk wine, (N=109). Through analyzing the states, the greatest difference is in the "other" category, where 27.4 percent of Michigan wineries use other, 11.7 percent of Missouri wineries and 7.6 percent of New York wineries, (N=109). The next significant difference exists in the states that use grapes as their main input, 76.2 percent of Missouri wineries use grapes as the main input in their wine compared to 71.2 percent of New York wineries and 62.8 percent of Michigan wineries, (N=109). The chart below shows the percentage of total wine volume produced from different inputs.

Figure 4: Percent of Total Wine Volume Produced with Various Inputs

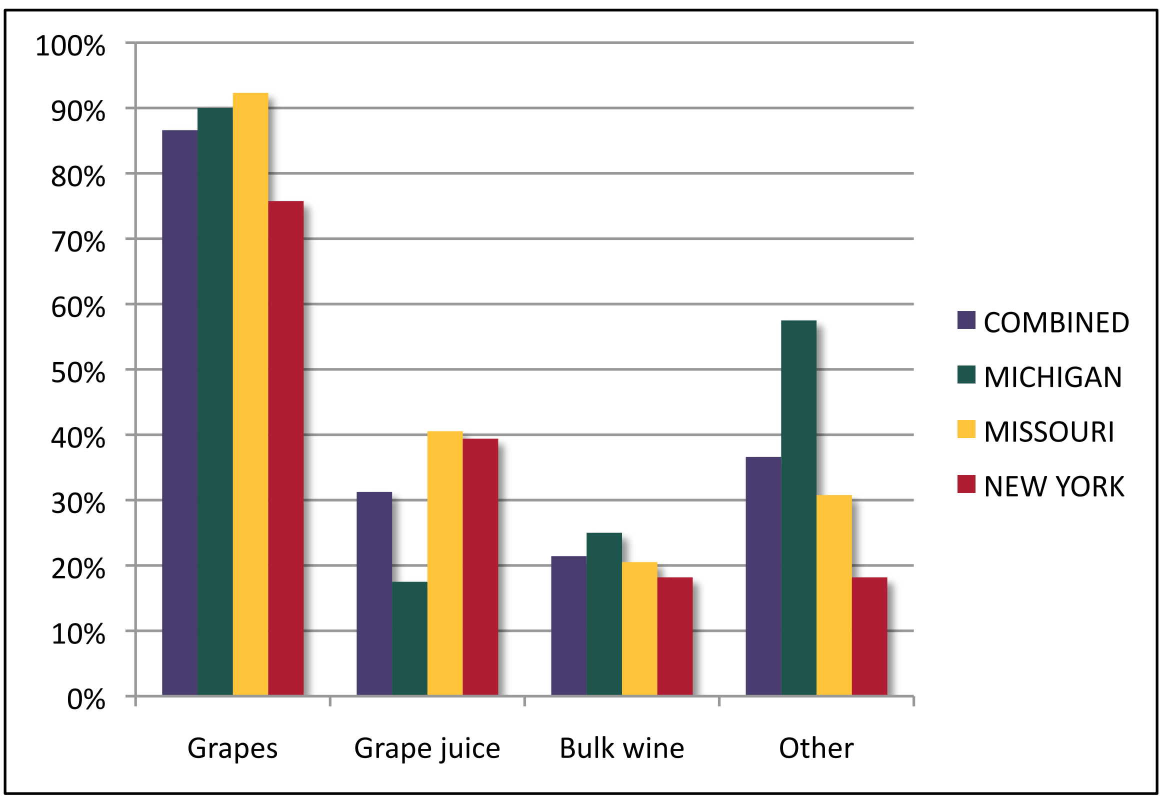


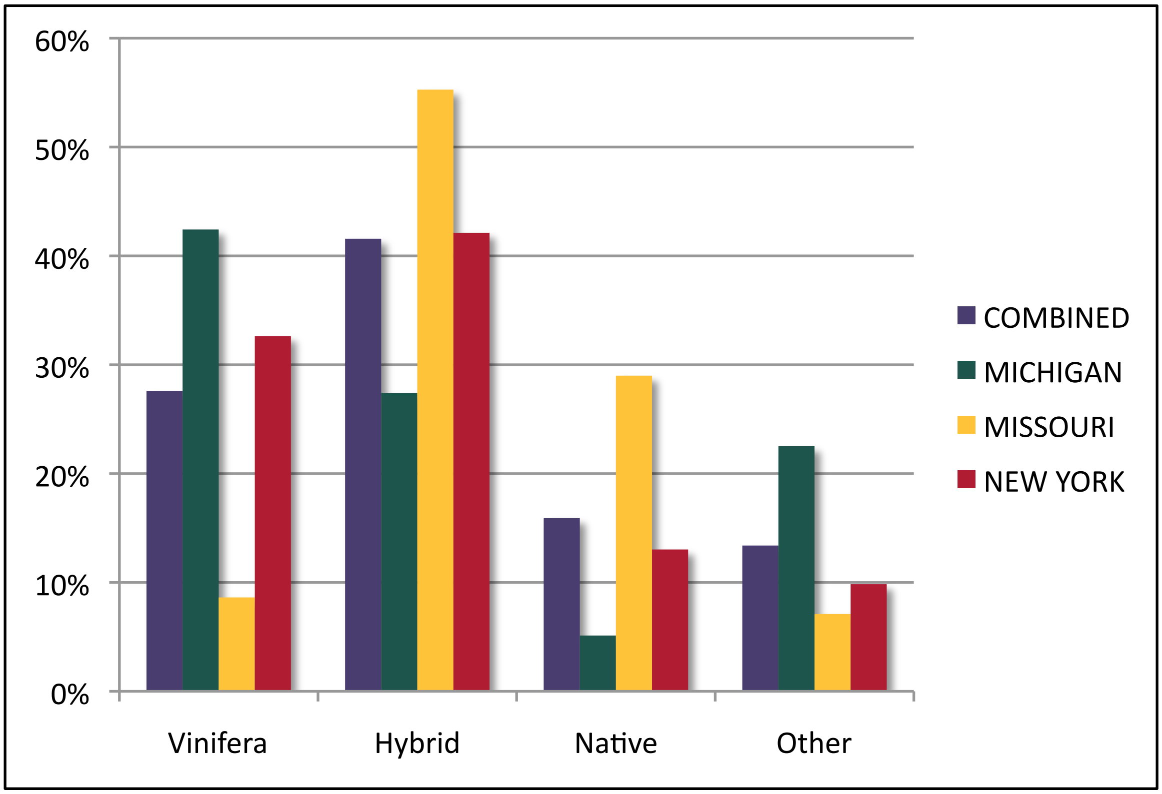
Table 8: Percent of Total Wine Volume Produced with Grapes, Grape Juice, Bulk Wine or Other

	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Grapes	86.6%	90.0%	92.3%	75.8%
Grape juice	31.3%	17.5%	40.5%	39.4%
Bulk wine	21.4%	25.0%	20.5%	18.2%
Other	36.6%	57.5%	30.8%	18.2%

Types of grapes used in production

The varieties of grapes grown in the U.S. fall in to three major categories: European varieties often called vinifera, native American and French/American hybrids. The majority (41.6 percent) of the wine produced in this emerging wine region is from hybrid grapes (i.e. Seyval blanc, Chardonel, etc.). The second most popular type of grapes used by 27.6 percent of the wineries are vitis vinifera (i.e. Chardonnay, Riesling, Pinot Noir, etc.) followed by (15.9 percent) using native American varietals (i.e. Concord, Catawba, etc.) and lastly "other" types (13.4 percent). Wineries that selected other were asked to specify, responses included juice (not including grape juice), grape concentrate, apple cider, honey, cherries, apples, berries, black currant, pecans, pumpkin, peaches and other fruits.

Figure 5: Percent of Total Wine Production with Different Grapes by State



Unlike New York and Missouri, Michigan produces the majority (42.4 percent) of its wine using vinifera varietals. Whereas, only 8.6 percent of Missouri and 32.6 percent of New York's production are from vinifera varietals. Additionally, Michigan also has the highest (22.5 percent) of its production that is made from "other", which could mean the state produces more wines made from fruit (i.e. cherry wine). Finally, of the three states Michigan also uses the least amount of native American varietals (5.1 percent), Missouri uses almost five times that amount (29 percent) and New York uses more than twice Michigan's amount (13.0 percent).

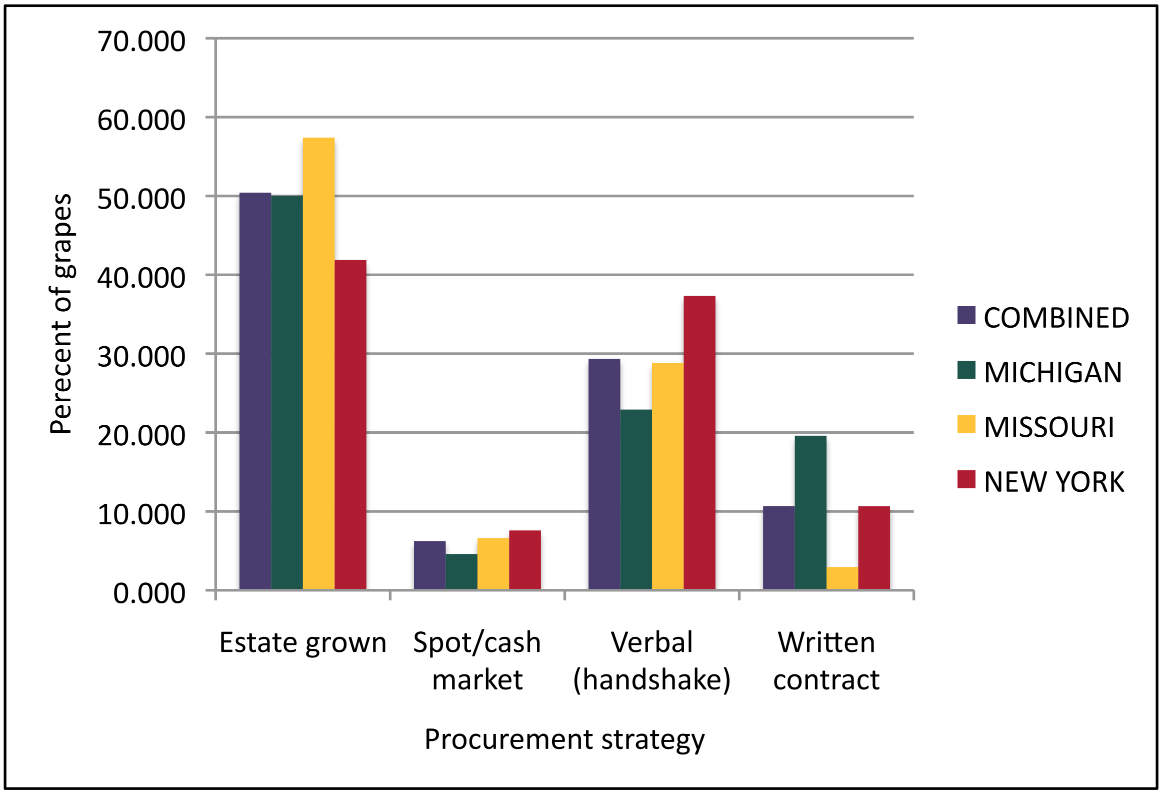
The majority of Missouri's wine is made from hybrid grapes (55.3 percent) followed by native American varietals (29 percent), vinifera (18.5 percent) and other (7.1 percent). The majority of

New York's wine is also made with hybrid varietals (42.1 percent) followed by vinifera grapes (32.6 percent), native American grapes (13.0 percent) and other (9.8 percent).

Procuring grapes

The survey asks winery owners for the percent of grapes they procure through their own vineyards (estate grown), spot or cash markets as needed, through verbal (handshake) contracts or through written contracts. In the emerging wine region, half of the wineries procure their grapes from their own vineyard, (N=106). Another 29.1 percent use verbal (handshake) contracts, 10.7 percent use written contracts and 6.23 percent acquire grapes through spot or cash markets, (N=106). While the majority of wineries predominantly rely on their own vineyards to procure grapes, the percentages in each state vary.

Figure 6: Percent of Grapes Procured through Various Strategies by State



Missouri wineries procures 57.4 percent, the highest percent, of grapes from their won vineyards, compared to Michigan who procures 50 percent and New York who procures the least, 41.9 percent. The second greatest difference among the states is between those that use written contracts, Michigan procures 19.6 percent of its grapes through written contracts, New York gets 10.6 percent through written contracts and Missouri gets 2.9 percent through written contracts.

Procuring grapes through a contract

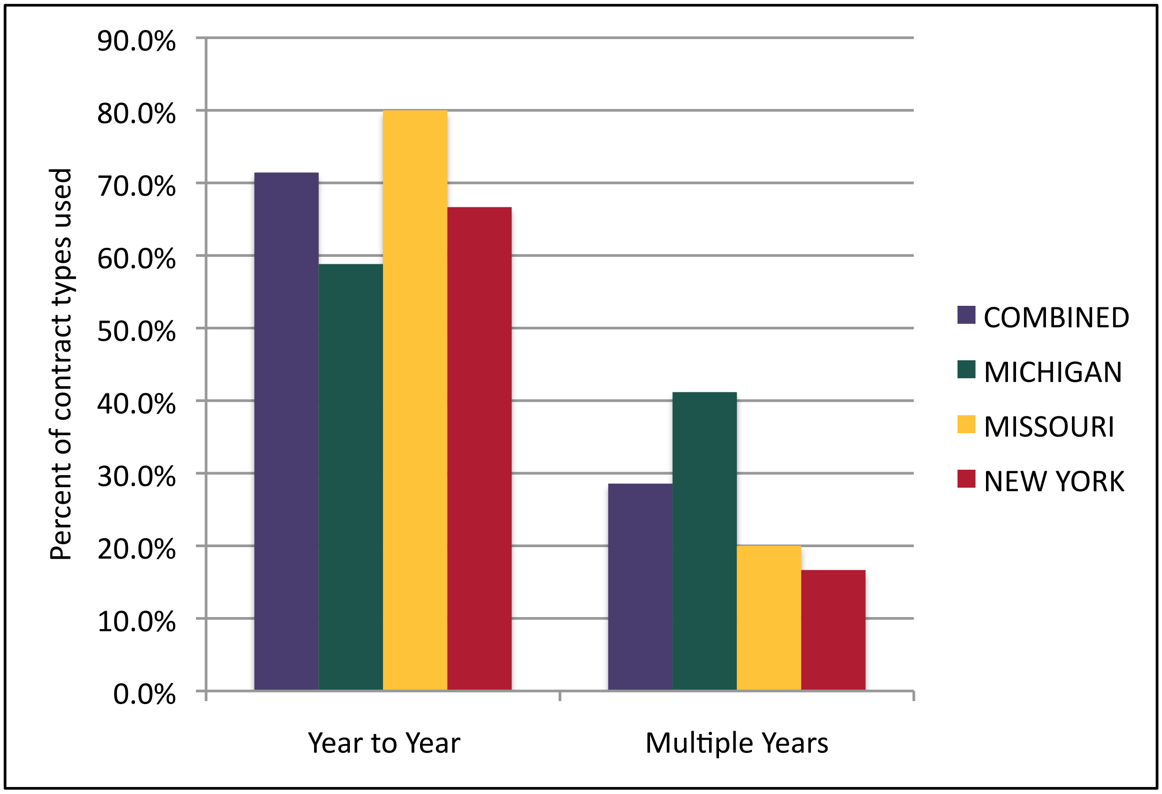
Table 9: Strategies use to Determine Contract Prices

Response	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Market Prices	60.5%	50.0%	66.7%	70.0%
Negotiated with supplier	0.0%	0.0%	0.0%	0.0%
Set by winery	11.6%	22.2%	6.7%	0.0%
Set by supplier	20.9%	16.7%	20.0%	30.0%
Other	7.0%	11.1%	6.7%	0.0%

The survey asked those winery owners that use contracts to select from one of the following options of how the contract price is determined, based on market prices, negotiated with the supplier, set by the winery, set by the supplier or some other method (which they were asked to write). In total, 43 wineries acknowledged using one of these methods, we expected a higher percentage of wineries to use some type of contract. Consistent across all three states, the most common method used to set contract prices is basing the prices on the market prices, 70 percent of New York wineries follow this method, 66.7 percent of Missouri wineries and 50 percent of Michigan wineries. None of the owners cited negotiating with the supplier as the method they use to determine contract prices however, 20.9 percent of contract in the emerging wine region are set by the supplier. New York has the highest percentage of contracts with prices set by suppliers followed by Missouri with 20 percent and Michigan with 16.7 percent. A key difference among the states is the percentage of contract prices that are set by the winery.

The greatest difference among the states' methods of setting the contract prices are those wineries that use contracts where the firm itself sets the price. Overall, contracts with prices set by the wineries accredit for 11.6 percent of the contracts. However, in New York none of the wineries set the contract prices while 22.2 percent of Michigan wineries and 6.7 percent of Missouri wineries set the prices. Further, wineries use year to year and multiple year contracts.

Figure 7: Length of Contracts used with Grape or Juice Suppliers by State



Next, the survey asked the firms that outsource their winemaking for the exact percentage of their wine production that is outsourced. The average percent of the region's wine production that is outsourced is 12.4 percent, (N=112). Consistent with the number of wineries in each state that outsource some of their winemaking, Michigan has the greatest number of wineries that outsource some part of their winemaking and of those wineries the average percent of the firm's wine production they outsource is 20.4 percent, (N=40). Again, in New York 24.2 percent of wineries outsource their winemaking, and the average amount of the firms' wine production they source is 7.3 percent, (N=32). Finally, Missouri has the fewest number of wineries that outsource some part of their winemaking (17.5 percent), and the average percent of the firms' wine production they outsource is 8.7 percent, (N=40). An important finding from the percent of the wineries'' production that they outsource is the range. In all three states, the range of the percent that the wineries outsource varies from zero to 100 percent, however only four wineries in the region outsource 100 percent of their winemaking.

Custom crush services

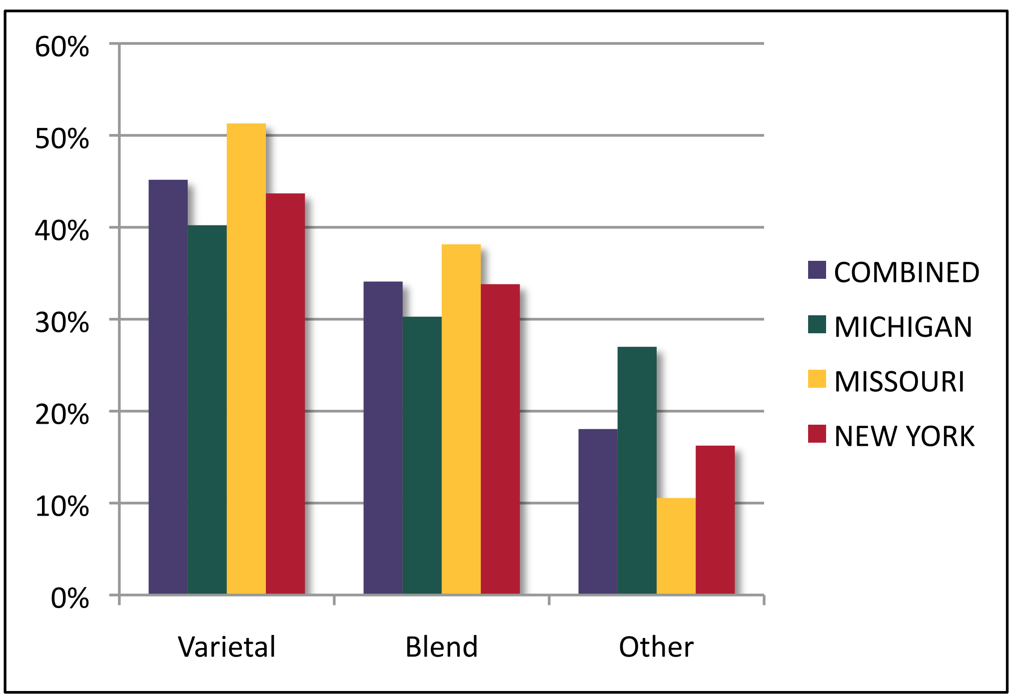
In the emerging wine region, 16.8 percent of the wineries produce wine for, or rent their facilities or equipment to other wineries doing custom crush, (N=113). None of the wineries in Missouri do custom crush, (N=40), however 11 wineries in New York offer custom crush services or rent their equipment to other wineries, (N=33) and eight Michigan wineries also offer these services and equipment, (N=40).

