Vive La Difference! An Empirical Investigation into Status, Innovation, and Financial Performance in The Wine Industry

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Abstract

Purpose: This investigation empirically demonstrates the connection between innovation and profitability / growth for SME wineries using actual winery financial data that have never before been available to researchers.

Design/methodology/approach: Using a two-by-two differentiation model, this study examines the impact of competitive strategies on profitability and growth of SME wineries. Financial and operational data from a proprietary database of 67 wineries, encompassing five continuous years (2006 – 2010), provide longitudinal robustness.

Findings: Management decisions regarding resources and capabilities enable clustering the sample firms into the two-by-two model based on quality/status and innovation. These quadrants are identified as Stragglers, Traditionalists, Status-seekers, and Pace-setters. Pace-setter wineries are found to be more profitable and faster-growing than Stragglers and Traditionalists.

Practical implications: Direct-to-consumer distribution positively impacts Gross Profit Margin and growth rates.

Key words: Small and medium-sized (SME), Competitive strategy, Differentiation, Performance, Growth, Wine
1. BACKGROUND AND IMPORTANCE OF THIS INVESTIGATION

Competition is everywhere! Managers must make choices among strategic alternatives to produce a competitive advantage and earn above-average returns. Yet firms operating in mature, traditional industries are unlikely to achieve a unique advantage based on resource capabilities alone (Edelman et al., 2005; Gimeno-Gascon et al., 1997). Mature and fragmented industries e.g. agriculture, retail, and services, are primarily comprised of small and medium-sized enterprises (SME). These industries possess specific characteristics, such as low entry barriers (Porter, 1980), low degrees of private or asymmetric information, and low levels of resources with limited strategic substitutability (Barney, 1991). Small and medium-sized firms in these industries achieve superior performance not only because they have accumulated more valued resources, but also because they make better use of those resources under their control (Barney, 1991; Penrose, 1959).

“Better use” has alternately been defined as: (1) products or service innovation (Brush and Chaganty, 1999; Brush et al., 2001; Chandler and Hanks, 1994); (2) superior product quality/customer service, e.g. quality control, satisfaction of customer needs, highest product quality, and unmatched service (Edelman et al. 2005; Porter, 1985); and (3) geographical and buyer segmentation (Carter et al., 1994; Miller, 1988). Each is an element of a differentiation strategy. Small firms operating in highly competitive environments may be unable to successfully differentiate due to low barriers to entry, or may have insufficiently rare or easy-to-imitate resources, limiting the range of viable strategic alternatives (Sandberg and Hofer 1987).

The U.S. wine industry is one example of a mature and highly fragmented yet intensely competitive industry. As of early 2012, there were about 7,116 U.S. bonded and virtual wineries competing in a saturated, mature domestic market (Fisher, 2012). The total included bonded wineries (those with production facilities and/or vineyards — 6,027 wineries) and virtual wineries (i.e. those with neither production facilities nor vineyards — 1,089). Wine sales in the U.S., which includes imports from producers outside the U.S., climbed to a new record of 347.0 million cases in 2011. This was a 5.3 percent jump from 2010 for an estimated retail value of $32.5 billion. Of total cases sold in the U.S. in 2011, California’s 211.9 million cases sold held a 61 percent share of the U.S. market (The Wine Institute, 2012). The U.S. wine industry can be described as “purely competitive”, as there is no single domestic lowest-cost provider. Rivals in this industry are forced to compete via focused or mass differentiation strategies. As with other SMEs, wineries often try to distinguish themselves through innovation (Stenholm, 2011).

A relatively recent innovation in the U.S. wine industry is the emergence of direct-to-consumer (DTC) sales via websites, tasting rooms, and wine clubs. In comparison with the traditional routes to market via distributors and wholesalers, DTC is believed to be a high-margin sales channel. Wineries normally sell products to distributors and wholesalers at 50% of the final retail price, yet are able to sell products DTC at the full retail price, less any discounts provided to and taken by their wine club members. The value of DTC shipments grew by $149 million in 2010. This growth came as a result of more cases shipped and higher prices per case. Volume of DTC shipments in 9-liter cases rose 9%, while dollar sales rose 13% (Gordon, 2012). However, a strategy that incorporates DTC sales presents both advantages (e.g. full markup, positive and ongoing customer relationships) and drawbacks (e.g. more complicated marketing, tracking, and shipping logistics).
In contrast to a focused, marketing-driven approach such as DTC, wine industry strategy has traditionally been production-driven and focused on volume growth dictated by the availability of grapes. However, production-driven strategies are no longer working successfully for many wineries (Steinthal, 2004). Wineries that create differentiation advantages are postulated to become more resilient and profitable (Steinthal, 2004; Steinthal and Hinman, 2007). These observations lead to two research questions:

