

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Newton, Sandra K.; Gilinsky, Armand; Jordan, Douglas

Article

Differentiation strategies and winery financial performance: An empirical investigation

Wine Economics and Policy

Provided in Cooperation with:

UniCeSV - Centro Universitario di Ricerca per lo Sviluppo Competitivo del Settore Vitivinicolo, University of Florence

Suggested Citation: Newton, Sandra K.; Gilinsky, Armand; Jordan, Douglas (2015): Differentiation strategies and winery financial performance: An empirical investigation, Wine Economics and Policy, ISSN 2212-9774, Elsevier, Amsterdam, Vol. 4, Iss. 2, pp. 88-97, https://doi.org/10.1016/j.wep.2015.10.001

This Version is available at: https://hdl.handle.net/10419/194503

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



ND https://creativecommons.org/licenses/by-nc-nd/4.0/







Available online at www.sciencedirect.com

ScienceDirect

Wine Economics and Policy 4 (2015) 88-97



Differentiation strategies and winery financial performance: An empirical investigation

Sandra K. Newton, Armand Gilinsky Jr, Douglas Jordan

Business Department, School of Business and Economics, Sonoma State University, Rohnert Park, CA, USA

Received 2 May 2015; received in revised form 1 September 2015; accepted 7 October 2015 Available online 22 October 2015

Abstract

This investigation into small-to-medium sized wine businesses empirically tests linkages among differentiation strategies and financial performance over time. Using a two-by-two model, we examine the impact of differentiation strategies on profitability and growth. Financial and operational data from a proprietary database of 71 United States wineries, encompassing five continuous years (2006–2010), provide longitudinal robustness. Management decisions regarding resources and capabilities are used to cluster the sample firms into a two-by-two differentiation strategy model. Those wineries sourcing over 50% estate grapes and distributing over 50% direct-to-consumer have higher gross margins compared to other clusters. Direct-to-consumer distribution decisions impact growth. Results of this research indicate that distribution channel choice-direct-to-consumer-positively impacts gross profit margin and winery growth rates. Supply chain choice-sourcing estate grapes also positively impacts gross profit margin. This study uses reported financial data that have not been made available to researchers.

© 2015 UniCeSV, University of Florence. Production and hosting by Elsevier B.V. All rights reserved.

Keywords: Small and medium-sized enterprises (SME); Competitive strategy; Differentiation; Financial performance; Wine industry

1. Introduction

Competition is everywhere! Managers are constantly making decisions among strategic alternatives to produce a competitive advantage in an attempt to earn above-average returns. Yet firms operating in mature, traditional industries, such as the wine industry, are unlikely to achieve a unique advantage, based on resource capabilities and product quality alone (Edelman et al., 2005; Gimeno-Gascon et al., 1997). Mature and fragmented industries such as 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 (Barney, 1991), and low levels of resources with limited strategic substitutability (Wernerfelt, 1984; Barney, 1991). Economies of scale

E-mail addresses: newtonsa@sonoma.edu (S.K. Newton), Armand.Gilinsky@sonoma.edu (A. Gilinsky Jr), jordand@sonoma.edu (D. Jordan). may be challenging to achieve, preventing SMEs from lowering costs of production by spreading fixed costs for capital improvements (Hunger and Wheelen, 2011). SMEs 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).

'Better use' of resources support differentiation within an industry and encompasses: (1) products or service innovation (Banker et al., 2014; Brush and Chaganti, 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). SMEs operating in mature, 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 (Hammervoll et al., 2014; Sandberg and Hofer, 1987).

1.1. United States wine industry

The United States wine industry is one example of a mature, highly fragmented yet intensely competitive industry, encompassing 7762 U.S. bonded and virtual wineries in early 2014 (Wines and Vines staff, 2014). This total included bonded wineries (those with production facilities and/or vineyards — 6565 wineries) and virtual wineries (i.e. those with neither production facilities nor vineyards — 1197) Wine sales in the United States, inclusive of imports from producers outside the U.S., climbed to 375 million cases in 2014. This represented a growth of 1% from 2013, reaching an estimated retail value of \$37.6 billion. Of the total cases sold in the U.S. in 2014, California's 225 million cases sold captured a 60% share of the total United States market (The Wine Institute, 2015). The United States wine industry has been described as 'purely competitive', that is, as there is no single domestic lowest-cost provider, rivals are forced to compete via focused or mass differentiation strategies (Swaminathan and Delacroix, 1991; Porter, 1998), and often try to distinguish themselves through quality or innovation (Duquesnois et al., 2010; Stenholm, 2011). Wine industry strategy has traditionally been production-driven and focused on volume growth dictated by the availability of grapes. However, production-driven strategies in the wine industry do not guarantee long-term financial performance (Brown and Butler, 1995; Steinthal, 2004). Wineries that create differentiation advantages are postulated to become more resilient and profitable (Steinthal, 2004; Steinthal and Hinman, 2007).