Next, 25 responses indicate that wineries in the region account custom crush services as 19.2 percent of their firms' gross revenue. The range shows that some firms only account custom crush services at 1 percent of their gross revenue while one firm account this service as 90 percent of its gross revenue. In analyzing the percent of gross revenue the states derive from their custom crush services, New York firms on average account 28 percent, (N=10), followed by Michigan who accounts 13.6 percent, (N=8), and Missouri who accounts 13 percent, (N=7). However, the median values suggest the average percent of gross revenue wineries earn from custom crush differ from the means. For Michigan and Missouri, the median predicts the average percent closer to 15 percent and for New York, the median suggests the state's average percent is lower than the mean and closer to 10 percent.

How wine is bottled

Wine is most commonly bottled as a straight varietal (i.e. merlot, vignoles, etc.) or as a blend of varietals. A winery's decision on how to bottle their wine is often the result of many factors, like showcasing a certain varietal's characteristics, a shortage in grape supply, a marketing decision or the wine maker or owner's personal preference, etc. The majority (45.2 percent) of the wine produced in the emerging wine region is bottled as a grape-specific varietal wine (N=112). While 34.1 percent of the region bottles their wine as a blend and another 18.1 percent bottles their wine as "other", (N=112).

Figure 8: Bottling Style by State



Missouri bottles the most wine (51.3 percent) as a varietal, New York even less (43.7 percent) and finally Michigan (40.2 percent). Similarly, Missouri has the highest percentage bottled as a blend among the three states (38.2 percent), then New York (33.8 percent) and finally Michigan (30.3 percent). However, among the three states, Michigan bottles significantly more wine as "other" (27 percent) compared to New York which bottles about 16.3 percent and Missouri who bottles less than a half of that amount as "other" (10.6).

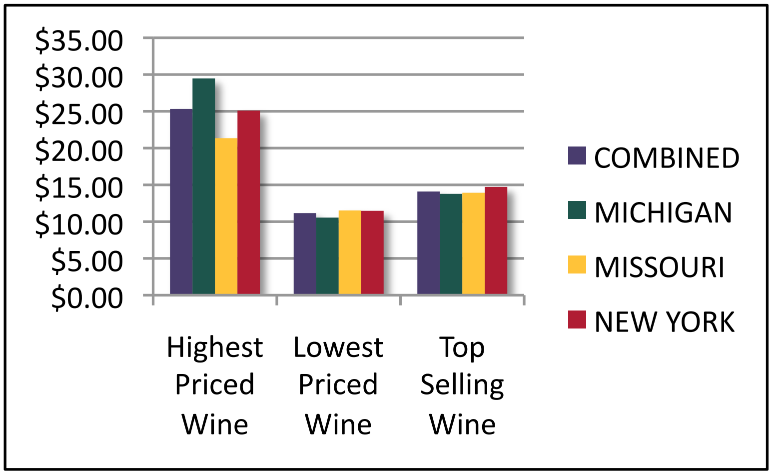
Taste of wine

The survey asked winery owners to describe how their winery decides to produce the taste of their wine. A seven-point scale is used with one being producing wine that tastes similar to what consumers are familiar with to seven being the winery focuses on producing wine that has a novel taste compared to what consumers are familiar with. On average, wineries in the emerging wine region describe their firms as a 4.3 on the seven-point scale, meaning firms produce wine that is neither familiar nor novel relative to what consumers have tasted. Across the states, the score is quite similar, New York wineries describe the wine they produce as slightly more novel (4.6), compared to Michigan's score of 4.4 and Missouri's score of 4.1, (N=106). While New York and Michigan's scores are the most similar and slightly higher than the scale's neutral value of 4, the medians in both states are higher than the means, at a value of 5.0. Finally, all of the states share the same large range, with scores ranging from one to seven.

Price of the wine

The surveyed asked respondents the average retail price of their highest, lowest and top selling wines. On average, the price of wineries in this region's highest priced wine is $25.32 and the lowest price is $11.16. The average retail price of wineries' top selling wine is $14.10.

Figure 9: Average Prices of Wine by State



Michigan was the only state whose highest and lowest priced wines fell outside the region's range with Michigan's highest price wine being 14.1 percent ($29.48) greater than the region's average ($25.32) and the lowest priced wine being 5.4 percent ($10.55) less than the region's lowest priced wine ($11.16). Finally, the range of Michigan's highest priced wine had the greatest range among the states with the minimum being $10 and the maximum at $85.

Unlike Michigan, the range of Missouri's lowest and highest priced wines was within the region's range. The average retail price for Missouri's highest priced wine is $21.35,which is 15.7 percent lower or $4 less than the region's average price. The average retail price of Missouri's lowest wine is $11.53, which is 3.2 percent higher than the region's average price. In summary, the prices of Missouri's wine are lower than the region's average.

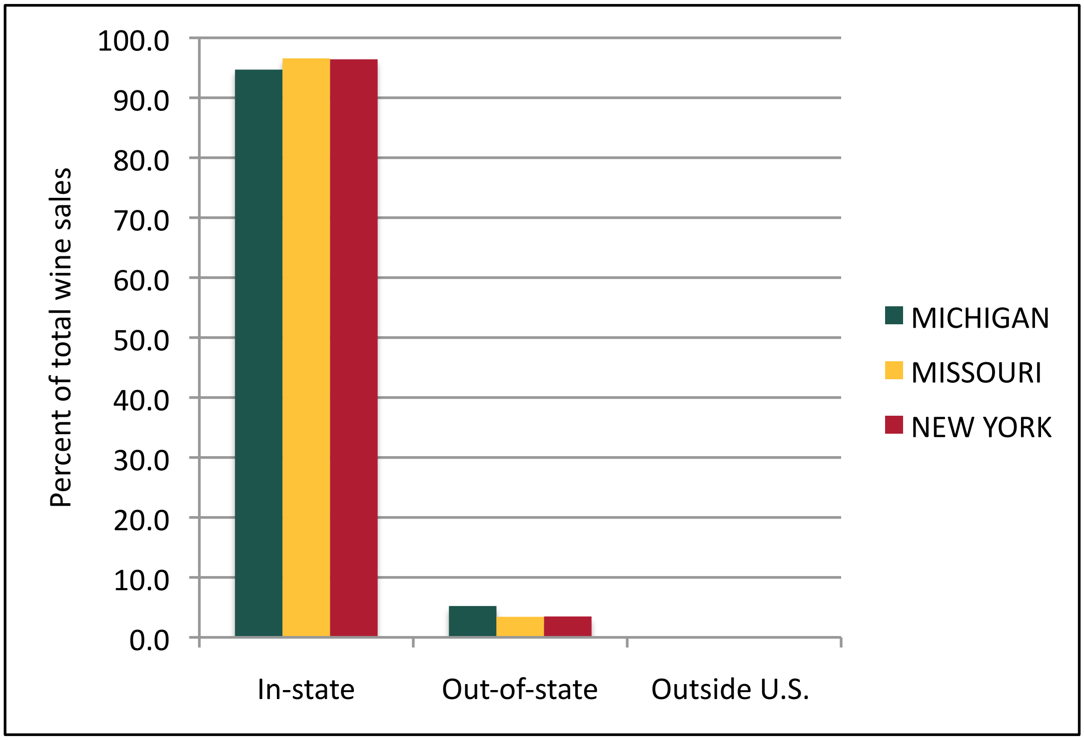
In New York, the average retail price of the state's highest and lowest priced wines were the closest of the three states to the region's averages. The average retail price of New York's most expensive wine was only 23 cents lower than the region's average and the State's lowest priced wine was just 31 cents higher the region's average. However, the range of New York's lowest price wine was the greatest among the states, with a minimum price recorded at $8 and maximum price of $40.

The retail price of the region's top selling wine is $14.10. New York commanded the highest retail price of $14.72, 14.2 percent above the region average. Additionally, compared to Michigan and New York, New York has the greatest range among its top selling wine with prices ranging from $8 to $40. Next is Missouri, the average retail price of the state's top selling wine is $13.93, 1.2 percent less than region average. Finally, the retail price of Michigan's wine is the lowest among the three states, selling for $13.78, which is 2.3 percent lower than the region average.

Where the wine is sold

On average, 96 percent of wineries in the emerging wine region's sales are from within the winery's home state, (N=111). This finding was expected since most wineries sell a high portion of their total sales volume at their winery. Missouri wineries credit 96.6 percent of their total wine sales from in state sales (N=40), New York sells 96.4 percent in state (N=31) and Michigan sells 94.7 percent in state (N=40).

Figure 10: Percent of Total Wine Sales Sold Within the Wineries' Home State, Outside their Home State and Outside the U.S., by State



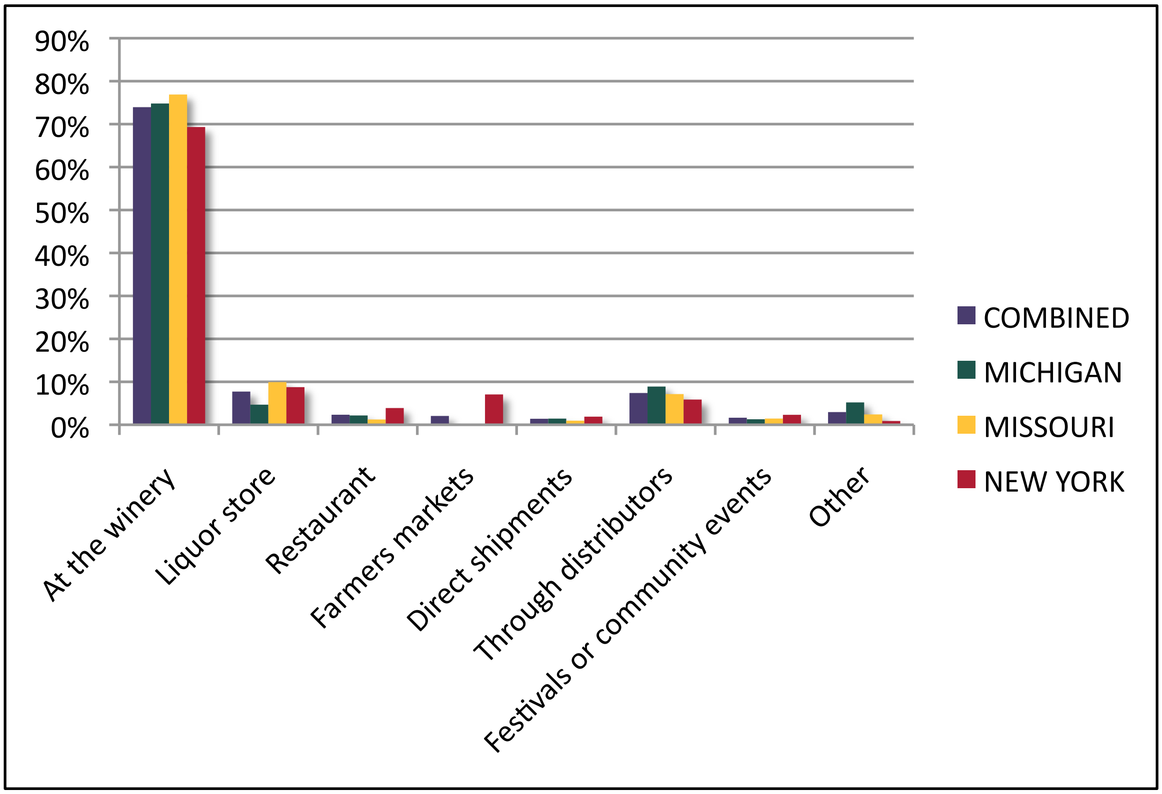
On average, wineries credit 4.1 percent of their total sales from out of state (N=111). However, the median value is 0.1 for region indicating that only a few wineries are selling wine outside their home state. A lower median value explains the higher median value of 99.9 percent for in-state sales again reemphasizing that only a few wineries in the region are selling wine outside their state and therefore the majority of the region only sells wine within their home state. Contrary to in-state sales, Michigan has the highest percent of its total wines sales from out of state (5.2 percent, N=40), compared to New York who sells 3.5 percent of its total wine sales outside the state, (N=31), and Missouri who sells 3.4 percent outside the state, (N=40).

Finally, on average, 0.1 percent of the total wine sales in the region are from outside the U.S., (N=111). Only four of the wineries surveyed sell wine outside the U.S., accounting for the average value of 0.1 percent of total wine sales for the region sold outside the U.S. Two wineries in Michigan and two wineries in New York sell wine outside the U.S., all four of the wineries account out of the country sales as one to two percent of their firm's total wine volume sales.

Distribution channels used to sell the wine

Survey respondents were given a list of eight distribution channels that they potentially sell their wine through including at their winery, a liquor store, a restaurant, a farmer's market, through direct shipment, through a distributor, at festivals or community events, or other. An overwhelming majority of the wine in the emerging region is sold at the wineries. The almost three quarters (73.9 percent) of the region that sells their wine directly at the winery is consistent with another finding that shows a significant number of wineries that have gift shops or a restaurant in addition to their tasting room to sell their products on site.

Figure 11: Percent of Wine Volume Sold through Various Distribution Channels, by

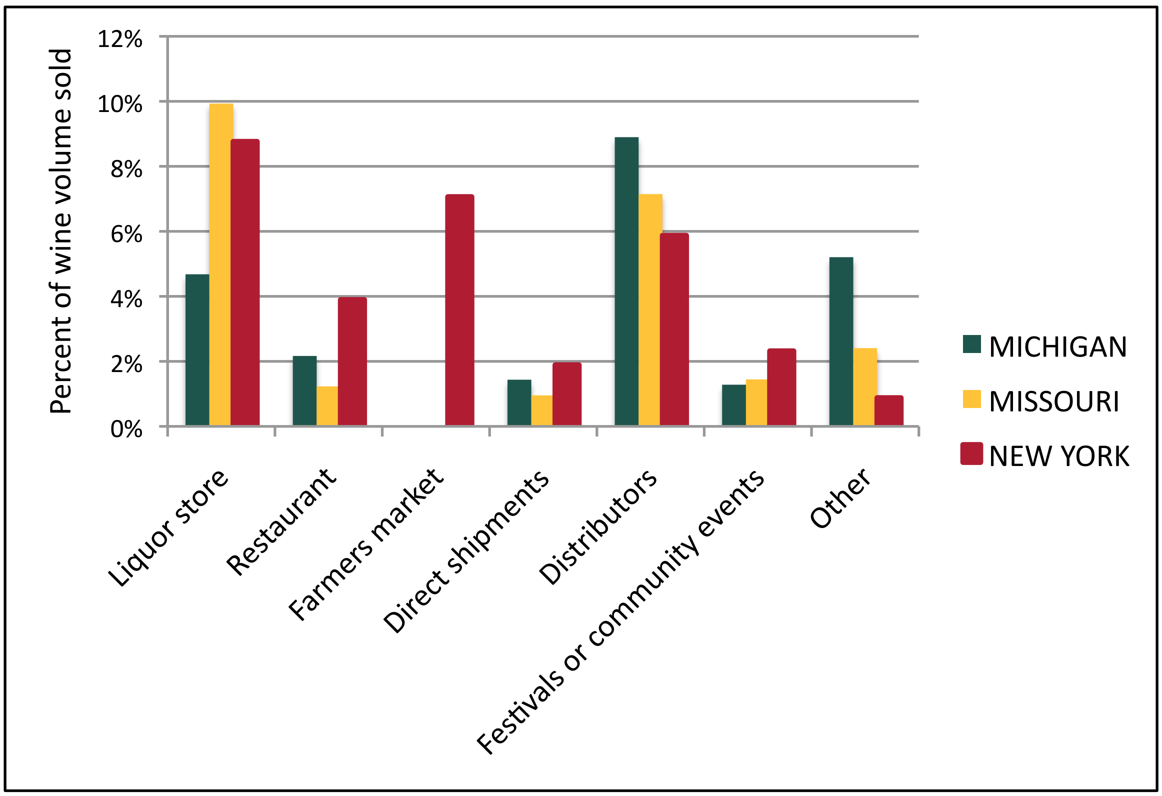


An overwhelming 99 percent of the region's wineries have a tasting room, (N=113). Three quarters of the wineries have a gift shop, and a fourth have a restaurant. Along with sales from the tasting room, 65 percent of the wineries said they are able to host events like weddings and receptions, which creates another opportunity for the wineries to market and sell their wine at their winery. Sixty-one percent of the wineries expect to increase the percent of wine volume they sell at their winery from 2012 to 2015.

The second most common distribution channel for wine from the emerging wine region is sold through a liquor store. Although only 7.7 percent of wineries sell directly to a liquor store, half of the wineries expect to increase the percent of their wine volume they sell to liquors stores in the next three years.

The third most common distribution channel utilized by wineries in the emerging wine region is selling through distributors. Of the 110 owners that responded to this question, selling through a distributor accounted for 7.4 percent of their wine volume sold. Seven of the 110 wineries sell more than 50 percent of their wine through distributors. In the next three years, 35 wineries (31.3 percent) expect to increase the volume of wine they sell through distributors.

Figure 12: Percent of Wine Volume Sold through Specific Distributions Channels by State



Then, the region's percentages dropped to less than 3 percent sold through the remaining channels: 2 percent at farmers markets, 2.3 percent to restaurants and 1.6 percent at festivals or community events. In the next three years, 17 percent of wineries expect to increase the percent of wine volume they sell at farmers markets, half of owners expect the percent of wine volume they sell to restaurants to increase and 30 percent of respondents expect to increase the percent of wine volume they sell at festivals or community events, (N=112). Finally, selling wine through direct shipments was the lowest used channel of the wineries with only 1.4 percent of wineries using this method. However, 39.3 percent of wineries noted they expect the percent of wine sold as direct shipments to increase, (N=112).

When analyzing the differences in states, Missouri and New York sell more wine through a liquor store than Michigan. The average percent the region sells through a liquor store is 7.7 percent: Missouri sells 9.9 percent, New York sells 8.8 percent and Michigan sells 4.7 percent. While the average percentage of wine sold at a farmers market is 2 percent, the average percent Michigan and Missouri sell is 0 percent while New York sells 7.1 percent of its wine through this channel. The third most varied category among the states is the percent sold through a distributor. On average, the region sells 7.4 percent through distributors: Michigan sells the most at 8.9 percent followed by Missouri at 7.1 percent and New York at 5.9 percent. Finally, another notable range among the states is the “other” category in which the region’s average is 2.9 percent yet Michigan has 5.2 percent, Missouri 2.4 percent and New York 0.9 percent.