[1] How do individual SMEs in the wine industry differentiate themselves? (This is particularly salient for this industry cluster given that wine as a product is essentially a commodity, albeit a “luxury” commodity).

[2] What, if any, are the impacts of these differentiation strategies on financial performance?

Wine business research into competitive strategy and performance has heretofore been limited to subjective evaluations (Jordan et al., 2007). This investigation proposes to discover the extent to which there is a linkage between factors that lead to competitive advantage and independently-gathered indicators of financial performance, data that have been missing from prior empirical studies (Bernabeu et al., 2008; Melnyk et al., 2003; Taplin, 2006), as well as answer the call to create new knowledge that may assist practitioners who are responsible for strategy-making in SME wineries (Orth et al., 2007).

Our paper is organized into five sections. The next section expands on the literature and sets the stage for the hypotheses tested in this study. Section 3 describes the research design and statistical methodology. Section 4 presents the discussion of results. We conclude with a discussion of the implications for wine industry practitioners considering alternative strategies to maintain their competitive advantage.

2. RELEVANT RESEARCH ORIENTATIONS AND HYPOTHESES

Prior researchers suggest that, in order to achieve above-average performance, SMEs in mature or declining market environments pursue cost leadership strategies that result in industry consolidation and development of economies of scale (Miles et al., 1993; Porter, 1985, 1998). Others suggest that the most successful firms in those environments pursue differentiation via innovation and focus strategies (Maruso & Weinzimmer, 1999; McGee & Shook, 2000). Investigating the competitive strategies of French wine producers, Duquesnois and colleagues (2010) found that larger wine producers tended to pursue cost leadership while SME wine producers tended towards a niche or focused differentiation strategy.

According to the resource-based view (RBV) (Barney, 1991), firms can gain a competitive advantage over other rivals either through differentiation or lowest cost strategies (Hill and Jones, 2010). This investigation adopts RBV theory about the importance of resources that are both tangible and intangible assets of the firm. The most important assets in combination or in toto are known as distinctive competencies, that is, they offer the means to differentiate in order to leverage growth and outperform rivals. Managers of wineries seek distinctive competencies to take advantage of specific strengths and maximize their financial return on investment. The distinctive competencies in this study include: (1) vertical integration (supply chain, ‘virtual’ up to fully integrated), and (2) innovation (escaping the power of the three-tier distribution channel). The intent is to identify conditions under which these firm-specific resources provide a competitive advantage, as measured by financial performance.
2.1. Vertical integration (supply chain choices)

Prior researchers have linked SME sourcing and supply-chain logistics as a means to maintain control over transaction costs (Fernandez-Olmosá et al., 2009). Orth and colleagues (2007) reasoned that wineries must continuously evaluate performance of their supply chains as wine is a “global product” and hence requires a variety of marketing approaches. Other researchers have investigated the impact of supply chain choices that affect costs, as well as brand, e.g., using estate-only, purchased fruit, bulk wine only, or a combination of estate-grown and purchased fruit (Goodhue, et al., 2003).

2.2. Innovation (escaping the power of the three-tiered distribution channel)

Prior studies have also posited a positive relationship between SME innovation and growth (Stenholm, 2011). For example, whereas wineries traditionally have relied upon wholesalers and distributors to reach off-premise consumers (e.g. retailers) and on-premise consumers (e.g. hotels and restaurants), the ‘three-tiered’ distribution channel has attenuated market penetration for SME wineries, particularly when competing against higher volume, large-scale wineries. That is, smaller wineries lack sufficient production volumes to capture the attention of what has been found as an increasingly shrinking number of wholesalers and distributors in the traditional three-tier channel (Taplin, 2006). When pitted against very large wine companies, SME wineries seek alternative distribution channels to the extent that those are available and permitted by law (Taplin, 2006). Direct to consumer (DTC) sales allow greater control over a winery’s pricing strategy (Coppla, 2000). Gurau and Duquesnois (2008) opine that to increase sales and production volumes, wineries need to adopt a variety of direct distribution channels, particularly direct sales at the winery and/or on the Internet to develop customer intimacy via loyalty programs (Gurau & Duquesnois, 2008).