A watershed event for the United States wine industry was the 2005 Granholm v. Heald decision that served to liberalize directto-consumer (DTC) sales of wine across state lines, e.g. from producer to consumer but absent a trade intermediary (wholesaler, distributor, retailer). DTC sales of wines via websites, tasting rooms, and wine clubs are strategies different from the traditional routes to market via distributors and wholesalers. DTC is expected to produce higher gross margins: 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 15% to \$1.8 billion in 2014, while volume of DTC shipments in 9-1 cases rose to 3.9 million (Gordon, 2015). A strategy that incorporates DTC sales presents both advantages and disadvantages: full mark-up, and positive and ongoing customer relationships, but complicated marketing, tracking, and shipping logistics (Gurau and Duquesnois, 2008).

Strategies that create competitive advantages for wine businesses are understudied (Delmas and Grant, 2008; Fearne, 2009). Just prior to the prolonged recession that negatively impacted all sectors in 2009 and 2010, the effect of the Napa Valley wine industry alone on the U.S. economy was \$42.4 billion (Stonebridge Research, 2008). Therefore, with that much money at stake, it is surprising that there have been relatively few recent studies linking the drivers of competitive advantage to performance in the wine industry (Hammervoll et al., 2014; Taplin, 2006; Jordan et al., 2007).

One explanation for the scarcity of such prior studies is the fact that proprietary data, from SMEs and other family-owned businesses that comprise the preponderance of the wine industry, have heretofore been largely unavailable to researchers to determine to what extent differentiation strategy theory and competitive advantage, measured by financial performance, are linked. Prior studies have implied but not demonstrated that such a relationship exists, despite the absence of longitudinal indicators of financial performance (Bernabeu et al., 2008; Melnyk et al., 2003; Orth et al., 2007; Taplin, 2006).

1.2. Research questions

Although many recognize M.E. Porter's (1980) theory of generic competitive strategy as the dominant paradigm in strategy research and practice, some suggest that cost leadership and differentiation (1) act as nothing more than high-level discriminators of competitive strategy designs (Campbell-Hunt, 2000), (2) contribute only tangentially to what has become the challenge of achieving a temporary competitive advantage (D'Aveni et al., 2010), (3) do not predict significant differences in performance in SMEs (Rubach et al., 2002), nor (4) describe completely how SME strategy formulation and implementation occur (Ebben and Johnson, 2005). According to Walters et al. (2005), the competitive advantage of a firm pursuing a differentiation strategy is often a result of management decisions regarding the development of new products and services, product design, product features, brand image, superior service, technology, and distribution. A more recent study confirms that producers with a differentiation are able to maintain a superior performance over those who pursue a cost leadership strategy (Banker et al., 2014).

These observations lead to two research questions:

- 1. How do individual SMEs in a focal industry wine differentiate amongst rivals? (This is particularly salient for the wine industry, given that the product in the bottle is essentially a commodity, albeit a 'luxury' commodity).
- 2. What, if any, are the impacts of various differentiation strategies on financial performance?

This paper is organized into five sections. Section 2 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 analysis of data. We conclude with a discussion, inclusive of limitations of this investigation, future research directions, and implications

¹In the 2005 Supreme Court's *Granholm v. Heald* decision, the Court held that the 21st Amendment "did not give states the authority to pass non-uniform laws in order to discriminate against out-of-state goods." For a typical U.S. winery, this meant that individual state regulations now dictated the fees and taxes, as well as how much, how often, or if any of its products could be shipped directly to a consumer of that state, thus bypassing the three-tier system. In the aftermath of the *Granholm v. Heald* ruling, opportunities in the direct-to-consumer (DTC) channel began to expand (due to the ruling from), as the number of states that accepted DTC shipments continued to increase to 40 states in 2012, an increase of nine states over 2011.

for SME practitioners regarding alternative differentiation strategies to sustain a competitive advantage.

2. Relevant research orientations and hypotheses

Prior researchers suggest that, in order to achieve aboveaverage performance, SMEs in mature industries pursue cost leadership via consolidation and development of economies of scale (Miles et. al, 1993; Porter, 1985, 1998) or differentiation via quality or innovation (Maruso and Weinzimmer, 1999; McGee and Shook, 2000). Dess et al. (1997) found that innovative differentiation was a positive predictor of firm performance. Hsueh and Tu (2004) found that innovation was positively related to both profits and sales growth. A survey of 178 small business owners in Indiana indicated that they appeared to be more likely to achieve a higher level of financial performance through product innovation in hostile environments (Wright et al., 2005). Empirical analysis of 2003 data from *Inc* 500 fast-growth firms by Chang et al. (2011) found that firms delivering similar products/services to existing offerings in the market experienced lower sales growth rates than those offering incremental and major innovations, but this was a cross-sectional study of firms that already had superior performance characteristics relative to other SMEs. Stenholm (2011) also posited a positive relationship between SME innovation and growth rates in sales. For SMEs, 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. SMEs seek distinctive competencies to take advantage of specific strengths and maximize return on investment. In this vein, Duquesnois et al. (2010) found that only the very largest French wine producers strove for cost leadership while the majority, SME producers, pursued a niche or focused differentiation strategy. A more recent study found similarity in French wineries' growth of sales and net profit even though wineries used two different marketing strategies - niche strategy and mass-market strategy (Hammervoll et al., 2014).