Finally, 18.8 percent of wineries in the emerging region plan to reduce the percent of their wine volume sales “at the winery”, (N=112). This was a surprising finding, we anticipated more wineries seeking to increase sales beyond their winery in the next three years, because the 46.9 percent of the region’s wineries have been operating for less than five years, therefore expanding beyond the tasting room may not currently be reasonable or accessible for these new wineries. Next, 9.82 percent of wineries plan to decrease the percent of wine they sell to "other" in the next three years, (N=112). Then, 7.14 percent of wineries anticipate decreasing the volume of wine they sell directly to liquor stores, (N=112). Finally, in the remaining five categories, less than 7 percent of wineries anticipate decreasing their wine volume sales through those channels.

Promotional activities

Table 10: Promotional Activities used by Wineries by State

Response	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Arrangements with tour or bus companies	33.9%	52.5%	12.5%	37.5%
Promotions for returning customers	50.9%	52.5%	45.0%	56.3%
Customer database	71.6%	67.5%	68.4%	80.6%
Club promotions	41.1%	35.0%	35.0%	56.3%
Website	99.1%	100.0%	100.0%	96.9%
Newsletter	54.5%	50.0%	57.5%	56.3%
Social media	87.4%	85.0%	87.2%	90.6%
Volume discounts	96.4%	97.5%	100.0%	90.6%
Other	13.4%	22.5%	5.0%	12.5%

The survey asked winery owners to select all of the promotional activities that their winey uses, including an arrangement with a tour bus company, promotions for returning customers, a customer database, club promotions, a website, a newsletter, social media, volume discounts or other. The most popular promotional activity used by firms in the emerging wine region is the utilization of a website, 99 percent of wineries have a website, (N=112). Secondly, 96 percent of wineries offer volume discounts, (N=112). In the region, 87 percent of wineries use social media like Facebook and Twitter, (N=111). Seventy-two percent of wineries have a customer database, (N=109). However, only 51 percent of wineries offer promotions for returning customers or offer club promotions, (N=112). With almost three fourths of the wineries maintaining a customer database, we anticipated the percentage of wineries that offer promotions for returning customers and offer club promotions to be closer to the percentage of wineries that have a customer database since most likely those two activities require using a customer database. Finally, 54 percent of wineries use a newsletter, however we are unsure how the newsletter is distributed, by email or mail, and how often the newsletter is sent out, (N=112). Next, 34 percent of wineries have arrangements with tour bus companies, (N=112). Then, the least used promotional activity used is “other”, which only 13 percent of wineries said they use, (N=112).

Comparing the states among the promotional activities, the most significant difference among the states are the wineries that have arrangements with tour bus company. In Michigan, 53 percent of wineries have an arrangement with a tour bus company, 37.5 percent of New York wineries have an arrangement and 13 percent of Missouri wineries have an arrangement with a tour bus company, (N=112). The second greatest difference among the states is in between the wineries that offer club promotions, 56.3 percent of New York wineries offer club promotions, and 35 percent of wineries in Michigan and Missouri offer club promotions, (N=112). The third important difference is between the wineries that use some “other” promotional activity, 23 percent of Michigan wineries report using this “other” promotional activities, 12.5 percent of

New York wineries use “other” promotional activities and 5 percent of Missouri wineries use “other” activities, (N=112).

Respondents’ view on how consumers perceive the region’s wine

Winery owners found consumers’ familiarity with wine from the region to be neither unfamiliar nor highly knowledgeable. Given a seven-point scale with a one being customers are unfamiliar with wine from the owner’s region to seven being consumers are likely to be highly knowledgeable about wines from the owner’s region, the average of the 107 respondents was 3.71. The almost neutral score was consistent among all three states. Similarly, 111 winery owners rated consumers’ degree of knowledge and familiarity with their specific winery’s products or winery as a 4.13 on the same seven-point scale.

INDIVIDUAL FIRMS

Organizational structure

The majority (58.9 percent) of the wineries are organized as limited liability companies. The second most common type of firm is a closely held organization (17.0 percent) and the third is a sole proprietorship (11.6 percent). Only 8.03 percent of the region’s wineries are organized as partnerships and another 3.57 percent operate as some “other” type of organization like an estate, trust or cooperative. Finally, a few of the wineries in the emerging wine region are publically traded.

Financed

Half of the wineries in the emerging wine region are self-funded by the owner, (N=113). While another 43.36 percent of the owners self-financed their winery in addition to receiving external funding. The remaining 7.08 percent of the wineries only use external funding. Missouri has more wineries that are self-financed, 60.0 percent, compared to Michigan with 42.5 percent and New York with 45.5 percent. However, zero of the Missouri wineries surveyed report only using external financing, unlike the two other states. In Michigan, five respondents (12.5 percent) only use external financing to support their winery and in New York even less, only three respondents (9.1 percent). In summary, the majority of the wineries in the emerging region are self financed by the owner (49.6 percent) and 43.4 percent of wineries are funded by a combination of external funding, like a bank loan, and the owner's investment, (N=113).

Table 11: Financing Strategies used by Wineries, by State

Response	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Self financed	49.6%	42.5%	60.0%	45.5%
Externally financed	7.1%	12.5%	0.0%	9.1%
Both	43.4%	45.0%	40.0%	45.5%

To further explain the wineries' financing, the survey asked the owners to state the percent of their self worth they invested in their winery. Of the 103 responses, the average winery owner invested 45.5 percent of their net worth in their winery. The median suggests the percentage is 50.0 percent and the mode is 50. Finally, the range across all of the states varies from 0 to 100 percent. New York respondents have the highest average percent invested in the wineries (56.97 percent), followed by Missouri (42.85 percent) and Michigan (38.0 percent). However, the median value of New York's average percent is 8.53 percent higher than the mean, while Michigan's median is 7 percent lower and Missouri's median is 7.85 percent is lower than their respective states' means. Another question asked respondents to rate external funders' familiarity with the wine business in their region.

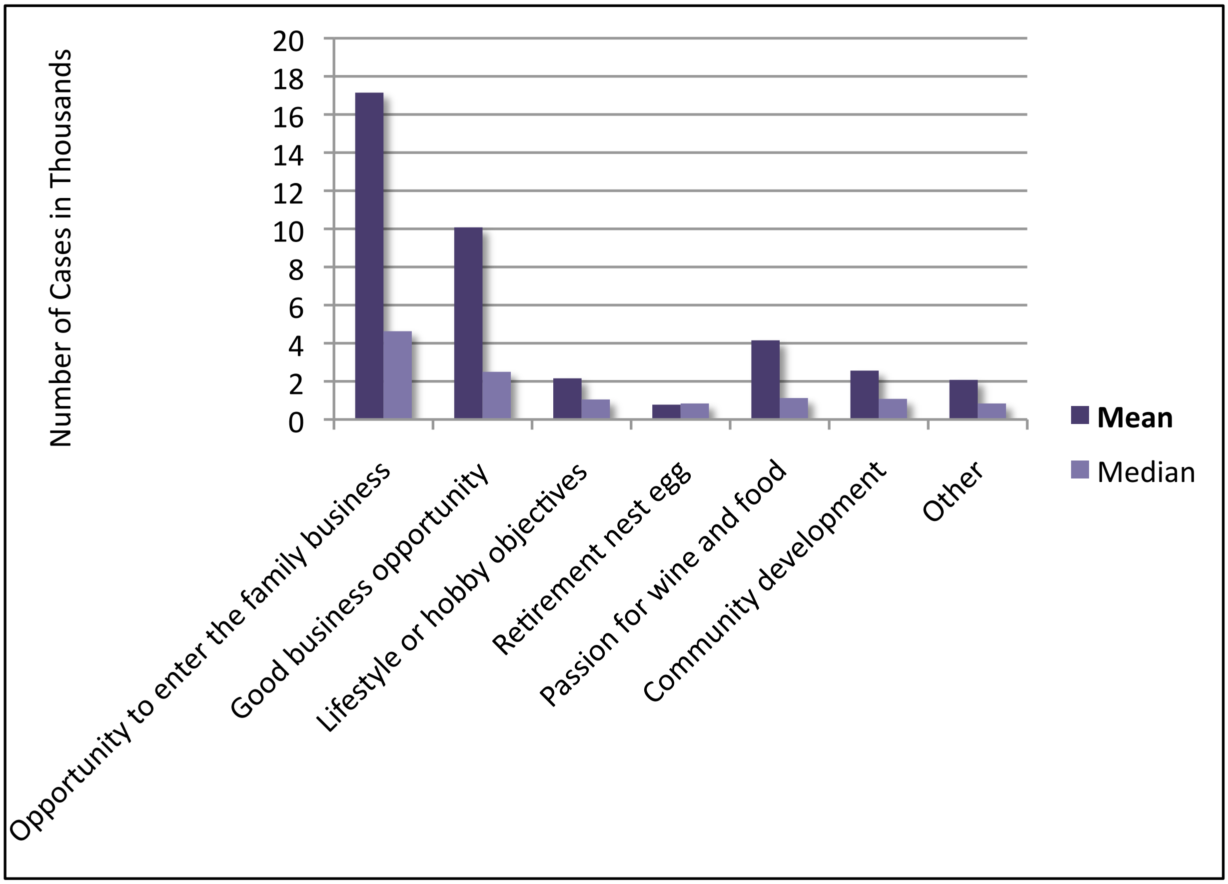
The survey asked respondents about external funders' (i.e. banks, investors, etc.) familiarity with the wine business in their region based on a seven-point scale. The scale ranged from one, funders do not understand management practices of wineries in the owner's region, to seven, funders do understand the management practices of wineries in the owner's region, and the average score among the 93 respondents was 2.84. The score indicates that respondents think external funders lack an understanding of the management practices of wineries in the emerging wine region. Missouri had the most responses (38 in total) to the question and the lowest score (2.11). Of the 27 New York responses, the average score was 3.37 and Michigan with 30 responses had an average score of 3.47. Next, the survey reveals information about the respondent and their motivations to enter the wine business.

Reason owners enter the wine business

The survey asked winery owners to select the main reason why they entered the wine business. Respondents could only select one option from the following seven possible reasons: opportunity to enter family business, good business opportunity, lifestyle or hobby objectives, retirement nest egg, passion for wine and food, community development or other (in which respondents were asked to specify). The most popular reason, selected by 23 percent of participants for entering the wine business was because of a good business opportunity. The second most popular reason selected by 21 percent of respondents was to fulfill lifestyle or hobby objectives. The third reason, selected by 21 percent of respondents was because of a passion for wine and food. Next, 17 percent of respondents entered the wine business an opportunity to enter a family business. While 8 percent entered the business as a retirement nest egg, 5 percent for community development reasons and 4 percent for other reasons, (N=113).

The top three reasons for entering the wine business vary across the three states. In Michigan, the No. 1 reason was as a good business opportunity (28 percent), No. 2 was because of a passion for wine and food (21 percent) and No. 3 was from an opportunity to enter the family business (17 percent), (N=40). In Missouri, the No. 1 reason was because of lifestyle or hobby objectives (33 percent) and the No. 2 and 3 reasons had the same amount of responses were because of an opportunity to enter the family business and as a good business opportunity, (N=40). New York and Michigan share the same No.1 and 2 reasons of entering as a good business opportunity (27 percent) and because of a passion for wine and food (24 percent) but New York's No. 3 reason is divided between an opportunity to enter the family business (15 percent) and for lifestyle or hobby objectives (15 percent). In summary, the reasons are quite similar across the states with the only significant percentage difference in the reason of entering for lifestyle or hobby objectives. Finally, Missouri has the highest number of respondents that selected lifestyle or hobby objectives (33 percent) follow by Michigan and Missouri (15 percent). Below shows an interesting look at the number of cases wineries produce based on the reasons the owners entered the wine industry.

Figure 13: Production and Reason for Entering the Industry



Employees

On average, a winery in the emerging wine region employs three full time, year round people, two full time, seasonal people and 7 part time people, (N=113). However, almost half of the wineries in this study have been operating for less than five years and 49 percent of those wineries do not employ any full time, year round help (N=53). Further, for wineries that are less than 5 years old, the range of the number of employees they hire doubles for the full time, seasonal employees. While 75.5 percent of these owners do not have any full time, seasonal employees, 17 percent have one to five employees, 5.66 percent have six to 10 employees and finally one winery has 20 employees, (N=53). Finally, 39.62 percent of the wineries that are less than 5 years old hire zero part-time employees, 37.74 percent hire one to five employees, 13.21 percent hire 6 to 10 employees and 3.78 percent hire more than 45 part-time employees, (N=53).

Fifty-three percent of the wineries have been in business for six or more years (N=60) and 26.67 percent still hire zero full time, year round employees. However, many do hire full time, year round employees: 55 percent have one to five employees, 15 percent hire six to 20 employees and 3.34 percent hire 47 to 84 employees, (N=60). For the number of full time, seasonal employees, 61.67 percent of the wineries that are 6 years and older hire zero full time, seasonal employees, 30.02 percent hire one to 10 employees and 8.35 percent hire 12 to 28 employees, (N=60). Finally, for the number of part-time employees, 15 percent hire zero, 35 percent hire one to five employees, 26.66 percent hire 6 to 10 employees, 16.67 percent hire 11 to 20 employees, 3.34 percent hire 23 to 30 employees and 3.34 percent hire 50 to 80 employees.

Products and Services offered

The survey asked winery owners to check all of the following products and services their winery offers, tours, a restaurant, a tasting room, a gift shop, food products and whether the winery hosts events (i.e. a wedding). All but one of the 113 wineries surveyed have a tasting room. The next most popular product or service is having a gift shop, on average 74 percent of the wineries in the region have a gift shop, 66 percent offer tours of their vineyard or winery, 65 percent offer food products, 65 percent can host events (i.e. weddings, receptions, etc.) and 25 percent of the wineries have a restaurant, (N=113).

Table 12: Products and Services Wineries Offer

Response	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Winery/Vineyard Tours	66.4%	52.5%	75.0%	72.7%
Restaurant	24.8%	19.1%	31.9%	18.2%
Tasting room	99.1%	100.0%	100.0%	97.0%
Gift Shop	74.3%	72.5%	77.5%	72.7%
Food products	64.6%	65.0%	72.5%	54.5%
Hosts winery events	64.6%	52.5%	82.5%	57.6%

When comparing the differences among the states, the most significant difference is between whether wineries host events. In Missouri, 82.5 percent of wineries host events whereas only 57.6 percent of New York wineries host events and only 52.5 percent of Michigan wineries, (N=113). The second largest difference in among the wineries that offer winery or vineyard tours. In Missouri 75 percent of wineries offer tours and 72.7 percent of New York wineries offer tours as well but only 52.5 percent of Michigan wineries offer tours, (N=113). Finally, the third most notable difference among the states is the wineries that offer food products. The number of wineries that offer food products varies from only 54.6 percent of New York wineries offering food products to 65 percent of Michigan wineries and 72.5 percent of Missouri wineries that offer food products, (N=113).

Industry certifications

The survey asks respondents if their winery or vineyards has obtained any industry certifications (i.e. sustainable, organic, etc.). Interestingly, zero wineries in Missouri have obtained winery or vineyard certification, (N=40). In Michigan, 25 percent of wineries and vineyards have certifications, (N=40). And, 12.12 percent of New York wineries and vineyards have certifications, (N=33).

Awards

Table 13: Awards Won by Wineries in the Emerging Wine Region

Response	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Wine competitions	68.1%	75.0%	62.5%	63.6%
Trade press	38.9%	45.0%	22.5%	51.5%
Other sources	37.2%	47.5%	27.5%	36.4%

Almost 70 percent (68.14 percent) of the wineries in the emerging wine region have won an award at a wine competition. Seventy-seven wineries in total have received awards: 75 percent of the Michigan wineries, 65 percent of the Missouri wineries and 63.64 percent of New York wineries, (N=113). Less than half (38.94 percent) of the wineries won trade press awards, (N=113). Among the states, were quite different, 51.52 percent of New York wineries, 45 percent of Michigan wineries and 22.50 percent of Missouri wineries, (N=133). In total, 37.17 percent of the wineries received an award from some "other" source: 47.50 of Michigan wineries, 36.36 percent of New York wineries and 27.50 of Missouri wineries all received some type of "other" award, (N=113).

Respondents' satisfaction with winery's current performance

The survey asked respondents about their level of satisfaction with the current performance of their winery based on a five-point Likert scale ranging from very unsatisfied to very satisfied. Across all three states, 46.9 percent of winery owners were generally "satisfied" with the performance of their winery (N=113). Missouri had the greatest number of winery owners, 55 percent, that were "satisfied" with their winery's current performance (N=40). However, 52.5 percent of Michigan winery owners describe being "very satisfied" with the current performance of their winery (N=40).

Overall, analyzing the results across the state, Michigan has the highest number of owners that are satisfied or very satisfied, 87.2 percent, (N=39). Zero respondents expressed being "very unsatisfied" with their winery's performance, however; New York wineries had the highest number of respondents who were "neither satisfied or unsatisfied" (15.6 percent) or "unsatisfied" (9.4 percent) with their winery's performance (N=32). Finally, Missouri and New York are most similar among the states, with the majority of the respondents being "satisfied" with their winery's current performance.

WINERY OWNER

The average winery owner is 52 years old. About half (45.5 percent) have a bachelor's degree in addition to years of experience in business, the wine industry and grape production. Of the 31 New York respondents, more than half (55 percent) have one or more graduate degrees, this was higher than Michigan (21 percent) and Missouri (33 percent), (N=113). The average winery owner has 21.2 years of experience in business, 12.5 years of experience in the wine industry and 11.2 years of experience in grape production. About one in every eight winery owners has a certificate in winemaking or viticulture. The average owner invested 44.6 percent of their net worth into the winery, and spends about three-fourths of their time working at the winery conducting activities related to the business like planning or working in the tasting room.

Table 14: Demographics of Winery Owners in the Emerging Wine Region by State

Response	COMBINED	MICHIGAN	MISSOURI	NEW YORK
Age (years)	52	51	52	52
Education level (Bachelor's degree or higher)	81.3%	72.5%	89.7%	81.8%
Certified in winemaking or viticulture	16.1%	10.0%	15.4%	24.2%
Wine industry experience (years)	12.7	12.8	12.2	13.2
Grape production experience (years)	11.2	13.5	11.5	8.3
Business experience (years)	21.5	21.2	21.7	21.5
Time spent at winery (%)	77.28%	76.3%	75.8%	80.3%
Net worth invested in winery (%)	45.4%	38.0%	42.8%	57.0%

Membership

Belonging to a local or regional chamber of commerce is popular among respondents with 90 owners acknowledging their membership. Michigan had the highest membership among owners in belonging to a chamber of commerce (85 percent), followed by Missouri (72.50 percent), and New York (81.82 percent).

The survey asked owners if they are a member of a wine trade association (board or council). Membership proved high again with 86 owners acknowledging their membership to a wine trade association. In New York, 85 percent of the owners are members of a wine association (N=33), in Michigan 80 percent of the owners are members (N=40) and 65 percent of Missouri owners belong to a wine association (N=40).