2.3 Model Development

SME wineries may promote change and innovation in order to compete aggressively on quality with other firms to create sustained performance advantages (Williamson and Zeng, 2009). Following Porter’s (1980, 1985) lead that firms derive competitive advantage either via a differentiation or low cost generic strategy, if SME wineries follow one of these generic strategies, they should achieve above-average firm performance (Leitner & Güldenburg, 2010). These two strategies result in different investments in firm resources and different strategic choices regarding those markets in which to compete.

Choice of distribution channel is one way to measure degree of innovation: highly innovative wineries distribute more than half (>50%) of their production via DTC channels. By contrast, those wineries that are averse to risk, e.g. following defensive routines and reacting slowly to environmental changes, are the least innovative (Carter et al., 1994; Hofer et al., 1991; Miles et al., 1993). Competitive advantage may also be linked to vertical integration or supply chain choices that may provide not only control over costs, but also increased branding and marketing differentiation (Orth et al., 2007; Goodhue et al., 2003). Firms have sourcing options to build brand equity (Thode and Maskulka, 1998). Marketing of “estate only” grapes may increase a consumer’s willingness to pay a premium for a wine as a result of “perceived” homegrown quality and attendant quality control; a winery using grapes from estate vineyards, e.g.,
Mitsuko’s Vineyard in Napa Valley, commands a price premium over wines sourcing grapes from other regions in California.\(^1\)

We define degree of quality/status as representing the continuum between the sourcing of grapes which is highly correlated to the self-identification of the wineries - estate or non-estate. Self-identified estate wineries generally use grapes grown on the estate as their source of supply, but also may purchase grapes and have long-standing relationships with their suppliers. We classify négociant and virtual wineries as non-estate. Non-estate wineries source from purchased grapes or purchased bulk wine.

![Figure 1. Two-by-Two Differentiation Strategy Model](image)

A two-by-two model enables mapping proposed relationships between two specific firm resources hypothesized to be a source of competitive advantage. See Figure 1. Degree of quality/status and degree of innovation classify SME wineries into four quadrants of the two-by-two model: (1) “Stragglers” are non-estate wineries with less than half of their production distributed through DTC channels; (2) “Traditionalists” are estate wineries with less than half of their production distributed through DTC channels; (3) “Status-seekers” are non-estate wineries with more than half of their production distributed through DTC channels; and (4) “Pace-setters” are estate wineries with more than half their production distributed through DTC channels. Based on the assumption that SME firms employ differentiation strategies in practice, we have developed the following hypotheses.

- **H1**: Differentiation strategies in a mature, traditional industry positively impact long-term financial performance, relating to firm profitability; therefore, “Pace-setter” wineries will be more profitable than firms in the other three quadrants.

- **H2**: Differentiation strategies in a mature, traditional industry positively impact long-term financial performance, relating to firm growth; therefore, “Pace-setter” wineries will grow more quickly than firms in the other three quadrants.

3. **RESEARCH DESIGN AND METHODOLOGY**

Prior studies on SMEs and family firms have attempted to capture the impact of several components of a differentiation strategy and RBV on firm performance, mostly using self-reported and cross-sectional data based on one moment in time, rather than longitudinal data that

\(^1\) Mitsuko’s Vineyard is from Clos Pegase in Napa Valley, California.
were systematically gathered and verified. Following Ellinger et al. (2011), who used Compustat to ascertain the impact of RBV and supply-chain management competency on the financial performance of larger firms, we set out to conduct a more robust study of the impact of SME competencies on sustained competitive advantage.