SMEs in the United States wine industry also develop distinctive competencies in order to compete aggressively on quality with rivals. These competencies include: (1) control over quality via vertical integration i.e., in a winery supply chain, there is a continuum from 'virtual' winery, one that outsources everything including growing grapes, processing grapes via fermentation, blending and aging wines, and bottling of wine, all the way up to a fully integrated or estate winery, and (2) extending reach to consumers, e.g. using direct sales via tasting rooms, wine clubs, and websites in order to escape the power of the three-tier distribution channel from producer to wholesaler to retailer (Williamson and Zeng, 2009).

2.1. Differentiation via sourcing choice

Prior researchers have linked winery sourcing and supply-chain logistics as a means to maintain control over transaction costs (Fernandez-Olmosá et al., 2009). Wineries must continuously evaluate performance of their supply chains, inasmuch as wine is

a 'global product' and hence requires a variety of marketing approaches (Orth et al., 2007). Holding winery location constant, supply chain choices not only affect costs, but also a brand's reputation and the propensity of consumers to pay a price premium, e.g., for estate-only wines from fully integrated producers (Goodhue, et al., 2003). Selection of supply chains — grape growing and wine making and related support activities — has been shown to impact competitive advantage in this industry (Cholette and Venkat, 2009).

2.2. Differentiation via distribution choice

Whereas U.S. wineries have traditionally relied upon the 'three-tier' distribution system of wholesalers and distributors to reach off-premise consumers (e.g. retailers) and on-premise consumers (e.g. hotels and restaurants), that system attenuated market penetration for SME wineries, particularly when competing against higher volume, large-scale wineries. The balance of power in the industry thus shifted to distributors due to consolidation of the resale channel (Taplin, 2006).² When pitted in competition against the largest wine companies (such as Gallo, Constellation, and Diageo), SMEs seek alternative distribution channels to the extent that those are available and permitted by law (Taplin, 2006). DTC sales allow greater control over a winery's pricing strategy (Coppla, 2000). Gurau and Duquesnois (2008) opined that, in order to increase sales and production volumes, wineries need to adopt a variety of direct distribution channels, particularly direct sales at the winery via tasting rooms and wine clubs and/or via the internet, that in turn serve to develop customer intimacy via customer loyalty programs.

2.3. Model development

Different investments in firm resources and different strategic choices regarding those markets in which to compete can contribute to above-average firm performance (Leitner and Güldenberg, 2010). An example of firm resource in the wine industry is the classification of wineries as estate, *Négociant*, or virtual. Another firm resource example would be the winery's grape sourcing decisions to produce its wine. 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. *Négociant* and virtual wineries are classified as non-estate.³ Non-estate wineries source from purchased grapes or

²The 'Big Five' wine distributors in the United States included Southern Wine & Spirits, Charmer, Republic/NDC, Glazer's, and Young's Market. These five distributors owned an estimated 52% market share in 2008, a share that had grown from about 39% since 2003, and their market share was forecasted by Silicon Valley Bank to increase substantially over the course of the next decade, as an increasing number of smaller or 'boutique' wine distributors were expected to exit the industry via acquisition or liquidation or default.

³Négociant is a French term for someone who purchases wine or grapes for the purposes of selling the end product (wine) under their own label. This can be done by purchasing fruit, where the négociant has full control over the wine produced; or by purchasing wine already produced by other vintners, aging this wine, blending it and then selling it with their own label. A *virtual winery* is



Low Supply Chain Choice – Degree of Estate Grapes High

Fig. 1. Two-by-two differentiation strategy model.

purchased bulk wine. Competitive advantage may 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 use sourcing options as a means 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 sourced in a particular region, e.g., Mitsuko's Vineyard in California's Napa Valley, commands a price premium over wines sourcing grapes from other regions in California.⁴

Choosing one or multiple distribution channels is another strategic choice for a winery. Winery decisions to distribute none, some or 100% of their production via DTC channels may be due to any number of reasons, whether the winery is averse to risk, e.g. following defensive routines and reacting slowly to environmental changes; or has resource capabilities to compete in the distributor market (Carter et al., 1994; Hofer et al., 1991; Miles et al., 1993).