Bivariate Results

This chapter includes the results of the bivariate tests including Pearson correlations, independent, two sample t-tests and chi-square tests. These tests were chosen based on the type of data being analyzed, which included continuous, binary and categorical data. Before running a t-test, the data was checked for equal variances, and if needed corrected using a robust f-test. Through running a Pearson correlation, we learned if a statistically significant relationship exists between the variables and how strongly the variables are related. By running an independent, two sample t-test we were able to see if the population of the means of the two samples were statistically significant and how the two groups varied. In an independent two-sample t-test the variances are assumed to be equal and when detected that they were not, Welch's test was used to correct for the violated assumption. Finally, a chi-square test was used to determine if the observed observations are independent and how likely that the observed distribution is due to chance.

Relationship 1: The relationship between the number of cases and the number of years a winery has been commercially producing wine will both have a strong, positive correlation with all eight legitimacy indicators.

Wine production

Table 15: Correlation Values of Legitimacy Variables with the Average Number of Cases Wineries in the Region Produced in 2011

Variable	Covariance
Full-time, year round employees	0.6615***
Full-time, seasonal employees	0.2903***
Percent of wine volume sold through a liquor store	-0.1292
Percent of wine sold to a restaurant	-0.0781
Percent sold through a distributor	0.7085***
Arrangement with a tour bus company	0.2492***
Received external funding	0.2114***
Large trading network	0.1313

A strong, positive correlation exists between the number of cases a winery produced in 2011 and the number of full-time, year round employees the firm employs, (r=0.6615, p=0.0000) and the percent of wine volume the firm sells through distributors, (r=0.7085, p=0.0000). This means, the more cases of wine a winery produces is related to an increase in the number of full-time, year round employees a winery employs. Further, as expected the more cases a winery produces is related to selling a greater percent of the firm's total wine volume sales through distributors.

A weak, positive correlation exists between the number of cases a winery produces and the number of full-time, seasonal employees a winery employs (r=0.2903, p=0.0021), whether they have an arrangement with a tour bus company (r=0.2903, p=0.0090) and have obtained external financing (r=0.2114, p=0.0266). A winery that produces more cases of wine is associated with a greater number of full-time, seasonal employees. Whether a winery has an arrangement with a tour bus company is associated with an increase in the number of cases produced. Finally, an association exists between an increase in wine production and the wineries that have external funding.

Table 16: Correlation Results with the Number of Years a Firm has Commercially Produced Wine

Variable	Covariance
Full-time, year round employees	0.6304***
Full-time, seasonal employees	0.2866***
Percent of wine volume sold through a liquor store	-0.0424
Percent of wine sold to a restaurant	-0.1275
Percent sold through a distributor	0.5001***
Arrangement with a tour bus company	0.1773*
Received external funding	0.1338
Large trading network	0.0514

A strong, positive correlation exists between the number of years a winery has been commercially producing wine and the number of full-time, year round employees the firm employs, (r=0.6304, p=0.0000) and the percent of wine volume the firm sells through distributors, (r=0.5001, p=0.0000). This means, the longer a winery has been producing, or an older winery, is related to employing more full-time, year round employees than a young or newly established winery. Further, while both findings were expected, the second strong correlation states that again an older winery is correlated with selling a higher percentage of its total wine volume through distributors.

Next, two weak, positive correlations exist between the age of a winery and the number of full-time, seasonal employees a winery hires and having an arrangement with a tour bus company. The more years a winery has been producing correlates with an increasing number of full-time, seasonal employees, (r=0.2866, p=o.0021). Second, the more years a winery has been producing correlates with the winery having an arrangement with a tour bus company, (r=01773, p=0.0615). Surprisingly, a correlation was not found between the number of years a winery has been commercially producing wine and receiving external funding, we anticipated seeing a strong, positive correlation between the two variables.

Relationship 2: Human capital has a strong, positive correlation to the eight legitimacy indicators.

Employees

Full-time, year round

Table 17: Correlation Results of the Average Number of Full-time, Year Round Employees

Variable	Covariance
Full-time, seasonal employees	0.3261**
Percent of wine volume sold through a liquor store	-0.1192
Percent of wine sold to a restaurant	-0.0516
Percent sold through a distributor	0.4291***
Arrangement with a tour bus company	0.2276**
Received external funding	0.2014**
Large trading network	0.0957

A moderate to strong, positive correlation exists between the number of full-time, year round employees a winery hires and the percent of the firm's wine volume that it sells through distributors (r=0.4291, p=0.0000). Another moderate, positive correlation exists between the number of full-time, year round employees working at a winery and the number of full-time, seasonal employees working at a winery (r=0.321, p=0.0021). Overall, the more full-time, year round employees a winery employs is correlated with increases in the percent of a winery's wine volume sold through distributors as well as the number of full-time, seasonal employees a winery employs.

A weak, positive correlation exists between the number of full-time, year round employees and whether a winery has an arrangement with a tour bus company (r=0.2276, p=0.0158). This means a correlation exists between increases in the number of full-time, year round employees a winery hires and a winery having an established arrangement with a tour bus company.

A weak, positive correlation exists between the number of full-time, year round employees a winery employs and whether the winery receives external funding (r=0.2013, p=0.0324). Therefore, when a winery hires more full-time, year round employees a correlation exists with an increase in the winery receiving external funding.

Full-time, seasonal employees

Table 18: Correlation Results of the Average Number of Full-time, Seasonal Employees

Variable	Covariance
Full-time, year round employees	0.3261***
Percent of wine volume sold through a liquor store	-0.1595*
Percent of wine sold to a restaurant	-0.0275
Percent sold through a distributor	0.3833***
Arrangement with a tour bus company	0.2799***
Received external funding	0.2760***
Large trading network	0.0000

A moderate, positive correlation exists between the number of full-time, seasonal employees a winery employs and the percent of wine volume sales sold through distributors (r=0.3833, p=0.0000). Increases in the number of full-time, seasonal employees a winery has correlate with increases in the percent of a winery’s total sales volume sold through distributors. Another moderate, positive correlation exists between the number of full-time, seasonal employees a winery employs and the number of full-time, year round employees a winery has (r=0.3261, p=0.0004). Therefore, an increase in the number of full-time, seasonal employees a winery has is correlated with increases in the number of full-time, year round employees a winery has.

A weak, positive correlation exists between the number of full-time, seasonal employees and whether a winery has established an arrangement with a tour bus company (r=0.2799, p=0.0028). Therefore, an increase in the number of full-time, seasonal employees is correlated with wineries that have an arrangement with a tour bus company.

A weak, positive correlation exists between the number of full-time, seasonal employees a winery employs and whether the winery obtains external funding (r=0.2760, p=0.0031). So, having external funding is associated with an increasing number of full-time, seasonal employees.

A weak, negative correlation exists between the number of full-time, seasonal employees a winery employs and the percent of a winery's total wine volume sales sold direct to a liquor store (r=-0.1595, p=0.0960). Therefore, wineries with fewer full-time, seasonal employees is associated with wineries that have sell a greater percentage of their total wine volume direct to a liquor store. However, since this relationship is negative, the relationship also finds a correlation between a winery increasing numbers of full-time, seasonal employees and a lower percentage of wine volume selling directly through a liquor store.

Part-time employees

Table 19: Correlation Results of the Average Number of Part-time Employees

Variable	Covariance
Full-time, year round employees	0.6363***
Full-time, seasonal employees	0.3402***
Percent of wine volume sold through a liquor store	-0.1229
Percent of wine sold to a restaurant	-0.066
Percent sold through a distributor	0.3656***
Arrangement with a tour bus company	0.3286***
Received external funding	0.2526***
Large trading network	-0.033

A strong, positive correlation exists between the number of part-time employees a winery employs and the number of full-time, year round employees a winery employs (r=0.6363, p=0.0000). Therefore an increasing number of full-time, year round employees is associated with an increase in the number of part-time employees.

A moderate, positive correlation exists among the number of part-time employees a winery has and three variables, the number of full-time, seasonal employees a winery has (r=0.3402, p=0.0002), the percent of wine volume sales sold through distributors (r=0.3656, p=0.0001) and whether a winery has an arrangement with a tour bus company (r=0.3286, p=0.0004). As the number of part-time employees increases a correlation exists between an increasing number of full-time, seasonal employees a winery employs. Second, a correlation exists between a winery increasing the number of part-time employees and an increasing percent in the total wine volume sales sold through distributors. Third, having an arrangement with a tour bus company is associated with an increasing number of part-time employees. Again these findings are correlations; therefore the two variables are not affecting each other but more simply showing that they are related.

A weak, positive relationship exists between the number of part-time employees a winery has and whether the winery has external funding (r=0.2526, p=0.0070). Since the point-biserial value is weak yet positive, this suggests that wineries who received external funding are associated with having more part-time employees.

Prior experience of firm owner

Table 20: Correlation Results of the Average Number of Years of Experience Owner has in the Wine Industry, Grape Production and Business

Variable	Covariance		
	Wine industry	Grape production	Business
Full-time, year round employees	0.3604***	0.4195***	0.1753*
Full-time, seasonal employees	0.2263**	0.2221**	0.023
Percent of wine volume sold through a liquor store	0.1037	-0.0813	-0.21423**
Percent of wine sold to a restaurant	0.0931	-0.0777	-0.0757
Percent sold through a distributor	0.2437**	0.3286***	-0.0489
Arrangement with a tour bus company	0.0351	0.0156	0.1182
Received external funding	-0.0019	0.0312	-0.0699
Large trading network	-0.0422	-0.1042	-0.0115

Note: ***= significantly different at the 1% significance level

**= significantly different at the 5% significance level

*= significantly different at the 10% significance level

Wine industry experience

Winery owners were asked how many years of experience they have in the wine industry, in grape production and in business in general. The number of years of experience an owner has in the wine industry shared a moderate, positive relationship to the number of full-time, year round employees a winery employs ($r=0.3604$, $p=0.0001$). Therefore, a winery owner that has more experience in the wine industry correlates with a winery having more full-time, year round employees. The second and third correlations show winery owners with again more wine industry experience are associated with wineries that have a greater percentage of their wine volume sold through a distributor ($r=0.2436$, $p=0.0110$) as well as a greater number of full-time, seasonal employees ($r=0.2263$, $p=0.0169$).

Business experience

Next, two correlations were found between the number of years in business a winery owner has and the percent of wine volume a winery sells direct to a liquor store ($r=-0.2142$, $p=0.0283$) and the number of full-time, year round employees a winery employs ($r=0.1753$, $p=0.0709$). This weak, negative correlation suggests that winery owners with less business experience are associated with wineries that distribute a greater percentage of their wine volume direct to a liquor store. Further, the second correlations suggests wineries with owners who have more business experience are related to wineries that also have a greater number of full-time, year round employees. This could mean that the owner understands the business aspect of the winery but hires others who have more experience in viticulture and enology that can help run those aspects of the winery.

Grape production experience

Correlations show that wineries whose owners who have more years of experience in grape production are associated with wineries that have increasing numbers of full-time employees (both year round and seasonal), as well as the wineries with a high percentage of their total wine volume being sold through distributors. A moderate to strong, positive correlation exists between wineries with owners who have a significant number of years experience in grape production and those wineries that employ an increasing number of full-time, year round employees (r=0.4195, p=0.0000). Next, a moderate, positive correlation exists with a winery's owner with increasing experience in grape production and wineries that sell an increasing percent of their total wine volume through distributors (r=0.3286, p=0.0007). Finally, a weak, positive relationship exists between the owner's grape production experience and wineries that employ an increasing number of full-time, seasonal employees (r=0.2221, p=0.0228).

Relationship 3: The relationships vary among the percent of production from certain grapes (i.e. Vinifera vitis, hybrid, native American or other), the main inputs used to produce the wine, the bottling styles used by wineries and the strategy used to procure grapes.

Type of grape

Vinifera vitis

Table 21: Correlation Results of Percent of a Firm's Total Wine Production Made from Vinifera Grapes

Variable	Covariance
Full-time, year round employees	-0.0021
Full-time, seasonal employees	0.2377**
Percent of wine volume sold through a liquor store	-0.1952**
Percent of wine sold to a restaurant	0.0528

Table 21 (Cont'd):

Percent sold through a distributor	0.3514***
Arrangement with a tour bus company	0.3806***
Received external funding	0.2263**
Large trading network	-0.0066

Moderate, positive correlations exist between the wineries with higher percentages of total wine production being made from vinifera grapes and whether a winery has an arrangement with a tour bus company (r=0.3806, p=0.0004) and the percent of wine volume sold through distributors (r=0.3512, p=0.0002). A relationship exists between a winery that has an arrangement with a tour bus company and an increasing percentage of its total wine production made from vinifera grapes. Next, an increasing percent of a winery's total sales volume sold through distributors is related to an increasing percentage of vinifera grapes that a winery uses to produce its wine.

A weak, positive correlation exists between the percent of vinifera grapes used and the number of full-time, year seasonal employees a winery has (r=0.2377, p=0.0112) and whether the winery has financing (r=0.2263, p=0.0159). Therefore, a relationship exists between an increase in the percent of vinifera grapes used and an increasing number of full-time, seasonal workers a winery employs. Second, wineries that have external funding are associated with having a higher percentage of their wine made from vinifera grapes. We anticipated seeing a positive, moderate to strong correlation develop between wineries that use a high percentage of vinifera grapes and those wineries that have external funding since vinifera grapes are well known (i.e. merlot, cabernet franc, chardonnay, etc.).

Finally, a weak, negative correlation exists between the percent of vinifera grapes used in production and the percent of total wine sales sold at a liquor store (r=-0.1952, p<0.0410). This inverse relationship indicates that wineries that use a low percentage of vinifera grapes to produce their wine are associated with sell more wine direct to liquor stores.

Hybrid grapes

Table 22: Correlation Results of a Percent of a Firm's Total Wine Production with Hybrid Grapes

Variable	Covariance
Full-time, year round employees	-0.0376
Full-time, seasonal employees	-0.0576
Percent of wine volume sold through a liquor store	0.0373
Percent of wine sold to a restaurant	0.0518
Percent sold through a distributor	-0.1967**
Arrangement with a tour bus company	-0.3120***
Received external funding	-0.0993
Large trading network	-0.0145

One moderate, negative correlation exists between the percent of hybrid grapes a winery uses in its total wine production and whether the winery has obtained external funding (r=-.3120, p=0.000). Therefore, the firms that have external funding are associated with having a lower percentage of their wine production from hybrid grapes.

A weak, negative correlation exists between the percent of hybrid grapes a winery uses and the percent of wine volume sold through distributors (r=-0.1967, p=0.0395). Therefore, using less hybrid grapes is associated with selling more wine through distributors.

Native American

Table 23: Correlation Results of a Percent of a Firm's Total Wine Production Made with native American Grapes

Variable	Covariance
Full-time, year round employees	-0.0677
Full-time, seasonal employees	-0.1405
Percent of wine volume sold through a liquor store	-0.0636
Percent of wine sold to a restaurant	-0.0845
Percent sold through a distributor	-0.1222
Arrangement with a tour bus company	0.0546
Received external funding	0.0201
Large trading network	0.0166

Other

Winery owners were asked about the percent of their total wine production that was made from vinifera grapes, hybrid grapes, native American grapes or other. No significant correlations were found among "other" and the eight variables of interest. This is surprising, we anticipated finding a strong, negative relationship among wineries with high percentages of "other" and all three distribution channels tested as well as in whether the winery had external funding.

Inputs used to produce wine

Grapes

Table 24: Correlation Results of the Percent of Firm that use Grapes as Main Input in Wine

Variable	Mean
Full-time, year round employees	3.804**
Full-time, seasonal employees	2.298969***
Percent of wine volume sold through a liquor store	7.023404
Percent of wine sold to a restaurant	1.911702
Percent sold through a distributor	8.017021***

Three of the eight variables of interest are significantly related to the wineries that use grapes as the main input in their wine. A two-sample, independent t-test showed that the wineries who use grapes as its main input in producing their wine employ more full-time, year round employees (M=3.804, SD=10.1156) than those that do not use grapes as the main input in producing their wine (M=1.2, SD=1.4736), t(109.957)=-2.3776. Secondly, wineries that use grapes as the main input in their wine also employ more full-time, seasonal employees (M= 2.298969, SD= 5.148149) than those that do not use grapes as their main input (M=.3333, SD=1.046536), t(103.488)=-3.3405, p=0.0012. And third, those wineries that consider grapes the main input in their wine are associated with selling more wine through distributors (M=8.017021, p=0.0001) than the wineries make use grape juice, bulk wine or other as their main input (M=0.6666667, p=0.0001).

Grape juice

Table 25: Correlation Results of the Percent of Firm that use Grape Juice as Main Input in Wine

Variable	Mean
Full-time, year round employees	1.742857*
Full-time, seasonal employees	1.485714
Percent of wine volume sold through a liquor store	8.58
Percent of wine sold to a restaurant	2.485714
Percent sold through a distributor	9.571429

The only significant relationship that exists shows that wineries who use a grape juice as their main input and associated with hiring more full-time, year round employees (M=1.742857, SD=3.58381) than those that do not use grape juice as their main input (M=4.33766, SD=11.09516), t(102.788)=1.7766, p=0.0786.

Bulk wine

Table 26: Correlation Results of the Percent of Firm that use Bulk Wine as Main Input in Wine

Variable	Mean
Full-time, year round employees	3.375
Full-time, seasonal employees	2.833333
Percent of wine volume sold through a liquor store	7.583333
Percent of wine sold to a restaurant	2.416667
Percent sold through a distributor	15.16667*

A two-sample, independent t-tests revealed that wineries that use bulk wine as the main input or ingredient to produce their wine are only related to one variable. Wineries that use bulk wine as the main input are associated with selling a higher percentage of their total wine volume through distributors than those that do not use bulk wine as the main input (M=4.701176, SD=11.17848), t(25.6989)=-2.0131, p=0.0547. However, wineries that use grapes as their main input showed a stronger correlation than the wineries that use bulk wine as the main input in relation to a high percentage of wine being sold through distributors.

Other

Table 27: Correlation Results of the Percent of Firm that use Other as Main Input in Wine

Variable	Mean
Full-time, year round employees	4.853659
Full-time, seasonal employees	1.878049
Percent of wine volume sold through a liquor store	10.1
Percent of wine sold to a restaurant	1.8375
Percent sold through a distributor	7.3925

Wineries were asked what was the main input used to produce their wine, those that selected "other" listed juice (not including grape juice), grape concentrate, apple cider, honey, cherries, apples, berries, black currant, pecans, pumpkin, peaches and other fruits. A two-sample, independent t-test showed that the wineries who selected "other" as the main input used to produce wine and associated with having a large trading network (M=*0.625*, SD=*0.4903*) than those wineries that do not use "other" as the main input when producing their wine (M=*0.4225*, SD=*0.4975*), t(*81.994*)=*-2.0778*, p=0.0409. None of the other seven variables of interest were significantly related to those wineries that use "other" as their main input.

A chi-square test found a moderately strong, positive correlation between those wineries that said "other" was the main input their winery used to produce wine and wineries that have a large trading network.

Table 28: Contingency Table Between Using "Other" as a Main Input and Wineries having a Large Trading Network

	Other as main input		**Total**
Large Trading Network	No	Yes	
No	41	15	56
Yes	30	25	55
Total	71	40	111

A significant correlation exists between whether the winery uses "other" as their main input and whether the winery has a large trading network, chi-square(1,N=111)=4.1956, p=0.041.

Relationship 4: Wineries that procure their grapes from their own estate or through a written contract will have a strong, positive correlation with the eight legitimacy indicators.