Data collected and shared by Silicon Valley Bank (SVB) encompassed five continuous years (2006 – 2010) of financial and operational statistics for 67 wineries, all clients of the bank. Sample data were collected under strict confidentiality agreements and sample firms were completely anonymous to the researchers. Five-year time-series data provided needed validity and longitudinal robustness lacking in earlier studies (Leitner & Gülденberg, 2010). As the number of wineries varied in each annual data set, data sets were scrubbed so that only those wineries that provided financial and operational data for all five years were retained for the analyses. In addition to balance sheet and income sheet data, the data set included demographic information about each winery. All wineries were from California, Oregon, and Washington, enabling a “West Coast wine business cluster” for purposes of analysis (Porter, 1998). Consistent with Degrelve (2012), researchers should not only consider one level such as the Resource-based View (RBV) of strategy, but also focus on multilevel analyses of variables within and outside the firm. Independent variables (IV) are tangible or intangible resources (Box and Miller, 2011; Edelman et al., 2005; Minai and Lucky, 2011; Pertusa-Ortega et al., 2010; Verreyenne and Meyer, 2010). Dependent variables (DV) are growth in production and revenues (Brush and Vanderwerf, 1992); gross profit margin (GPM) and return on assets (ROA) (Qi et al., 2011; Rocchi and Stefani, 2001; Wagner et al., 2012), and return on investment (ROI) and optimal capital structure (Dyer et al., 2009; Viviani, 2008). To summarize:

**Strategy choices (IV):**
- Supply chain choices – sourcing percentages for estate-only, purchased fruit, and bulk wine purchase.
- Model of the winery – estate, négociant, and virtual.
- Distribution channel choice – percentage of product sold via DTC, in-state wholesale, and out-of-state wholesale.

**Performance measures (DV):**
- Firm profitability – GPM and ROA.
- Firm growth – Net Cased Goods Sales, Case Production, and Case Sales.

4. DISCUSSION OF RESULTS

To analyze the data, SPSS Statistics, Version 20 was used. To address the hypotheses, a variety of statistical methods were used, including multivariate analysis of variance (MANOVA) and analysis of variance (ANOVA). Standard and multivariate assumptions were tested and found adequate to perform the appropriate analyses. Because of the need for five complete and continuous years of data, the sample size for this study was small \( (n = 67) \); and while the recommended cell size for multivariate analyses of 20 observations was not met, the observed power for each multivariate analysis was .90 or greater (Hair et al., 1998).

The sample was clustered into the quadrants of our hypothesized two-by-two model according to the self-reported demographic information provided by the bank: 16 firms were non-estate wineries with less than half their production distributed through DTC channels, 34 were estate wineries with less than half their production distributed through DTC channels, and 17 were estate wineries with more than half their production distributed through DTC channels. Only one
firm self-identified as a non-estate winery, with more than half its production distributed through DTC channels, i.e. what we would classify as a “Status-seeker”; that firm was removed from further analysis. See Table 1 for cases produced and cases sold, averaged across all five years, and sourcing and distribution channel percentages for the 67 firms in the sample.

Table 1. Descriptive Data of the Sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Stragglers (N=16)</th>
<th>Traditionalists (N=34)</th>
<th>Pace-setters (N=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averaged 2006-2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case Sales</td>
<td>12,610</td>
<td>38,733</td>
<td>12,132</td>
</tr>
<tr>
<td>Case Production</td>
<td>15,280</td>
<td>43,694</td>
<td>15,279</td>
</tr>
<tr>
<td>Sourcing Channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Estate</td>
<td>.13%</td>
<td>59.21%</td>
<td>59.65%</td>
</tr>
<tr>
<td>Purchased Grapes</td>
<td>99.88%</td>
<td>40.64%</td>
<td>40.06%</td>
</tr>
<tr>
<td>Bulk Wine Purchases</td>
<td>0.00%</td>
<td>.23%</td>
<td>.42%</td>
</tr>
<tr>
<td>Distribution Channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct–to-Consumer</td>
<td>20.75%</td>
<td>24.47%</td>
<td>74.53%</td>
</tr>
<tr>
<td>In-State Wholesale</td>
<td>27.50%</td>
<td>26.96%</td>
<td>11.46%</td>
</tr>
<tr>
<td>Out-of-State Wholesale</td>
<td>58.56%</td>
<td>54.91%</td>
<td>16.71%</td>
</tr>
</tbody>
</table>

4.1. Firm profitability

Following Qi et al. (2011) and Wagner et al. (2012), MANOVA was used to assess the differences between the group means of the profitability dependent variables: Gross Profit Margin (GPM) and Return on Assets (ROA). Multicollinearity between the two dependent variables was not a significant issue with Pearson correlations at .445.

To test H1, GPM and ROA data were averaged across the five years and entered as the dependent variables. Three quadrants, representing the degree of quality / status and degree of innovation, were entered as the independent variable. All four of the omnibus MANOVA test statistics were significant at alpha (α) = 0.01 cutoff with an F-statistic = 6.687 (Roy’s Largest Root), Sig. = 0.002 with an observed power of .901 offering support for H1. The univariate test results for GPM were significant at α = 0.01 cutoff with an F-statistic = 6.469, Sig. = 0.003. The univariate test results for ROA were not significant at α = 0.01 cutoff with an F-statistic = 1.190, Sig. = 0.311. Figure 2 shows significant differences found in the averages of GPM across 2006-2010 for Traditionalists and Pace-setters (Sig. = .003) in the Scheffe post hoc tests.

![Figure 2. GPM Means Plots – H1 Post hoc tests](image-url)
As an alternate method for analyzing GPM, we also aggregated data by the three quadrants for all five years and the average. The results are shown in Table 2.

Table 2. Average GPM sorted by the three quadrants

<table>
<thead>
<tr>
<th>Quadrant</th>
<th>2006 GPM</th>
<th>2007 GPM</th>
<th>2008 GPM</th>
<th>2009 GPM</th>
<th>2010 GPM</th>
<th>5 year Ave. GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straggler</td>
<td>56.1%</td>
<td>55.4%</td>
<td>58.2%</td>
<td>54.2%</td>
<td>46.4%</td>
<td>54.1%</td>
</tr>
<tr>
<td>Traditionalist</td>
<td>52.4%</td>
<td>53.1%</td>
<td>57.0%</td>
<td>50.9%</td>
<td>50.0%</td>
<td>52.7%</td>
</tr>
<tr>
<td>Pace-setter</td>
<td>64.3%</td>
<td>63.2%</td>
<td>63.3%</td>
<td>66.2%</td>
<td>65.2%</td>
<td>64.4%</td>
</tr>
<tr>
<td>F-statistic</td>
<td>3.29</td>
<td>2.16</td>
<td>1.03</td>
<td>11.06</td>
<td>7.81</td>
<td>19.14</td>
</tr>
<tr>
<td>F stat prob.</td>
<td>0.0430*</td>
<td>0.1231</td>
<td>0.3630</td>
<td>0.0001**</td>
<td>0.0009**</td>
<td>1.3000E-08**</td>
</tr>
</tbody>
</table>

*Significant at the .05 level **Significant at the .01 level

An examination of the raw average GPM data in Table 2 shows that the Pace-setters were more profitable over time than Stragglers or Traditionalists. The GPMs for the Pace-setters were higher each year than the other two quadrants and the aggregated five year average profit margins were higher for the Pace-setters than those of the Stragglers and Traditionalists. An ANOVA test was performed to determine whether or not the differences each year among the Pace-setters and Stragglers and Traditionalists were statistically significant. Examination of the F-statistics reveals differences statistically significant at $\alpha = .05$ cutoff in three of the five individual years and significant at $\alpha = .01$ cutoff level for the aggregated five years of data, also supported through the MANOVA and univariate tests.

While ROA was significant in the omnibus MANOVA, it was not significant in the univariate test; therefore, we chose to further investigate the raw ROA data and the profitability of Pace-setters, compared with firms in the other two quadrants. Results of the analysis are shown in Table 3.

Table 3. Average ROA sorted by the three quadrants

<table>
<thead>
<tr>
<th>Quadrant</th>
<th>2006 ROA</th>
<th>2007 ROA</th>
<th>2008 ROA</th>
<th>2009 ROA</th>
<th>2010 ROA</th>
<th>5 year Ave. ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straggler</td>
<td>7.3%</td>
<td>10.6%</td>
<td>8.2%</td>
<td>4.4%</td>
<td>2.2%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Traditionalist</td>
<td>7.3%</td>
<td>6.3%</td>
<td>3.9%</td>
<td>-1.3%</td>
<td>1.8%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Pace-setter</td>
<td>11.4%</td>
<td>12.0%</td>
<td>12.7%</td>
<td>7.9%</td>
<td>1.8%</td>
<td>9.1%</td>
</tr>
<tr>
<td>F-statistic</td>
<td>0.4893</td>
<td>1.4826</td>
<td>2.9288</td>
<td>3.8806</td>
<td>0.0092</td>
<td>5.7071</td>
</tr>
<tr>
<td>F stat prob.</td>
<td>0.6153</td>
<td>0.2349</td>
<td>0.0607</td>
<td>0.0258*</td>
<td>0.9908</td>
<td>0.0037**</td>
</tr>
</tbody>
</table>