Procuring grapes

The survey asked winery owners to sum the percentage of their grapes that they procure through their own vineyards (estate grown), acquire in a spot or cash market, procure through a verbal (handshake) contract or through a written contract. Correlations were run with the eight variables of interest and these four procurement strategies. Only six significant correlations were found between all the correlations. Below is a table representing the correlations between the percent of grapes firms in the emerging wine region procure through the different types of contract options:

Table 29: Correlation Results of Different Procurement Strategies Firms Use

Variable	Covariance			
	Estate grown	Spot/cash market	Verbal (handshake)	Written Contract
Full-time, year round employees	-0.0361	-0.049	-0.0584	0.2060**
Full-time, seasonal employees	0.005	-0.0455	-0.0967	0.2146**
Percent of wine volume sold through a liquor store	-0.1159	0.0342	0.1081	-0.0224
Percent of wine sold to a restaurant	-0.0385	0.2328**	-0.07	0.0475
Percent sold through a distributor	-0.0836	-0.0438	-0.0264	0.2674***
Arrangement with a tour bus company	-0.1205	0.0663	0.0926	0.096
Received external funding	0.047	-0.0527	-0.0126	0.0809
Large trading network	-0.3286***	0.073	0.2149**	0.148

Table 29 (Cont'd):

Note: ***= significantly different at the 1% significance level

**= significantly different at the 5% significance level

*= significantly different at the 10% significance level

Estate grown

A moderate, negative correlation was found between the percent of grapes procured through a winery's own vineyard and the breadth of a winery's trading network ($r=-0.3286$, $p<0.0006$). The correlation shows wineries that have a large trading network are associated with procuring less grapes form their own vineyards. This finding was expected, wineries that do not grow a significant percentage of their own grapes have to interact more with others to obtain grapes, unlike for example an established winery that manages their own large vineyard or has established or multi-year contracts with the same grape growers.

Spot market contracts

The percentage of grapes a winery procures through spot or cash markets has a weak, positive correlation with the percent of wine a winery sells to a restaurant ($r=0.2328$, $p=0.0179$). This finding shows an association between the wineries that have an increasing percent of their grapes procured through spot or cash markets and those wineries that have an increasing percentage of their wineries being sold to restaurants. This finding was not expected, because often supplying to a business requires a winery to provide a consistent and often high volume of wine therefore leading the wineries to desire a more secure contract to obtain grapes.

Verbal (handshake) contracts

A weak, positive correlation exists between wineries that procure a high percentage of their grapes through verbal contracts and those wineries that have a large trading network (r=0.2149, p=0.0277). We anticipated this finding to have a stronger correlation value, however depending on the number of verbal contracts a winery needs they may only need to communicate with a few grapes growers and they may even use the same growers each year.

Written contracts

The percent of grapes a winery procures through a written contract correlates with three variables. The first correlation is with the percent of wine volume sold through distributors (r=0.2674, p=0.0066), this weak, positive correlation shows a relationship exists between a high percentage of grapes being procured through a written contract and those wineries that sell a high percentage of their wine through distributors. Two more weak, positive correlations exist between the percentage of grapes procured and the number of full-time, year round employees a winery has (r=0.2060, p=0.0350) and the number of full-time, seasonal employees a winery has (r=0.2146, p=0.0279). These two correlations indicate that wineries that use more written contracts when buying grapes are related to wineries that have an increasing number of full-time employees.

Relationship 5: Firms who outsource their wineries' winemaking have a strong, positive correlation with the eight legitimacy indicators.

Winemaking

Table 30: Two Sample T-Test with Unequal Variances for Differences in Mean for Firms that Outsource Winemaking

Variable	Mean
Full-time, year round employees	3.65625
Full-time, seasonal employees	3.84375*
Percent of wine volume sold through a liquor store	4.865625*
Percent of wine sold to a restaurant	1.7875
Percent sold through a distributor	9.371875

A two-sample, independent t-test showed those firms that outsource their winemaking hire more full-time, seasonal employees (M=3.8438, SD=7.5993) than the firms that do all their own winemaking (M=1.2963, SD=2.045), t(34.6367)=-1.8438, p=0.0738. Interestingly, of the three distribution channels that we ran t-tests against if a firm outsources their winemaking, the only significant distribution channel was the percent of wine volume a winery sells direct to a liquor store, compared to those wineries that do not outsource their winemaking (M=8.9038, SD=14.8370), t(94.5422)=1.7701, p=0.0799.

Table 31: Contingency Table Between Firms that Outsource Winemaking and Firms that have an Arrangement with a Tour Bus Company

	Outsource winemaking		Total
Arrangement with tour bus company	**No**	**Yes**	
No	59	15	74
Yes	21	17	38
Total	80	32	112

A significant correlation exists between whether a winery outsources their winemaking and whether the winery has an arrangement with a tour bus company, chi-square(1,N=112)=7.3644, p=0.007. This finding was surprising, however outsourcing the winemaking means a winery is interacting with someone outside the firm which could lead to a network expansion that could include gaining access and building a relationship with a tour bus company.

Table 32: Contingency Table Between Firms that Outsource Winemaking and Firms that Obtain External Funding

	Outsource winemaking		Total
Obtained external funding	**No**	**Yes**	
No	47	9	56
Yes	34	23	57
Total	81	32	113

A significant correlation exists between a winery that outsources their firm's winemaking and whether the firm obtains external financing or not, chi-square(1,N=113)=8.2032, p=0.004. This finding could be from external funders viewing the outsourcing of a significant cost to the firm, winemaking, as positive or as an indicator of legitimacy that the winery is working with a skilled or established winemaker therefore potentially increasing the potential success of the new firm. However, outsourcing the winemaking could also be a risk for the winery if they winery develops a reputation based on the style or reputation of a specific winemaker. A winery could reduce this risk through having a formal contract with the winemaker. Further, in developing wine regions, a higher percentage of wineries often share the same winemaker.

Relationship 6: Firms that derive a higher percentage of their gross revenue from wine sales only correlate negatively with the legitimacy indicators. Further, firms that have a high percentage of in state sales have a negative relationship with the legitimacy indicators. Firms with a high percentage of sales outside their winery's home state have a strong, positive correlation with the legitimacy indicators.

Wine sales

Table 33: Correlation Results of the Percent of Winery's 2011 Gross Revenue from Wine Sales Only

Variable	Covariance
Full-time, year round employees	-0.049
Full-time, seasonal employees	-0.1448
Percent of wine volume sold through a liquor store	0.1854**
Percent of wine sold to a restaurant	0.0065
Percent sold through a distributor	0.0618
Arrangement with a tour bus company	-0.1567
Received external funding	-0.0875
Large trading network	0.0112

Wineries provided the percent of their gross revenue that is from wine sales only: this variable only correlated with one variable. A weak, positive relationship exists between the percent of total wine sales sold through a liquor store and percent of gross revenue from wine sales only ($r=0.1854$, $p=0.0560$). Therefore showing that as the percent of gross revenue from wine sales increases, the percent of wine volume sold direct to a liquor store is also increasing. Finally, we were surprised that no other correlations existed with this variable, since an increase in the percent of gross revenue from wine sales only could mean an increase in the production of wine leading to a greater need for more employees or more wine being distributed outside the winery's tasting room to restaurants or through distributors.

In-state sales

Table 34: Correlation Results of Firms' Percent of In-State Sales

Variable	Covariance
Full-time, year round employees	-0.3647***
Full-time, seasonal employees	-0.2061**
Percent of wine volume sold through a liquor store	0.0703
Percent of wine sold to a restaurant	0.0555
Percent sold through a distributor	-0.3629***
Arrangement with a tour bus company	-0.2376**
Received external funding	-0.1910**
Large trading network	-0.1481

The percent of a winery's in-state sales correlated with five variables. A moderate, negative correlation exists between the wineries' in-state sales and the number of full-time employees a winery employs (r=-0.3647, p=0.0001). This finding could be explained by as the percent of in-state sales decreases, the number of full-time, year round employees increases, this could be due to increasing out of state sales which may require more employees to assist with growing the grapes, producing the wine and establishing and facilitating out of state sales. The second moderate, negative correlation is with the percent of wine sales sold through a distributor (r=-0.3629, p=0.0001). This means a decrease in the amount of in-state sales is related to an increase in the percent of wine sales sold through distributors, this can be explained by a winery potentially working with a regional distributor who could help the winery increase its distribution to more channels outside the winery's home state.

A weak, negative relationship exists between the percent of in-state sales and whether a winery has a relationship with a tour bus company (r=-0.2376, p=0.0120). Therefore, wineries that have an arrangement with a tour bus company are often associated with having a lower percent of their sales from in state. The second negative, weak relationship is between the percent of in-state sales and the number of full-time, seasonal employees a winery hires (r=-0.2061, p=0.0300). Therefore, an association exists between a decrease in the percent of in-state sales and an increase in the number of full-time, seasonal employees a winery hires. The final weak, negative correlation is with the whether the winery has obtained external funding (r=-0.1910, p<0.0446). Therefore, wineries that have external funding are associated with having a lower percent of their sales from in state, inside the winery's home state.

Out-of-state sales

Table 35: Correlation Results of Firms' Percent of Out-of-State Sales

Variable	Covariance
Full-time, year round employees	0.3713***
Full-time, seasonal employees	0.2111**
Percent of wine volume sold through a liquor store	-0.0699
Percent of wine sold to a restaurant	-0.0574
Percent sold through a distributor	0.3635***
Arrangement with a tour bus company	0.2370**
Received external funding	0.1919**
Large trading network	0.144

Similar to the percent of in-state sales, five variables correlate with the percent of a winery's out-of-state sales, however; unlike in-state sales, the same variables are positively correlated with out-of-state sales. A moderate, positive correlation exists with the number of full-time, year round employees a winery hires (r=0.3713, p=0.0001). Therefore, an increase in the percent of sales a winery sells outside their home state is related to an increase in the number of full-time, year round employees the winery hires. The second variable that shares a moderate, positive correlation is the percent of wine volume sold through distributors (r=0.3629, p=0.0001). This is understandable, since often times a winery will work with a distributor to help increase their distribution network to outside the winery's home state. So, wineries that work with a distributor are associated with selling more wine outside their home state.

Three weak, positive correlations exist between the percent of out-of-state sales. The first is those wineries that have an arrangement with a tour bus company ($r=0.2370$, $p=0.0123$). Wineries that have an arrangement with a tour bus company are associated with having an increasing percent of the wine sales from out of state, outside the winery's home state. The second weak, positive correlation is between the number of full-time, seasonal employees ($r=0.2111$, $p<0.0262$), therefore an association exists between an increasing percent of out-of-state sales and an increase in the number of full-time, seasonal employees a winery hires. The third correlation is among those wineries that have external funding ($r=0.1919$, $p<0.0436$). Therefore, wineries with external funding are associated with having a greater percentage of their sales from outside their state. Finally, one weak, positive correlation was found between those wineries with an increasing percentage of sales outside the U.S. and those wineries with an increasing percentage of their wine volume being sold through distributors ($r=0.1778$, $p=0.0644$).

Relationship 7: Firms that sell a high percentage of their total wine volume at their winery have a strong, negative correlation with the legitimacy indicators.

Distribution channels

The survey asked wineries to sum the percent of their wine volume sold through eight different distribution channels to 100 percent, the following are the distribution channels listed on the survey, at the winery, to a liquor store, to a restaurant, through a distributor, through direct mail, at festivals or other. Correlations were conducted to see if relationships exist between those seven distribution channels and the eight variables of interest, listed below are the significant correlations found.

Table 36: Correlation Results of Firms' Percent of Total Wine Volume Sold through Distribution Channels

Variables	Number of full-time, year round employees	Number of full-time, seasonal employees	Wine volume sold direct to liquor store (%)	Wine volume sold direct to restaurant (%)	Wine volume sold through distributor (%)
At the winery	-0.1949**	-0.1061	-0.4561***	-0.3616***	-0.4487***
Farmers market	-0.0642	-0.0896	0.0379	0.0355	-0.0896
Direct mail	0.1385	0.1178	-0.1177	0.0075	0.2195**
Festivals or communi ty events	-0.0258	0.0003	0.1361	0.0835	-0.0899
Other	0.0308	-0.0375	-0.0920	-0.0487	-0.0626

NOTE: ***= significantly different at 1% significance level

**= significantly different at the 5% significance level

*= significantly different at 10% significance level

Regulations can also determine which distribution channel a winery sells through since regulations can often include wineries having to obtain permits or pay fees. In Michigan, wineries can offer free samples or charge for samples but are restricted at their facility where wine can be served. For example, Michigan wineries can only serve glasses of wine in a restaurant that is “owned by the Wine Maker or Small Wine Maker or is leased to another person,” (MLCC, p. 2). Additionally, all glasses of wine sold must be wine made by the winery. According to a Missouri alcohol and tobacco agent, wineries that have a domestic winery permit, which means those firms that sell less than 500,000 gallons a year of wine, can sell any alcoholic products from their own winery or other alcohol producers in their tasting room. Further, domestic wineries are able to sell outside Missouri and can sell direct to consumers, retailers and wholesalers. The agent suggests that new firms’ challenge to sell through formal distribution channels is not due to regulations, saying that the possibilities for domestic wineries is “wide open.”

Percent of wine volume sold at the winery

Table 37: Correlation Results of Firms’ Percent of Wine Volume Sold at the Winery

Variable	Covariance
Full-time, year round employees	-0.1949**
Full-time, seasonal employees	-0.1061
Percent of wine volume sold through a liquor store	-0.4561***
Percent of wine sold to a restaurant	-0.3616***
Percent sold through a distributor	-0.4487***
Arrangement with a tour bus company	-0.044
Received external funding	0.1085
Large trading network	-0.0898

Four variables negatively correlate with the percent of wine volume a winery sells at their winery (i.e. in a tasting room, gift shop, etc.). First, a moderate to strong, negative correlation exists between the percent of wine volume sold at the winery and the percent of wine volume sold direct to a liquor store (r=-0.4561, p=0.0000), meaning a decrease in the percent of wine volume sold at the winery is related to an increase in the percent of wine volume a winery sells direct to a liquor store. Next, another moderate to strong, negative correlation is presented between the percent of wine volume sold at a winery and the percent of wine volume sold through distributors (r=-0.4487, p=0.0000). Finally, a moderate, negative correlation exists between the percent of wine volume sold at the winery and the percent of wine volume sold to a restaurant (r=-0.3616, p=0.0001). The relationships of these three distribution channels and the percent of wine sold at the winery are similar since all negative, leading to an inverse relationship with the percent of wine sold at a winery.

One weak, negative relationship exists between the percent of wine volume sold at the winery and the number of full-time, year round employees a winery employs (r=-0.1949, p=0.0413).

Percent of wine volume sold direct to a liquor store

Table 38: Correlation Results of Firms' Percent of Wine Volume Sold Direct to a Liquor Store

Variable	Covariance
Full-time, year round employees	-0.1192
Full-time, seasonal employees	-0.1595*
Percent of wine volume sold through a liquor store	1.0000***
Percent of wine sold to a restaurant	0.3736***
Percent sold through a distributor	-0.1892**
Arrangement with a tour bus company	-0.1539
Received external funding	-0.113
Large trading network	-0.0401

Note: ***= significantly different at the 1% significance level

**= significantly different at the 5% significance level

*= significantly different at the 10% significance level

Three variables correlate with the percent of wine volume a winery sells direct to a liquor store. First, a moderate, positive correlation is present between the percent of wine volume a winery sells to a liquor store and the percent of wine volume the winery sells to a restaurant (r=0.3726, p=0.0001). Therefore, a percent increase in these two distribution channels is related. An important note, a comparison can be found between this moderate and positive correlation to the percent of wine volume sold to a restaurant and to the previous correlation, where a moderate but negative correlation was found between the percent of wine volume sold to a restaurant and the percent of wine volume sold at the winery. In summary, the percent of wine volume sold at the winery and to a restaurant have are negatively correlated whereas an increase in the percent of wine volume sold to a liquor store is related to an increase in the wine volume sold to a restaurant.

The percent of wine volume sold to a liquor store and the percent of wine volume sold through distributors has a weak, negative correlation (r=-1892, p=0.0477). This shows an association between a decrease in the percent of wine volume sold through a liquor store and an increase in the percent of wine volume sold through distributors.

Another variable shares a weak, negative correlation with the percent of wine volume sold to a liquor store, the number of full-time, year round employees a winery hires (r=-0.1595, p=0.0960). This correlation shows a decrease in the percent of wine volume sold through a liquor store is related to an increase in the number of full-time, year round employees a winery has. The correlation result is surprising, one possible reasoning could be that the winery is selling more volume through its tasting room therefore they need more full-time, year round employees to manage their tasting room.

Percent of wine volume sold through distributors

Table 39: Correlation Results of Firms' Percent of Wine Volume Sold through Distributors

Variable	Covariance
Full-time, year round employees	0.4291***
Full-time, seasonal employees	0.3833***
Percent of wine volume sold through a liquor store	-0.1892**
Percent of wine sold to a restaurant	-0.1069
Arrangement with a tour bus company	0.1758*
Received external funding	0.2604***
Large trading network	0.2288**

A moderate to strong, positive correlation exists between the percent of wine volume sold through a distributor and the number of full-time, year round employees a winery employs (r=0.4291, p=0.0000). A second moderate, positive correlation was found between the number of full-time, seasonal employees a winery has (r=0.3833, p=0.0000). These two findings were expected, an association between an increase in the percent of wine volume sold through distributors and an increase in the number of full-time employees a winery has because often to work with distributors, wineries need to be producing a consistent and often high volume of wine to support the volume needs of the alcohol distributors. Additionally, according to Mark Esterman, wine buyer at Meijer Grocery, distributors are more likely to work with a winery if they have a tasting room therefore requiring staff to operate and manage a tasting room experience for consumers.

A weak, positive correlation exists between the percent of wine volume sold through distributors and those wineries with a large trading network (r=0.2288, p=0.0167). This finding was expected; wineries that have a large trading network are associated with selling a high percentage of wine volume through distributors.

The second correlation is also weak but negative with the percent of wine volume sold through distributors and the percent of wine volume sold direct to a liquor store (r=-.1892, p=0.0477). The correlation has an inverse relationship therefore those wineries that sell less through distributors are associated with those wineries that sell a greater percent through a liquor store. However, as stated in an earlier correlation, this relationship can be the opposite with a winery that sells less to a liquor store and one that sells more through distributors (r=-0.1892, p=0.0477). The third correlation is with those wineries that have an arrangement with a tour bus company and those that have an increasing percent of their wine volume sold through distributors (r=0.1758, p<0.0662). Therefore, wineries that have an arrangement with a tour bus company are associated with selling a greater percentage of wine through distributors.

Relationship 8: Firms that charge more for their wine have a strong, positive correlation with the legitimacy indicators.

Wine pricing

Table 40: Correlation Results of Firms' Average Prices of their Highest, Lowest and Top Selling Wines

Variable	Covariance		
	Highest priced	Lowest priced	Top selling
Full-time, year round employees	0.151	-0.1242	-0.1433
Full-time, seasonal employees	0.5504***	0.0701	0.1531
Percent of wine volume sold through a liquor store	-0.2240**	-0.1421	-0.1794*
Percent of wine sold to a restaurant	0.0313	0.0974	0.1474
Percent sold through a distributor	0.3476***	-0.1606*	-0.0791
Arrangement with a tour bus company	0.3433***	0.0657	0.0816
Received external funding	0.3250***	-0.1069	-0.0425
Large trading network	-0.0789	-0.024	-0.0058

NOTE: ***= significantly different at 1% significance level

**= significantly different at the 5% significance level

*= significantly different at 10% significance level

Price of wineries' highest priced wine

A strong, positive correlation exists between the cost of wineries' highest priced wine and the number of full-time, seasonal employees a winery employs, (r=0.5504, p=0.0000). This correlation highlights a relationship between a higher priced wine and an increasing number of full-time, seasonal employees that a winery employs.