*Significant at the .05 level **Significant at the .01 level

Data in Table 3 imply that the Pace-setters were more profitable and had a higher average ROA than firms in the other two quadrants in four of five years and that the aggregated averages for the entire five years of data were also higher than for the Stragglers and Traditionalists. F-tests for statistical significance revealed that only one of the five years (2009) was statistically significant at $\alpha = .05$ cutoff. The aggregated ROA results were significant at $\alpha = .01$ cutoff level.

4.2. Firm growth

Firm growth is often associated with increases in sales revenues over time (Brush and Vanderwerf, 1992). Compound annual growth rates (CAGR) for years 2006–2010 were computed for Case Production, Case Sales, and Net Cased Goods Sales. We chose MANOVA to assess the differences between the group means of the CAGR for years 2006-2010 for Case Production, Case Sales, and Net Cased Goods Sales. Pearson correlations between the three
dependent variables were not sufficiently high to warrant a multicollinearity issue (Hair, et al., 1998); they ranged between -.605 and .829.

To test $H2$, the CAGR data for years 2006-2010 for Case Production, Case Sales, and Net Cased Goods Sales were entered as the dependent variables. The three quadrants representing the degree of quality / status and degree of innovation were entered as the independent variable. The MANOVA test statistic, Roy’s Largest Root, was significant at alpha ($\alpha$) = 0.01 cutoff with an $F$-statistic = 6.230, Sig. = 0.001 with an observed power of .953 offering support for $H2$. The univariate test results are shown in Table 4, of which the CAGR for Net Cased Goods Sales is significant at $\alpha = 0.001$ cutoff, and CAGR for Case Sales is significant at $\alpha = 0.05$ cutoff. The means for each of the three quadrants and the dependent variables are also shown.

Table 4. Firm Growth univariate test results – $H2$

<table>
<thead>
<tr>
<th>CAGR for 2006-2010</th>
<th>F</th>
<th>Sig.</th>
<th>Straggler Mean</th>
<th>Traditionalist Mean</th>
<th>Pace-setter Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Production</td>
<td>2.648</td>
<td>.079</td>
<td>-3.68%</td>
<td>0.72%</td>
<td>5.49%</td>
</tr>
<tr>
<td>Case Sales</td>
<td>3.712</td>
<td>.030*</td>
<td>1.44%</td>
<td>4.82%</td>
<td>13.52%</td>
</tr>
<tr>
<td>Net Cased Goods Sales</td>
<td>8.538</td>
<td>.001**</td>
<td>2.88%</td>
<td>3.66%</td>
<td>14.25%</td>
</tr>
</tbody>
</table>

*Significant at the .05 level  **Significant at the .01 level

Figure 3 shows significant differences in the CAGR for Net Cased Goods Sales found between Stragglers and Pace-setters (Sig. = .004), and Traditionalists and Pace-setters (Sig. = .002) in the Scheffe post hoc tests. Significant differences in CAGR for Case Sales were found between Stragglers and Pace-setters (Sig. = .042) in the Scheffe post hoc tests.

Figure 3. CAGR for Net Cased Goods Sales and Case Sales Means Plots – $H2$ Post hoc tests

5. CONCLUSIONS

In this study we apply differentiation strategy and RBV theories to the wine industry. A two-by-two differentiation model using actual SME winery financial data — never before available to researchers — provides a convenient lens through which to view SME winery strategies. This study used five years of performance and growth financial data to permit the evaluation of differences in the outcomes of management decisions made by SME wineries. This study found a number of significant differences between the clustered wineries using the winery model type and degree of DTC distribution channel as the differentiators in trying to explain the level of quality/state and innovation. Mapping the sample into the two-by-two differentiation model
shown in Figure 1, estate wineries with at least 50 percent distribution through direct-to-consumer (DTC) channels were identified as the Pace-setters; estate wineries with at less than 50 percent distribution through DTC channels were identified as Traditionalists; non-estate wineries with less than 50 percent distribution through DTC channels were identified as Stragglers; only one firm was identified as a Status-seeker.