A moderate, positive relationship exists between the cost of a winery's highest priced wine and the percent of wine sold through distributors, whether the winery has an arrangement with a tour bus company and if the winery has obtained external funding. The correlation between the percent of wine sold through distributors (r=0.3476, p=0.0002), reveals that having a high priced wine correlates with an increasing percent of wine being sold through distributors. Secondly, a correlation exists between a winery that has an arrangement with a tour bus company and a winery with an increasingly high priced wine ($r=0.3433$, $p=0.0002$). The third moderately strong, positive correlation is between a winery that has external funding and the increasing cost of a winery's highest priced wine, ($r=0.3250$, $p=0.0005$).

Finally, one weak, negative correlation exists between the cost of a winery's highest priced wine and the percent of wine sold direct to a liquor store, ($r=-0.2240$, $p=0.0186$). Therefore, a winery that has a lower price of its highest priced wine is correlated with a winery that sells a higher percentage of its wine sales direct to a liquor store.

Price of wineries' lowest priced wine

Only one variable correlated with the values of a winery's lowest priced wine. The percent of wine sold through distributors has a weak and negative relationship with the cost of a winery's lowest priced wine ($r=-0.1606$, $p=0.0937$). This finding is interesting because of its negative sign, stating that an inverse relationship exists between the two variables, so a winery that increases their lowest priced wine is associated with a decreasing percent of their wine being sold through distributors. Finally, we anticipated seeing correlations among the other two distribution channels of interest.

Price of a wineries top selling wine

Again, only one variable correlated with the price of the wineries' top selling wine and eight of the variables of interest. A weak, negative relationship exists with the percent of total wine volume sold through a liquor store (r=-0.1794, p=0.0608). Therefore, a relationship exists between the price of a wineries' top selling wine decreasing, the total wine volume sold direct to a liquor store increasing, however; because this is only a correlation we cannot say that one affects the other, simply the two variables are related.

Relationship 9: Firms that have won awards have a strong, positive correlation with the legitimacy indicators.

Awards

Table 41: Correlation Results of Firms that Won Awards from Wine Competitions

Variable	Mean
Full-time, year round employees	4.519481**
Full-time, seasonal employees	2.454545
Percent of wine volume sold through a liquor store	7.713158
Percent of wine sold to a restaurant	1.956579
Percent sold through a distributor	10.41579***

Wine competitions

A two-sample, independent t-test showed the wineries who won a wine competition award hire more full-time, year round employees (M=*4.5195*, SD=*11.2069*) than those wineries who have not won an award (M=*1.0833*, SD=*1.842*), t(*84.4243*)=*-2.6160*, p=0.0105. As expected, the wineries who won an award from a wine competition sell a higher percentage of their total wine volume through distributors (M=10.4158, SD=18.652) than those wineries that have not won an award (M=0.6471, SD=2.058), t(79.0027)=-4.5040. However, the question asks wineries if they have won an award from a wine competition, so whether a winery has even entered a wine competition is unknown.

Table 42: Contingency Table Between Firms that Won an Award from a Wine Competition and Firms that have an Arrangement with a Tour Bus Company

	Won wine competition award		Total
Arrangement with tour bus company	**No**	**Yes**	
No	29	45	74
Yes	6	32	38
Total	35	77	112

A chi-square test shows that wineries who have won wine competitions are correlated with having an arrangement with a tour bus company, chi-square(1,N=112)=6.3988, p=0.011. The results show that 58 percent wineries that won an award from a wine competition were not more likely to have an arrangement with a tour bus company.

Table 43: Contingency Table Between Firms that Won an Award from a Wine Competition and Firms that have Obtained External Funding

	Won wine competition award		Total
Obtained external funding	**No**	**Yes**	
No	24	32	56
Yes	12	45	57
Total	36	77	113

A chi-square test shows that wineries who have won wine competitions are correlated with having obtained external funding, chi-square, chi-square(1,N=113)=6.1864, p=0.013. Wineries that won an award from a wine competition were more likely to obtain external funding.

Trade Press Award

Table 44: Correlation Results of Firms that Won a Trade Press Award

Variable	Mean
Full-time, year round employees	6.818182**
Full-time, seasonal employees	4.113636***
Percent of wine volume sold through a liquor store	6.055814
Percent of wine sold to a restaurant	2.539535
Percent sold through a distributor	14.87442***

Through conducting two-sample, independent t-tests, results showed those wineries that have won a trade press award employ more full-time, year round and seasonal employees than the wineries that have not won a trade press award. The winning wineries hired more full-time, year round employees (M=6.8182, SD=14.2963) than those not winning wineries (M=1.2609, SD=2.2206), t(44.3266)=-2.5589, p=0.0140. In addition winning wineries hired more full-time, seasonal employees (M=4.1136, SD=6.9088) than the wineries that did not win the same award (M=0.68116, SD=1.8981), t(47.1699)=-3.2190, p=0.0023.

Wineries that have won a trade press award sell a greater percent of their wine volume through distributors (M=14.8744, SD=19.6852) than those wineries that have not won an award (M=2.5970, SD=11.1886), t(59.591)=-3.7221, p=0.0004.

Table 45: Contingency Table Between Firms that Won a Trade Press Award and Firms that have an Arrangement with a Tour Bus Company

	Won trade press award		Total
Arrangement with tour bus company	No	Yes	
No	52	22	74
Yes	26	22	38
Total	68	44	112

Additionally, a significant correlation exists between those wineries that have won a trade press award and whether the wineries have an arrangement with a tour bus company, chi-square(1)=8.3501, p=0.004.

Table 46: Contingency Table Between Firms that Won a Trade Press Award and Firms that Obtained External Funding

	Won trade press award		Total
Obtained external funding	No	Yes	
No	41	15	56
Yes	28	29	57
Total	69	44	113

Finally, a significant correlation exists between wineries that have won a trade press award and whether the winery obtains external funding, chi-square(1)=6.8955, p-value=0.009. No significant findings were found between a winery that wins a trade press award and having a large trading network.

Relationship 10: Firms that utilize new forms of media have a strong, positive relationship with the legitimacy indicators, in this survey new media includes . Firms that use traditional forms of media have negative relationship with the legitimacy indicators.

Table 47: Two Sample T-Tests with Unequal Variances Results of Promotional Activities Firms Use

Variables	Number of full-time, year round employees	Number of full-time, seasonal employees	Wine volume sold direct to liquor stores (%)	Wine volume sold direct to restaurants (%)	Wine volume sold through distributors (%)
Promotions for	4.82456	2.5088	5.1554**	1.7268	8.9929
Customer database	4.4744***	2.5128**	6.0442	3.0807	9.8779***
Club	4.7826	4.02174***	5.26*	1.8156	11.9311**
Newsletter	5.2951**	2.5574	6.8254	2.3848	9.7390*
Social media	3.8557***	2.1237	7.5547	2.5653**	8.4905***
Volume discounts	3.5648***	2.1111***	7.5962	1.9359	7.6566***
Other	11.5333	3.9333	6.000	2.7857	9.55

NOTE: ***= significantly different at 1% significance level

**= significantly different at the 5% significance level

*= significantly different at 10% significance level

Through conducting two-sample, independent t-tests and chi-square tests results showed club promotions as being the most significant across all eight legitimacy indicators. The wineries that offer club promotions hire more full, time seasonal employees, and sell a higher percentage of their total wine volume through liquor stores and distributors.

The next highly correlated promotional activity was social media (i.e. Facebook and Twitter). Wineries that use social media are correlated with hiring more full-time, year round employees, and selling an increasing percentage of their total wine volume through restaurants and distributors. First, wineries that use social media are associated with hiring more full-time, year round employees (M=3.86, SD=10.11) than wineries that do not use social media (M=0.929, SD=1.27), t(108.5)=-2.71, p=0.0079. Second, wineries that use social media are correlated with selling an increasing percent of their total wine volume through restaurants (M=2.57, SD=5.52) than wineries that do not use social media (M=0.964, SD=1.84), t(56.4)=-2.13. This result was expected, as social media can create awareness quickly about a brand and serve as a tool to interact with other brands or supporting industries like restaurants. The third correlation is between those wineries that use social media sell a higher percentage of their total wine volume through distributors (M=8.49, SD=17.14) than wineries that do not use social media (M=0.5, SD=1.24), t(100.74)=-4.45.

A surprising finding was wineries that use newsletters was positively correlated with two of the legitimacy indicators, we anticipated this traditional media form to be negatively correlated with several of the indicators. First, wineries that use newsletters hire more full-time, year round employees (M=5.30, SD=12.45) than those that do not create newsletters (M=1.25, SD=1.91), t(63.35)=-2.50. Second, and the most surprising finding, wineries that create newsletters sell a greater percentage of their total wine volume through distributors (M=9.74, SD=17.6) than wineries that do not use newsletters (M=4.69, SD=14.01), t(107.32)=-1.67.

Table 48: Chi-Square Results of Promotional Activities Firms Use

Variables	Arrangement with tour bus company	Obtained external funding	Large trading network
Promotions for returning customers	7.0704***	9.1283***	2.0360

Table 48 (Cont'd):

Customer database	0.2824	1.2589	1.4063
Club promotions	3.1756**	6.4090**	0.2164
Website	0.5181	1.0457	0.9911
Newsletter	0.0148	5.1090**	2.0744
Social media	0.0156	8.8105***	0.3274
Volume discounts	0.1475	1.1128	0.0003
Other	1.2536	0.1238	0.0993

NOTE: ***= significantly different at 1% significance level

**= significantly different at the 5% significance level

*= significantly different at 10% significance level

A significant relationship exists between wineries that offer promotions for returning customers and having an arrangement with a tour bus company, chi-square(1)= 7.0704, p-value=0.008. A significant relationship exists between wineries that offer promotions for returning customers and obtaining external funding, chi-square(1)= 9.1283, p-value=0.003.

A significant relationship exists between wineries that offer club promotions and have an arrangement with a tour bus company, chi-square(1)= 3.1756, p-value=0.075. A significant relationship exists between wineries that offer club promotions and obtaining external funding, chi-square(1)= 6.4090, p-value=0.011.

A significant relationship exists between wineries that have newsletters and firms that obtained external funding, chi-square(1)= 5.1090, p-value=0.024. This finding was since newsletters are associated with being a traditional, an older type of media. Further, instead of sending out monthly updates many wineries and businesses choose to update daily or weekly through social media outlets. In addition, printing and mailing newsletter is often quite costly for businesses, however, this newsletter could be sent through email but this information was not collected in our survey.

A significant relationship exists between wineries that use social media and obtaining external funding, chi-square(1)= 5.1090, p-value=0.003.

Table 49: Contingency Table Between Firms that use Social Media and Obtain External Funding

	Utilizes social media		Total
Obtained external funding	**No**	**Yes**	
No	12	42	54
Yes	2	55	57
Total	14	97	111

Pearson chi2(1) = 8.8105, P-Value = 0.003

NOTE: ***= significantly different at 1% significance level

**= significantly different at the 5% significance level

*= significantly different at 10% significance level

The chi-square result shows that a significant relationship exists between those wineries that use social media and those that do not and the likelihood that a winery obtains external funding. The contingency table above reveals that 57 percent of the wineries that use social media obtained external funding. However, another 43 percent of wineries also use social media but did not obtain external funding. We anticipated a higher percentage of the wineries that use social media to obtain external funding, instead of this results that show the groups are quite similar.

Table 50: Two Sample T-Tests with Unequal Variances Results of Products and Services Firms Offer

Variable	Number of full-time, year round employees	Number of full-time, seasonal employees	Wine volume sold direct to liquor store (%)	Wine volume sold direct to restaurant (%)	Wine volume sold through distributors (%)
Winery and/or vineyard tours	4.0933	2.6267**	6.6904	2.5849	5.9945
Restaurant	6.6786	3.2857	3.2964***	2.1429	11.7036
Gift shop	4.1905**	2.3691*	7.3256	1.3866**	8.2512
Offer food products	4.6712**	2.7945***	7.3901	2.1366	9.3887*
Hosts wine events	4.1644	2.6438**	6.7264	1.6875	8.1347

Through conducting two-sample, independent t-tests with those wineries that offer food products and the eight indicators of legitimacy, we found five significant correlations. Wineries who offer food products hire more full-time, year round employees and more full-time, seasonal employees. In addition wineries that offer food products sell a higher percentage of their total wine volume through distributors.

Wineries that have a gift shop correlated among five of the legitimacy indicators. Wineries with gift shops employ more full-time, year round employees and full-time, seasonal employees than wineries that do not have a gift shop. In addition wineries with gift shops are associated with selling a higher percentage of their total wine volume through restaurants.

Wineries that have a restaurant and the eight indicators of legitimacy, results showed a correlation with one of the legitimacy indicators and wineries that have a restaurant. Wineries with restaurants employ sell a higher percentage of their total wine volume through liquor stores.

Finally, we anticipated seeing wineries that offer tours of their winery or vineyard to correlate with more of the legitimacy indicators than just an increase in the number of full-time, seasonal employees a winery hires.

Table 51: Chi-Square Results of Products or Services Firms Use

	Arrangement with tour bus company	Obtained external funding	Large trading network
Winery and/or tours	0.4345	0.1098	0.0404
Restaurant	0.4780	6.5581***	1.905
Tasting room	- -	1.0269	1.0090
Gift shop	2.6022	3.9750**	1.7143
Offer food products	6.8159***	13.0374***	0.3541
Hosts events	0.8744	2.7010	8.8514***

A significant relationship exists between wineries that have a restaurant and obtaining external funding, chi-square(1)=6.5581, p-value=0.010. In addition, a significant relationship exists between wineries that have a gift shop and wineries that obtain external funding, chi-square(1)=3.9750, p-value=0.046.

A significant relationship exists between wineries that offer food products and having an arrangement with a tour bus company, chi-square(1)=6.8159, p-value=0.009. Another significant relationship exists with those wineries that offer food products and obtaining external funding, chi-square(1)=13.0374, p-value=0.000.

A significant relationship exists between wineries that host events (i.e. weddings and receptions) and having a large trading network, chi-square(1)=8.8514, p-value=0.003. This result was anticipated because hosting events often involves collaborating with other supporting industries like party planners, caterers, tent companies and party rental companies.

CHAPTER 5: DISCUSSION AND CONCLUSION

New firms need to first obtain legitimacy as a resource to gain access to other resources crucial to their survival and growth. Through this study, we analyzed how wineries' management and marketing decisions affect the number of legitimacy indicators a winery obtains. The bivariate results indicated the greatest number of indicators one variable correlated with was five. Further, only eight variables correlated with five legitimacy indicators. Further, only three variables correlated with four of the legitimacy indicators. Finally, many of our study's predictions were significant leading us to form direct strategies for nascent firms operating a developing industry, and contribute to the literature on legitimacy and developing wine regions.

Interestingly, the number of years of experience a winery owner has in the wine industry, grape production or business does not relate to a firm obtaining financing or having a large trading network. This was surprising, since much of the previous literature suggests an owner with previous relevant experience often associates with the success of new venture. Further, owners with previous experience in different industries or the wine or grape industry would presumably have a large network. Torniskoski and Newberg (2005) had similar findings in their study, networking behavior had a much less significant effect on emerging factors than anticipated.

Our analysis revealed that wineries need to focus on increasing production levels (number of cases produced annually) to increase their ability to obtain legitimacy. Unlike other legitimacy indicators, the age of the winery does not correlate with obtaining external funding, this is positive for new firms seeking funding. Further, produces a significant percent of wine from vinifera grapes correlated with five of the legitimacy indicators. Interestingly, the procurement method that wineries use to obtain grapes did not correlate with obtaining external funding. We anticipated external funders viewing formal contract methods as the firm behaving like an established firm. However, wineries that outsource some part of their winemaking are more likely to obtain external funding. Through in-depths interviews with lenders in and outside the emerging region could help to understand what factors external funders deem important.

Interestingly, wineries that declared, “bulk wine” as the main input correlated with selling an increasing percent of wine through distributors. Finally, a key relationship was rejected when using “other” (i.e. cherries, pecans, etc.), as the main input to produce wine did not negatively correlate with selling an wine through distributors. Surprisingly, increasing production did not correlate with an increasing percentage of wine selling through restaurants or liquor stores. Finally, information is lacking on what owners’ ideal visions are for their winery, which could offer insight to how firms and the region itself views legitimacy, as well as the growth and success of their firm and the region. This information could be gathered through asking winery owners on a future study if they have an ideal number of cases they hope to produce and by when, or asking the owners if they want to become a boutique style winery or a winery with large, national distribution.

Wineries that use “other” as the main input in their wine are more likely to have a large trading network. In this emerging wine region, many wineries make wine from many fruits, which could require a large network of suppliers. This was confirmed in the results through wineries that grow their own grapes correlating negatively with having a large trading network. Surprisingly, none of the promotional activities including social media or club promotions correlated with wineries having a large trading network.

Further, the more a winery charges for its highest priced wine correlates with a winery obtaining key legitimacy indicators. As expected, the more wine a firm sell outside its home state correlates with a higher number of legitimacy indicators and selling a higher percent of in-state sales negatively correlates to obtaining those same legitimacy indicators. Wineries should offer food products, club promotions and have a gift shop. Further, firms should use social media to promote their firm, social media correlated with the greatest number of indicators.

Wineries that want to sell through distributors need to produce a certain amount of wine. In future studies, surveying distributors would help to understand exactly how much wine a firm needs to supply. In terms of production, wineries that use more vinifera grapes and grapes as the main input in their wine sold more wine through distributors. Finally, in support of our relationship, wineries that produce a high percent of their wine from hybrid grapes sold less through distributors, and further using hybrid grapes did not correlate with selling wine through liquor stores or restaurants.

Winning an award, having returning customer promotions and club promotions may increase the likelihood of having an arrangement with a tour bus company. Again, awards and the pricing of the wine could be the measurements a tour bus company uses in selecting which wineries it wants to collaborate with. We anticipated that a firm who uses social media would be more likely to have an arrangement with a tour bus company but the results do not support that relationship. However, firms that offer food products are more likely to have an arrangement with a tour bus company. Surprisingly, no correlation was found between wineries that host events. We anticipated a working relationship with the wineries and tour bus companies. This aligns with Carlsen (2013) and Hall et al. (1998) which emphasize compatibility is important to ensure that the experience of a winery visit is not compromised, stating that some wineries do not have space for bus loads of wine drinkers and therefore some wineries are resistant to even host tour buses without an appointment.

Wineries that win awards are more likely to obtain external funding. Therefore, wineries should invest in applying for awards and advertise their wins to customers and resource gatekeepers. While having a gift shop and offering food products is plausible, operating a restaurant can be quite different than running a winery therefore, we were surprised by the strong relationship between obtaining external funding and having a restaurant. However, offering these products and services often helps build interest in the winery and helps consumers connect with the winery as discussed by Brown and Getz (2005), "There will be a search for authenticity, often manifested in seeing the actual grapes, physical plant, and personnel that produce favored wines," (Brown and Getz, p. 269).

We anticipated older wineries to have a large trading network, however, over time wineries may buy more land, operate their own vineyard and start vertically integrating many aspects of their business leading them to interact less with others. This same reasoning could also apply to increases in production, as wineries expand they may establish long-term contracts with the same growers or grow their own grapes, and potentially work with one distributor, therefore reducing their trading network.

A few key strategies can be suggested for the region. First, the success of the individual wineries depends on the success of the overall region; further legitimizing the region must be done first before wineries can legitimize their own firm. “Therefore a regional brand is more important to new wineries and small brands than to large well known brands,” (McCutcheon et al., 2013; Johnson and Bruwer, 2007; Lockshin et al., 2006; Van Zanten et al., 2003). This is a key finding for the region that newer wineries need a strong regional brand more than well-known wineries and since more established firms might have more power this could be challenging.

Table 52: Current Status of the Emerging Wine Region based on Easingwood (2006) model

Variables	Emerging Wine Region
Specializing in a wine style	
Producing significant amounts of	
Discussed by opinion formers	
Consistently produces high quality	✓
Has a wine heritage	✓
Produces distinctive wines	✓
Makes wine that terroir can produce	✓

Note: Applied Easingwood’s (2006) model of key features that drive regionality of a wine region to the emerging wine region

While the emerging region is not producing significant amounts of wine, the quality of the wine and percent of vinifera grapes used are increasing according to Master Sommelier Ron Edwards. Further, viticulture expert Paolo Sabbitini, Ph.D., finds that wineries that have been operating for 30 to 40 years do a “portfolio switch” from simply producing wine to pay their bills to producing wine that builds their winery's reputation. This transition is what Sabbitini believes is the leading cause of the increased planting of vinifera grapes across the region.

The emerging wine region needs to acknowledge and focus on producing a flagship varietal to increase the region's reputation and recognition. Edwards and Sabbitini both agree a wine style or flagship varietal is lacking but both note this decision may be state based. Easingwood (2006) agrees that having a flagship grape increases regionality but also notes that, "it also helps if the wine is a result of a particular terroir so that other regions will find it hard to replicate the wine style," (Easingwood, p. 224).

Finally, the emerging wine region must change its perception of being a service economy to an experience economy. As Getz and Brown (2006) mention wineries in almost every growing area of the world can produce high quality wine therefore leading consumers to easily switch wines since the overall message is quality. Wineries and supporting industries in emerging wine regions need to collaborate and reinforce the same message about the activities that wineries offer, the quality of the wine in the region and the cultural and recreational experiences that make the region an exciting wine destination.

Finally, we added to the work of Navis and Glynn (2006) on building a product category. Our analysis contributes to the research on the legitimation of a new market category through analyzing the factors internal to the category like the strategic and symbolic actions of the firms and the factors external to the category like the resource gatekeepers and legitimizing organizations who judge the individual firms and the region's credibility, appropriateness and ultimately its legitimacy.

In summary, increasing the survey response rate would increase the validity of the results and offer a more comprehensive view of the wine region. Further, through surveying the same wineries every few years would allow a more in-depth analysis of the effects of the management and marketing strategies on the success and legitimacy of the individual firms and the region. Surveying supporting industries could also offer insight in how these key resource gatekeepers perceive firms in the emerging region, this could offer more strength and accuracy to the legitimacy indicators. Overall, the findings from this 2012 survey are highly beneficial to winery owners to understand how other wineries are performing and to gain perspective on the direction the region is going. Finally, this research will also serve as a resource for supporting industries and resource gatekeepers to understand the relationships of wineries' strategies and different factors as well an opportunity to help resource gatekeepers make decisions that are less subjective and more objective and in line with wineries and the region's needs to obtain resources and ultimately help facilitate growth and success for both.

A few limitations exist in this thesis research. First, the wine regions in Michigan, Missouri and New York are a relatively small industry, therefore we could increase the sample size. In surveying the winery owners again in the future, a few questions should be added to the survey including asking the owners what their production goal is in five years and what other goals the owners have for their winery in the future, i.e. sell outside their home state, sell a greater percentage of total wine volume through distributors, or increase marketing efforts, etc. The third limitation in the study is no causation can be inferred making it difficult to infer recommendations to the winery owners and the industry since we do not have causal effects. The fourth limitation is the lack of a legitimacy index, in the future this would benefit the research field on legitimacy and legitimizing a wine region. The ideal legitimacy index would collect data that would allow the wineries to then be ranked as low, medium or high achievers of legitimacy. Finally, an important limitation is an adequate model of legitimacy is lacking and crucial for future research.

In summary, the goal of this thesis was to answer the following questions: What strategies can firms use to build legitimacy and thereby gain access to key resources crucial to the firm's survival and growth? After completing a thorough review of previous literature on legitimacy, developing wine regions, collaboration and building a regional identity, this paper identified eight strong indicators of legitimacy. The framework followed the work of Zimmerman and Zeitz (2002) and Torniksoki and Newbert (2007) categorizing the indicators into four categories, (1) hiring an employee, (2) making a sale, (3) obtaining financing and (4) networking. Through surveying 113 winery owners in the emerging wine region, we were able to conduct a comprehensive descriptive, bivariate and multivariate analysis on the data between all eight variables and the marketing and management decisions of the wineries. The paper offers strategies for wineries and the region to build legitimacy and therefore use legitimacy as a resource to obtain other key resources crucial to the individual firms' and region's success and growth.

APPENDICES

APPENDIX A

Table 53: The continuous variables that correlated with the greatest number of legitimacy indicators at the 1, 5, 10 percent significant levels

VARIABLE	1	2	3	4	5	6	7	8
CORRELATION RESULTS						**CHI-SQUARE RESULTS**		
Number of Years Winery has Commercially been Producing Wine and Number of Cases Produced in 2011								
Years in business	✓	✓			✓	✓		
Cases produced	✓	✓			✓	✓	✓	
Percent of Total Wine Production made from Vinifera, Hybrid, native American Grapes or Other (i.e. Cherries, Honey, Pecans, etc.)								
% of Vinifera grapes		✓	-✓		✓	✓	✓	
% of Hybrid grapes					-✓	-✓		
% of native American grapes			✓					
% of Other								
Percent of Wine Bottled as Varietal, Blend or Other								
% of one Varietal								

Table 53 (Cont'd):

% of Blends					✓			
% of Other								
Cost of Wineries' Highest and Lowest Priced Wine and Top Selling Wine								
Cost of Highest Priced Wine		✓	- ✓		✓	✓	✓	
Cost of Lowest Priced Wine					-✓			
Cost of Top Selling Wine			-✓					
Percent of Gross Revenue from Wine Sales Only, Percent of Wine Sales from In-State, Out of State and Outside the U.S.								
% Gross Revenue from Wine Sales			✓					
% of In-State Sales	-✓	-✓			-✓	-✓	-✓	
% of Out-of-State Sales	✓	✓			✓	✓	✓	
% of Out-of-Country Sales					✓			✓
Percent of Wine Volume Sold Through Various Distribution Channels								
Percent of Total Wine Volume Sold through Various Distribution Channels								
% Sold at the Winery	-✓		-✓	-✓	-✓			

Table 53 (Cont'd):

% Sold at Farmers Market								
% Sold through Direct Mail					✓	✓		
% Sold through Festival						✓	-✓	
% Sold through Other								
Percent of Total Wine Volume Produced from Grapes, Grape Juice, Bulk Wine or Other								
% Produced with Grapes								
% Produced with Grape Juice								
% Produced with Bulk Wine				✓				
% Produced with Other			✓					
Percent of Grapes Procured Using Different Strategies (Own vineyard, Spot/Cash Market (As Needed), Verbal (Handshake) Agreement or Through a Written Contract								
% via Own Vineyard								-✓

Table 53 (Cont'd):

% via Spot/Cash Mkt				✓				
% via Verbal/ Handshake								✓
% via Written Contract	✓	✓			✓			
Percent of Wine Production a Firm Outsources								
% of Winemakin g Outsourced						✓	✓	
Owner Characteristics Including Prior Experience, Time Spent Working at Winery/Vineyard and Percent of Self Worth Invested in Winery								
Years in Wine Industry	✓	✓			✓			
Years in Business	✓		-✓					
Years in Grape Industry	✓	✓			✓			
% Time Spent at Winery						✓	✓	
% Self Worth Invested in Winery					✓		✓	
Owner's Age								

Note: 1=Full-Time, Year Round Employees, 2=Full-Time, Seasonal Employees, 3=Wine Volume Sold to Liquor Stores (%), 4=Wine Volume Sold to Restaurants (%), 5=Wine Volume Sold

Table 53 (Cont'd):

through Distributors (%), 6=Arrangement with Tour Bus Company, 7=Received External Funding, and 8=Large Trading Network.

Table 54: The binary variables that correlated with the greatest number of legitimacy indicators at the 1, 5 and 10 percent significant levels

VARIABLE	1	2	3	4	5	6	7	8
T-TEST RESULTS						**CHI-SQUARE RESULTS**		
Main Input Used to Produce Wine								
Grapes	✓	✓			✓			
Bulk Wine					✓			
Grape Juice	✓							
Other								✓
Typical length of contract with grape or juice supplier								
Year to year								
Multiple years								
Firms that outsource some part of their winemaking								
Outsource winemaking		✓				✓	✓	
Products or Services Wineries Offers Customers								
Winery/ Vineyard Tours		✓						
Restaurant			✓				✓	
Tasting Room								
Gift Shop	✓	✓		✓			✓	
Food Products	✓	✓			✓	✓	✓	
Hosts events		✓						✓

Table 54 (Cont'd):

Promotional Activities Wineries Utilize								
Promotion for returning customers			✓			✓	✓	
Customer Database	✓	✓			✓			
Club Promotions		✓	✓		✓	✓	✓	
Website								
Newsletter	✓				✓		✓	
Social Media	✓			✓	✓		✓	
Volume Discount	✓	✓			✓			
Other								
Winery Owner is a Member of an Association								
Local Chamber of Commerce								
Wine Association								
Awards and Certifications Winery has Obtained								
Industry Certification		✓				✓	✓	
Wine Competition	✓				✓	✓	✓	
Trade Press	✓	✓			✓	✓	✓	
Owner has vineyard/ winemaking certification					✓			

Note: 1=Full-Time, Year Round Employees, 2=Full-Time, Seasonal Employees, 3=Wine Volume Sold to Liquor Stores (%), 4=Wine Volume Sold to Restaurants (%), 5=Wine Volume Sold

Table 54 (Cont'd):

through Distributors (%), 6=Arrangement with Tour Bus Company, 7=Received External Funding, and 8=Large Trading Network.

Table 55: The categorical variables (more than 2 groups) that correlated with the greatest number of legitimacy indicators at the 1, 5 and 10 percent significant levels

VARIABLE	1	2	3	4	5	6	7	8
ONE-WAY ANOVA RESULTS						**CHI-SQUARE RESULTS**		
Reason Winery Owner Entered the Wine Business								
					✓			
Winery Owner's Satisfaction Level with Performance of Winery (5-point Likert scale)								
							✓	
How Winery Business is Organized (i.e. Sole proprietorship, partnership, L.L.C, etc.)								
			✓					
Method Used to Determine Contract Price (i.e. Based on market prices, negotiated with supplier, set by winery, etc.)								
					✓	✓		
Owners' Rating of their Typical Customer's Degree of Knowledge and Familiarity with their Winery's Products or Winery								
	✓	✓		✓	✓	✓		
Owners' Rating of Consumers' Familiarity with Wine from Their Region								
	✓						✓	
Type of Financing a Winery Uses (Self-financed, External Financing (bank, investor), or Both)								
	✓	✓			✓	✓		
Winery's Method of producing wine that is 1) Similar to what consumers are familiar with to 7) Producing a novel taste compared to what consumers are used to								
	✓	✓						

Note: 1=Full-Time, Year Round Employees, 2=Full-Time, Seasonal Employees, 3=Wine Volume Sold to Liquor Stores (%), 4=Wine Volume Sold to Restaurants (%), 5=Wine Volume Sold through Distributors (%), 6=Arrangement with Tour Bus Company, 7=Received External Funding, and 8=Large Trading Network.

APPENDIX B

Survey of Michigan Wineries Code No. ___

1. Name of Winery: ____.

2. ZIP Code of your winery: ________________.
3. In what year was your winery licensed? ___________.
4. What was the first year of commercial wine production? _________.

5. Why did you decide to enter the wine business? Please check the main reason:
   ( ) Opportunity to enter the family business
   ( ) Good business opportunity
   ( ) Lifestyle or hobby objectives
   ( ) Retirement nest egg
   ( ) Passion for wine and food
   ( ) Community development
   ( ) Other (please specify):____.

6. How satisfied are you with the performance of your winery? Please circle one option:

Very satisfied	Satisfied	Neither satisfied nor unsatisfied	Unsatisfied	Very unsatisfied

7. What best describes how your winery business is organized?
   ( ) Sole proprietorship
   ( ) Partnership
   ( ) Limited liability company (LLC)
   ( ) Closely held or family corporation
   ( ) Publically traded corporation
   ( ) Other (estate or trust, cooperative, etc.)

8. What was your total wine production in 2011? _____________cases or ___________gallons.

9. Over the previous three years, your annual wine production has:
   ( ) been stable at the same level.
   ( ) increased. By how much? ______________%
   ( ) decreased. By how much? ______________%
   ( ) Not applicable (if winery less than 3 years in business).

10. How many persons (excluding unpaid family workers and laborers supplied by third party contractors) worked at the winery (including the vineyard if applicable) in 2011?
    Full time, year round ______; Full time, seasonal_____; Part time (year round and/or seasonal)_________.

11. Currently, what percentage of your total wine production is made from (sum to 100%):
    Vinifera Grapes ______% Hybrid Grapes ______% Native American Grapes _____% Other _____%

12. What percentage of your total wine production is bottled as (sum to 100%):
    Grape varietal? ______% Grape blends? ______% Other?______%

13. What is the average retail price for your:
    highest priced wine? $____________ per bottle
    lowest priced wine? $____________ per bottle
    top selling wine? $____________ per bottle

14. In addition to wine, what other products and services does your winery offer wine customers?

	YES	NO
Winery/vineyard tours?		
Restaurant?		
Tasting room?		
Gift shop?		
Food products?		
Hosting winery events (weddings, receptions, etc.)?		

15. What percentage of your winery's 2011 gross revenue is from wine sales only?
    _______%.

16. What percentage of your total wine sales are: In state _____%; Out of state_____%; Out of country_____%

17. What percentage of your 2011 sales at the winery (tasting room or mail order shipments) were repeat purchases? ________ %.

18. Please answer the following questions about your wine distribution channels:

Currently, what percentage of wine volume is sold…?		Over the next three years, do you expect this percentage to decrease, increase or stay the same? (Please check one)
At the winery	%	Decrease__ Stay the same__ Increase__
Direct to liquor stores	%	Decrease__ Stay the same__ Increase__
Direct to restaurants	%	Decrease__ Stay the same__ Increase__
At a farmers market	%	Decrease__ Stay the same__ Increase__
Direct mail order shipments	%	Decrease__ Stay the same__ Increase__
Through distributors	%	Decrease__ Stay the same__ Increase__
Festivals or community events	%	Decrease__ Stay the same__ Increase__
Other:______________________	%	Decrease__ Stay the same__ Increase__

19. Please answer the following questions regarding your promotional activities:

	YES	**NO**
Do you have arrangements with tour or bus companies?		
Do you have promotions for returning customers?		
Do you have a customer database?		
Do you have club promotions?		
Do you have a website?		
19. Please answer the following questions regarding your promotional activities (continued):	**YES**	**NO**

Do you have a newsletter?		
Do you use social media (i.e. Facebook, Twitter, etc.)?		
Do you offer volume discounts?		
Other (please specify):____		

20. What main input or ingredient do you use in the winery to produce wine?

	YES	**NO**	**Percentage of total wine volume produced from…**
Grapes			%
Grape juice			%
Bulk wine			%
Other: ___________________________ (please specify)			%
Sum of all main inputs used to produce wine (as % of wine volume)			100%

21. What percentage of grapes do you currently:
    Produce in your own vineyards (estate grown)? __________%
    Acquire in spot/cash markets as needed? __________%
    Procure via verbal (handshake) contract? __________%
    Procure via written contract? __________%
    Sum: 100%

    If you do not use contracts to procure grapes, please skip to question 24.

22. How is the contract price determined?
    ( ) Contract price is based on market prices.
    ( ) Contract price is negotiated with supplier.
    ( ) Contract price is set by the winery.
    ( ) Contract price is set by the supplier.
    ( ) Other method. Please explain:
    ____.

23. What is the typical length of a contract with your grape or juice supplier(s)?
    ( ) Year to year ( ) Multiple years (how many? ________).

24. What other terms are included in your contracts with grape or juice supplier(s)? Please check all that apply:
( ) Specific acreage
( ) Specific quantity (tonnage, gallons)
( ) Disagreement resolution clause
( ) Viticultural practices clause
( ) Bonuses/Penalties for: ( ) sugar ( ) acids ( ) defects (mold, rot) ( ) Other (specify_______________).

25. Do you outsource any of your winemaking to another winery?
( ) No, I produce all wine on site.
( ) Yes, I outsource – Percentage of you wine production that is outsourced: _______%

26. Do you produce wine for, or rent your facilities/equipment to, other wineries (custom crush)?
( ) No ( ) Yes – Percentage of winery's gross revenue from custom crush services: _______%

Please indicate how much you agree or disagree with the following statements...

	Strongly Disagree						Strongly Agree
27. I can easily and accurately measure all quality attributes of grapes used in winemaking.	1	2	3	4	5	6	7
28. It is easy to procure grapes of adequate quality.	1	2	3	4	5	6	7

29. Indicate the degree to which physical investments made in the winery (winemaking facilities and equipment) can be redeployed to other uses.
Easily redeployed without cost 1 2 3 4 5 6 7 Cannot be redeployed for technical or economic reasons

30. Indicate the degree to which physical investments made to produce grapes (vineyard, equipment, and machinery) can be redeployed to other uses.
Easily redeployed without cost 1 2 3 4 5 6 7 Cannot be redeployed for technical or economic reasons

31. If the transaction between your winery and your main grape supplier ceased unexpectedly, to what degree could the assets dedicated to that specific transaction be redeployed to other uses?
Easily redeployed without cost 1 2 3 4 5 6 7 Cannot be redeployed for technical or economic reasons

32. To what degree is the timing of grape deliveries (i.e. having access to grapes on a certain schedule) important to the profitability of your winery?
    Not important at all 1 2 3 4 5 6 7 Extremely important

33. To what degree has your relationship with your main grape supplier become important to the profitability of your winery?
    Not important at all 1 2 3 4 5 6 7 Extremely important

34. Indicate the degree of uncertainty you face with respect to grape <u>yields</u> (and thus quantity of grapes available to winemaking) from year to year.
    No uncertainty at all 1 2 3 4 5 6 7 Extremely high uncertainty

35. Indicate the degree of uncertainty you face with respect to grape <u>quality</u> available to winemaking from year to year.
    No uncertainty at all 1 2 3 4 5 6 7 Extremely high uncertainty

36. Are you a member of your local/regional chamber of commerce? ( ) Yes ( ) No
37. Are you a member of a wine trade association (board or council)? ( ) Yes ( ) No
38. Has your winery or vineyard obtained any industry certifications (i.e. sustainable, organic, etc.)? ( ) Yes ( ) No
39. How would you rate your own knowledge of regulations affecting the wine industry (such as Alcohol and Tobacco Tax and Trade Bureau (TTB), zoning, environmental, labor, food safety, etc.)?
    No knowledge 1 2 3 4 5 6 7 Full knowledge of industry regulations

40. Has your winery received any awards from:
    a. Wine competitions? ( ) Yes ( ) No
    b. Trade Press? ( ) Yes ( ) No
    c. Other sources? ( ) Yes ( ) No
41. How would you rate your winery's performance relative to others in your region?
    Lower Than Average 1 2 3 4 5 6 7 Higher Than Average

42. How would you rate the breadth of your winery's trading network (i.e. buyers, suppliers, etc.)?

Winery consistently interacts with a select few trading partners	1 2 3 4 5 6 7	Winery consistently interacts with a large number of trading partners

43. How would you rate your typical customer's degree of knowledge and familiarity with <u>your wine products or winery</u>?