5.1. Firm profitability

The business model of the sample firm (estate or non-estate winery) is a proxy of degree of quality. Estate wineries are perceived as higher status / quality than non-estate wineries. The predominant distribution channel is a proxy for degree of innovation; wineries that sell more than 50% of finished product through direct-to-consumer channels are considered innovative. Significant differences are evident when the profitability variables, Gross Profit Margin (GPM) and Return on Assets (ROA), are evaluated together using the three quadrants representing the degree of quality / status and degree of innovation as the independent variable. While the MANOVA test results indicate significant differences between both profitability variables, GPM differences are of singular significance: Pace-setter wineries outperform Stragglers and Traditionalists.

Two questions arise from closer inspection of the data in Tables 3–5: (1) Why is the average GPM for the Pace-setters higher each year while in one year of the ROA analysis (2010) the Pace-setter average ROA is actually lower than the Stragglers ROA? (2) Why is only one year of the ROA analysis statistically significant while three years of the GPM analysis are significant? We believe the answer to both of these questions is a function of the equity component of the ROA calculation, consistent with earlier findings for larger firms by Wagner et al. (2012). The equity value used in the calculations is the book value of equity in the balance sheets provided to SVB by its client wineries. All SVB clients are privately owned. Book values of the equity of those clients are highly variable, and variations in how equity is valued result in larger overall variance for the ROA than for GPM outcomes. The larger variance in the ROA is the likely explanation for uncharacteristically low ROA for Pace-setting wineries in 2010, and for differences in statistical significance of the annual GPM and ROA data.

5.2. Firm growth

From inspection of the growth variables, Case Production, Case Sales, and Net Cased Goods Sales (each compounded annually through 2006-2010), MANOVA test results indicate significant differences among Net Cased Goods Sales and Case Sales. As hypothesized, Pace-setter wineries outperform Stragglers and Traditionalists in growth of Net Cased Goods Sales. Pace-setters also outperform Stragglers in growth in Case Sales. This finding is consistent with that of Edelman et al. (2005), which used compound annual growth rates in Return on Sales as a proxy for performance. In this study, wineries are clustered according to their strategy, which enabled identification of opportunities for developing new products and markets and making internal innovations or developing new processes that facilitate growth and success (Kickul and Gundry, 2002).

5.3. Implications for researchers and practitioners

Innovations in supply chain configuration and sales channel choices are often necessary ingredients for success in a competitive world. Innovative companies, such as Apple® and Google® (to name just two well-known examples) have grown to become financially profitable
companies and, as of this writing, have achieved sustained leadership status in their respective industry segments. Innovation, quality, and status elements of a differentiation strategy appear to be related to sustained profitability and growth.

While significant differences are found, future research might consider other defining characteristics to further differentiate SME, such as firm age or number of employees, or compare the financial performance of similar sized SME across countries and markets to ascertain whether differentiation consistently results in superior financial performance. As our sample contained only one firm that could be classified as a status-seeker, a future investigation might involve qualitative methods such as case studies to determine the characteristics and performance peculiar to that type of firm. Future research could investigate the impact of the recent prolonged economic downturn on firm performance in the wine industry, which may have impacted the results for FY 2009 and FY 2010 in our study. Finally, as the wine industry comprises a range, from large multi-national corporations to small family-owned and -operated firms, each with its own particular product portfolio, degree of vertical integration, and channel choices, a future investigation might compare the impacts of differentiation strategies on performance, in general, and direct-to-consumer channel choices, in particular, using firm size as a delimiting criterion.

We hope that the additional insight gained from the typology of differentiation strategies and the use of a proprietary financial database will enable SME, particularly those in the wine industry, to more effectively direct scarce resources to choosing the supply chain processes that not only tend to absorb the majority of managerial attention but that also result in the creation of revenue and enhancement of profitability over time.
References


Hill, C.W. and Jones, G.R. (2010), Strategic Management An Integrated Approach, South-Western Cengage Learning, Mason, OH.