Customers are unfamiliar with our products and winery	1 2 3 4 5 6 7	Customers have a high degree of knowledge and familiarity with our products and winery

44. How would you characterize the consumer's familiarity with wine from <u>your region</u>?

Consumers are likely to be unfamiliar with wines from my region	1 2 3 4 5 6 7	Consumers are likely to be highly knowledgeable about wines from my region

45. How would you rate your typical input supplier's (i.e. grapes, juice, bulk wine, etc.) familiarity with the management practices of wineries in your region?

Input suppliers <u>do not</u> understand management practices of wineries in my region	1 2 3 4 5 6 7 N/A	Input suppliers <u>do</u> understand the management practices of wineries in my region

46. How is your winery financed? ( ) Self-financed ( ) External funding (bank, investor) ( ) Both

47. How would you rate an external funder's (banks, investors, etc.) familiarity with the wine business in your region?

Funders <u>do not</u> understand management practices of wineries in my region	1 2 3 4 5 6 7 N/A	Funders <u>do</u> understand the management practices of wineries in my region

48. How would you characterize the strategic behavior of new entrants in your region's wine industry?

New entrants are likely to copy the strategies of existing wineries	1 2 3 4 5 6 7	New entrants are likely to experiment with new strategies

49. Please describe the extent to which your winery focuses on:

A.	Adopting business practices used by others in the wine industry	1 2 3 4 5 6 7	Innovating and introducing new business practices in the wine industry
B.	Producing wine that tastes similar to what consumers are familiar with	1 2 3 4 5 6 7	Producing wine that has a novel taste compared to what consumers are familiar with

Please answer this last set of questions about yourself (winery owner or general manager):

50. What is your age? ______.
51. What is your level of education?
    ( ) High school ( ) Some college ( ) Bachelor's degree ( ) One or more graduate degrees

52. Have you received a certificate in winemaking or viticulture? ( ) Yes ( ) No
53. How many years of experience do you have…
    In the wine industry? _______ years.
    In grape production? _______ years.
    In business? _______ years
54. What percentage of your time do you spend working on your winery or in conducting activities related to your wine business (e.g. vineyard, tasting room, planning, etc.)? ________%.
55. What percentage of your current net worth is invested in the winery? ________%.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alonso, Abel Duarte. “Wine, Tourism and Experience in the Canary Islands’ Context.” *Turizam: znanstveno-stručni časopis* 57.1 (2009): 7–22. Print.

Baron, Robert A, and Gideon D Markman. “Beyond Social Capital: The Role of Entrepreneurs’ Social Competence in Their Financial Success.” *Journal of Business Venturing* 18.1 (2003): 41–60. *ScienceDirect*. Web. 11 Feb. 2013.

Baron, Robert A., and Gideon D. Markman. “Beyond Social Capital: How Social Skills Can Enhance Entrepreneurs’ Success.” *Academy of Management Executive* 14.1 (2000): 106–116. Print.

Battilana, Julie, Bernard Leca, and Eva Boxenbaum. “2 How Actors Change Institutions: Towards a Theory of Institutional Entrepreneurship.” *Academy of Management Annals* 3 (2009): 65–107. Print.

Beames, Geoffrey. “The Rock, the Reef and the Grape: The Challenges of Developing Wine Tourism in Regional Australia.” *Journal of Vacation Marketing* 9.3 (2003): 205–212. *jvm.sagepub.com*. Web. 10 Mar. 2013.

Benjamin, Beth A., and Joel M. Podolny. “Status, Quality, and Social Order in the California Wine Industry.” *Administrative Science Quarterly* 44.3 (1999): 563–589. *asq.sagepub.com*. Web. 8 Feb. 2013.

Beverland, Michael B. “Crafting Brand Authenticity: The Case of Luxury Wines*.” *Journal of Management Studies* 42.5 (2005): 1003–1029. *Wiley Online Library*. Web. 15 Feb. 2013.

Blank, Malin, and Anna Maria Persson. *The Swedish food retail market : An econometric analysis of the competition on local food retail markets*. Ekonomiska institutionen, 2004. *liu.diva-portal.org*. Web. 8 Feb. 2013.

Brown, Graham, and Donald Getz. “Linking Wine Preferences to the Choice of Wine Tourism Destinations.” *Journal of Travel Research* 43.3 (2005): 266–276. *jtr.sagepub.com*. Web. 21 Mar. 2013.

Brush, Candida G., Tatiana S. Manolova, and Linda F. Edelman. “Properties of Emerging Organizations: An Empirical Test.” *Journal of Business Venturing* 23.5 (2008): 547–566. *ScienceDirect*. Web. 22 Mar. 2013.

Bruwer, Johan, and Isabelle Lesschaeve. “Wine Tourists’ Destination Region Brand Image

Perception and Antecedents: Conceptualization of a Winescape Framework." *Journal of Travel & Tourism Marketing* 29.7 (2012): 611–628. *Taylor and Francis+NEJM*. Web. 10 Mar. 2013.

Caple, Susan. "An Investigation into the Role of Collaboration in the Development of a Regional Brand." 2011. *otago.ourarchive.ac.nz*. Web. 15 Feb. 2013.

Carlsen, Jack. "A Review of Global Wine Tourism Research." *Journal of Wine Research* 15.1 (2004): 5–13. *Taylor and Francis+NEJM*. Web. 25 Feb. 2013.

Cholette, Susan, Richard Castaldi, and April Frederick. "The Globalization of the Wine Industry: Implications for Old and New World Producers." *International Business and Economy Conference Proceedings*. 2005. *Google Scholar*. Web. 29 Apr. 2013.

De Carolis, Donna Marie, Barrie E. Litzky, and Kimberly A. Eddleston. "Why Networks Enhance the Progress of New Venture Creation: The Influence of Social Capital and Cognition." *Entrepreneurship Theory and Practice* 33.2 (2009): 527–545. *Wiley Online Library*. Web. 1 Feb. 2013.

Cornelissen, J. P., and J. S. Clarke. "Imagining and Rationalizing Opportunities: Inductive Reasoning and the Creation and Justification of New Ventures." *Academy of Management Review* 35.4 (2010): 539–557. Print.

De Carolis, Donna Marie, Barrie E. Litzky, and Kimberly A. Eddleston. "Why Networks Enhance the Progress of New Venture Creation: The Influence of Social Capital and Cognition." *Entrepreneurship Theory and Practice* 33.2 (2009): 527–545. *Wiley Online Library*. Web. 1 Feb. 2013.

Déjean, Frédérique, Jean-Pascal Gond, and Bernard Leca. "Measuring the Unmeasured: An Institutional Entrepreneur Strategy in an Emerging Industry." *Human Relations* 57.6 (2004): 741–764. *hum.sagepub.com*. Web. 1 Feb. 2013.

Delmar, Frédéric, and Scott Shane. "Legitimating First: Organizing Activities and the Survival of New Ventures." *Journal of Business Venturing* 19.3 (2004): 385–410. *ScienceDirect*. Web. 20 Apr. 2013.

Dillman, Don A. et al. "Response Rate and Measurement Differences in Mixed-mode Surveys Using Mail, Telephone, Interactive Voice Response (IVR) and the Internet." *Social Science Research* 38.1 (2009): 1–18. *ScienceDirect*. Web. 19 Feb. 2013.

Easingwood, Chris. "The Drivers of Regionality: The Case of the Australian Wine Regions." Montpellier, 2006. Web. 15 Feb. 2013.

Esterman, Mark. Telephone interview. 21 Mar. 2013.

Fensterseifer, Jaime Evaldo. "The Emerging Brazilian Wine Industry: Challenges and Prospects for the Serra Gaúcha Wine Cluster." *International Journal of Wine Business Research* 19.3 (2007): 187–206. *Emerald Publishing*. Web. 7 Feb. 2013.

Fernández Olmos, Marta. "The Performance Implications of 'grow or Buy' Decisions in the Wine Industry." *Food Policy* 35.3 (2010): 256–264. *ScienceDirect*. Web. 29 Apr. 2013.

Fischer, Christian, and Monika Hartmann. *Agri-food Chain Relation... - Books on Google Play*. CABI, 2010. Web. 13 Mar. 2013.

Gartner, William B. "A Conceptual Framework for Describing the Phenomenon of New Venture Creation." *Academy of Management Review* 10.4 (1985): 696–706. Print.

Getz, Donald, and Graham Brown. "Critical Success Factors for Wine Tourism Regions: a Demand Analysis." *Tourism Management* 27.1 (2006): 146–158. *ScienceDirect*. Web. 25 Feb. 2013.

Giuliani, Elisa. "Do your neighbors matter? A study on the innovative performance of firms in wine clusters." Knowledge, innovation, and competitiveness: Dynamics of firms, networks, regions and institutions. Copenhagen, Denmark, 2006. Web. 25 Feb. 2013.

Giuliani, Elisa, and Martin Bell. "The Micro-determinants of Meso-level Learning and Innovation: Evidence from a Chilean Wine Cluster." *Research Policy* 34.1 (2005): 47–68. *ScienceDirect*. Web. 25 Feb. 2013.

Hall, C. Michael. *Wine Tourism Around the World*. Taylor & Francis, 2000. Print.

Hayward, David, and Nick Lewis. "Regional Dynamics in the Globalising Wine Industry: The Case of Marlborough, New Zealand." *Geographical Journal* 174.2 (2008): 124–137. *Wiley Online Library*. Web. 11 Mar. 2013.

Houghton, Meg. "The propensity of wine festivals to encourage subsequent winery visitation." *International Journal of Wine Marketing* 13.3 (2001): 32–41. Print.

Bruwer, Johan. Johnson, Ray. "Place-based Marketing and Regional Branding Strategy Perspectives in the California Wine Industry." *Journal of Consumer Marketing* 27.1 (2010): 5–16.

Johnson, Cathryn, Timothy J. Dowd, and Cecilia L. Ridgeway. "Legitimacy as a Social Process." *Annual Review of Sociology* 32 (2006): 53–78. *JSTOR*. Web. 15 Feb. 2013.

Johnson, Ray, and Johan Bruwer. "Regional Brand Image and Perceived Wine Quality: The Consumer Perspective." *International Journal of Wine Business Research* 19.4 (2007):

276–297. *Emerald Publishing*. Web. 15 Feb. 2013.

Jones, Gregory V., and Robert E. Davis. "Climate Influences on Grapevine Phenology, Grape Composition, and Wine Production and Quality for Bordeaux, France." *American Journal of Enology and Viticulture* 51.3 (2000): 249–261. Print.

Ling, Bith-Hong, and Larry Lockshin. "Components of Wine Prices for Australian Wine: How Winery Reputation, Wine Quality, Region, Vintage, and Winery Size Contribute to the Price of Varietal Wines." *Australasian Marketing Journal (AMJ)* 11.3 (2003): 19–32. *ScienceDirect*. Web. 18 Feb. 2013.

Liu, Tao. "Study on the Development of Grape Wine Tourism Based on Industrial Clusters: Yantai City as an Example." *2011 International Conference on Management and Service Science (MASS)*. Aug. 1–4. *IEEE Xplore*. Web.

Lockshin, Larry et al. "Using Simulations from Discrete Choice Experiments to Measure Consumer Sensitivity to Brand, Region, Price, and Awards in Wine Choice." *Food Quality and Preference* 17.3–4 (2006): 166–178. *ScienceDirect*. Web. 21 Mar. 2013.

Low, Murray B., and Eric Abrahamson. "Movements, Bandwagons, and Clones: Industry Evolution and the Entrepreneurial Process." *Journal of Business Venturing* 12.6 (1997): 435–457. *ScienceDirect*. Web. 22 Mar. 2013.

McCutcheon, Emily, Johan Bruwer, and Elton Li. "Region of Origin and Its Importance Among Choice Factors in the Wine-buying Decision Making of Consumers." *International Journal of Wine Business Research* 21.3 (2009): 212–234. *Emerald Publishing*. Web. 25 Feb. 2013.

"Michigan Wines : Wineries : All Wineries." *Michigan Grape and Wine Industry Council*. Web. 23 Apr. 2013.

"Midwest Grape Production Guide." 2005. Web. 23 Apr. 2013.

"Missouri Wine Country, the History and the Grapes." *Examiner.com*. Web. 23 Apr. 2013.

MKF Research L.L.C. *The Economic Impact of Wine and Grapes on the Missouri Economy*. Missouri Department of Agriculture, 2007. Web. 23 Apr. 2013.

Moolhuijsen, Leoni, and Ina Boudier-Bakkerlaan. "The Impact of Legitimacy Strategies on the Performance of Companies." Feb. 2011. Web. 2 Feb. 2013.

Navis, Chad, and Mary Ann Glynn. "How New Market Categories Emerge: Temporal Dynamics of Legitimacy, Identity, and Entrepreneurship in Satellite Radio, 1990-2005." *Administrative Science Quarterly* 55.3 (2010): 439–471. Print.

Nowak, Linda I., and Sandra K. Newton. "Using the Tasting Room Experience to Create Loyal Customers." *International Journal of Wine Marketing* 18.3 (2006): 157–165. *Emerald Publishing*. Web. 29 Apr. 2013.

O'Neill, Martin, Adrian Palmer, and Steven Charters. "Wine Production as a Service Experience – the Effects of Service Quality on Wine Sales." *Journal of Services Marketing* 16.4 (2002): 342–362. *Emerald Publishing*. Web. 29 Apr. 2013.

Packalen, Kelley A. "Complementing Capital: The Role of Status, Demographic Features, and Social Capital in Founding Teams' Abilities to Obtain Resources." *Entrepreneurship Theory and Practice* 31.6 (2007): 873–891. *Wiley Online Library*. Web. 2 Feb. 2013.

Pereira, Filipe, and Peter Goldsmith. "Industrial Illegitimacy and Negative Externalities: The Case of the Illinois Livestock Industry." Web. 6 Feb. 2013.

Perry, Ron, Paolo Sabbatini, and James Burns. "Growing Wine Grapes in Michigan." (2012). *Google Scholar*. Web. 23 Apr. 2013.

Rao, R. S., R. K. Chandy, and J. C. Prabhu. "The Fruits of Legitimacy: Why Some New Ventures Gain More from Innovation Than Others." *Journal of Marketing* 72.4 (2008): 58–75. Print.

Rendleman, C. Matthew, William C. Peterson, and Roger J. Beck. "Illinois' Grape and Wine Industry as a Contributor to Rural Economic Growth." *Selected Paper Prepared for Presentation at the Southern Agricultural Economics Association Annual Meeting, Mobile, AL, February*. 2003. 1–5. *Google Scholar*. Web. 15 Feb. 2013.

Roberts, Peter W, Mukti Khaire, and Christopher I Rider. "Isolating the Symbolic Implications of Employee Mobility: Price Increases After Hiring Winemakers from Prominent Wineries." *American Economic Review* 101.3 (2011): 147–151. *CrossRef*. Web. 29 Apr. 2013.

Romanelli, Elaine, and Olga M. Khessina. "Regional Industrial Identity: Cluster Configurations and Economic Development." *Organization Science* 16.4 (2005): 344–358. Print.

Sabbatini, Paolo, Ph.D. Personal interview. 29 Mar. 2013.

Schamel, Günter, and Kym Anderson. "Wine Quality and Varietal, Regional and Winery Reputations: Hedonic Prices for Australia and New Zealand." *Economic Record* 79.246 (2003): 357–369. *Wiley Online Library*. Web. 11 Mar. 2013.

Scott, W. Richard. "The Adolescence of Institutional Theory." *Administrative Science Quarterly,* 32.4 (1987): 493–511. Print.

Scott, Shane. A General Theory of Entrepreneurship. The Individual-Opportunity Nexus. Edward Elgar, 2003. Print.

Suchman, Mark C. "Managing Legitimacy: Strategic and Institutional Approaches." *Academy of Management Review* 20.3 (1995): 571–610. Print.

Taplin, Ian M., and R. Saylor Breckenridge. "Large Firms, Legitimation and Industry Identity: The Growth of the North Carolina Wine Industry." *The Social Science Journal* 45.2 (2008): 352–360. *ScienceDirect*. Web. 29 Apr. 2013.

Thode, Stephen F., and James M. Maskulka. "Place-based Marketing Strategies, Brand Equity and Vineyard Valuation." *Journal of Product & Brand Management* 7.5 (1998): 379–399. *Emerald Publishing*. Web. 29 Apr. 2013.

Tornikoski, Erno T., and Scott L. Newbert. "Exploring the Determinants of Organizational Emergence: A Legitimacy Perspective." *Journal of Business Venturing* 22.2 (2007): 311–335. *ScienceDirect*. Web. 1 Feb. 2013.

Trejo-Pech, C. O. et al. "Is the Baja California, Mexico, Wine Industry a Cluster?" *American Journal of Agricultural Economics* 94.2 (2011): 569–575. *CrossRef*. Web. 29 Apr. 2013

Van de Ven, Andrew H., Roger Hudson, and Dean M. Schroeder. "Designing New Business Startups: Entrepreneurial, Organizational, and Ecological Considerations." *Journal of Management* 10.1 (1984): 87–107. Print.

Vergne, Jean-Philippe. "Toward a New Measure of Organizational Legitimacy: Method, Validation, and Illustration." (2011). Web. 8 Feb. 2013.

Webb, Justin W. et al. "You Say Illegal, I Say Legitimate: Entrepreneurship in the Informal Economy." *Academy of Management Review* 34.3 (2009): 492–510. Print.

"Welcome to New York Wine Country!" *New York Wines*. Web. 23 Apr. 2013.

Williams, Peter. "Positioning wine tourism destinations: An image analysis." *International Journal of Wine Marketing* 13.3 (2001): 42–58. Print.

"Wineries." *Missouri Wines*. Web. 23 Apr. 2013.

Yuan, Jingxue (Jessica) et al. "Marketing Small Wineries: An Exploratory Approach to Website Evaluation." *Tourism Recreation Research* 29.3 (2004): 15–25. Print.

Zimmerman, Monica A., and Gerald J. Zeitz. "Beyond Survival: Achieving New Venture Growth by Building Legitimacy." *The Academy of Management Review* 27.3 (2002): 414–431. *JSTOR*. Web. 2 Feb. 2013.

Zuzul, Tiona, and Amy C. Edmondson. “Working Paper: Ambiguity Squared: Growing a New Business in a Nascent Industry.” *Harvard Business School* (2012): n. pag. Web. 6 Feb. 2013.