To summarize, one of the primary findings in the literature is that SME wineries differentiate themselves in order to attain and sustain profitability. Two of the primary sources of differentiation are the sourcing of grapes used to produce wine and distribution channel. Although these are not the sole sources of differentiation among wineries, they are two key strategic processes by which wineries differentiate themselves. Given the primacy of these two methodologies, we developed a simple two-by-two model based only on these two attributes to distinguish between the wineries in our data set.

This two-by-two model enables mapping proposed relationships between two specific firm resources hypothesized to be a source of competitive advantage (Eisenhardt and Sull, 2001; Fernandez, 2011). For this study, degree of sourcing choice and degree of distribution choice classify SME wineries into four quadrants of the model. (See Fig. 1.) Therefore, we hypothesize the four quadrants will be defined as follows:

- Wineries that source less than half their grapes with estate and less than half their production distributed through DTC channels – Group 1.
- Wineries that source less than half their grapes with estate and more than half of their production distributed through DTC channels – Group 2;
- Wineries that source more than half their grapes with estate and less than half of their production distributed through DTC channels – Group 3; and
- Wineries that source more than half their grapes with estate and more than half their production distributed through DTC channels – Group 4;

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 in terms of profitability; therefore, wineries in Group 4 will be more profitable than firms in the other three groups.
- **H2.** Differentiation strategies in a mature, traditional industry positively impact long-term financial performance, relating to firm growth; therefore, wineries in Group 4 will grow more quickly than firms in the other three groups.

3. Methodology

3.1. Dataset

Whereas Ellinger et al. (2011) used Compustat to ascertain the impact of a differentiation strategy on the long-term financial performance of large firms, prior studies on SMEs and family firms typically had to resort to self-reported and cross-sectional financial performance data based on one moment in time, rather than systematically gathered and verified longitudinal data. We obtained data collected by Silicon Valley Bank (SVB) from 120 of its winery clients over five continuous years, 2006-2010. The rich dataset provided by SVB included both traditional financial data (balance sheet, income statement, and financial ratios) as well as demographic data for each winery on grape supply chain, business model, and distribution channel. We were given access to the data under a strict confidentiality agreement. Since the number of wineries varied in each annual data set, data sets were scrubbed so that only those wineries providing financial and operational data across all five years were retained for the analyses. The data yielded usable and consistent annual financial and operational statistics for only 71 wineries; a number accepted, as it was felt that only complete five-year time-series data would provide needed validity and longitudinal robustness, as discussed by Leitner and Güldenberg (2010). All wineries were from California, Oregon, and Washington, enabling a 'West Coast wine business cluster' for purposes of analysis (Porter, 1998).

⁽footnote continued)

loosely defined as having a brand name, its own management and winemaker, but produces its wine at bonded hosted or shared facilities.

⁴Mitsuko's Vineyard is from Clos Pegase in Napa Valley, California.

3.2. Strategy choices (IV)

Shi and Yu (2013) found that proper sourcing strategy of a firm can improve its financial performance. Thus, independent variables (IV) identified for this study are strategy choices such as supply chain, business model, and distribution channel (Box and Miller, 2011; Degravel, 2012; Edelman et al., 2005; Minai and Lucky, 2011; Pertusa-Ortega et al., 2010; Verreynne and Meyer, 2010); and are defined as follows:

- Supply chain sourcing percentages for estate-only, purchased fruit, and bulk wine purchase, with the sum of all three totaling 100%.
- Model of the winery estate, *négociant*, and virtual.
- Distribution channel percentage of product sold via DTC, in-state wholesale, and out-of-state wholesale, with the sum of all three totaling 100%.

3.3. Performance measures (DV)

Dependent variables (DV) identified for this study 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); and are defined as follows:

- Firm profitability GPM and ROA.
- Firm growth Net Cased Goods Sales, Case Production, and Case Sales.

4. Findings

To analyze the data, SPSS Statistics, Version 21 was used. First, a cluster analysis was performed to classify the sample into the four quadrants of our hypothesized two-by-two model. The strategy choices data (supply chain choice percentages, model of the winery, and distribution channel choice percentages) for 71 respondent wineries were entered into the cluster analysis, and four significant clusters emerged. Fig. 2 depicts a scatterplot of the data clustered as hypothesized per the two-by-two differentiation strategy model.

To test hypotheses, multivariate analysis of variance (MAN-OVA) and analysis of variance (ANOVA) were used. Standard and multivariate assumptions were tested and found adequate to perform the appropriate analyses. Owing to the need for five complete and continuous years of data, the sample size for this study was small (n=71); and while the recommended cell size for multivariate analyses of 20 observations was not met, the observed power for each multivariate analysis was 0.80 or greater (Hair et al., 1998).

Table 1 presents means for cases produced, cases sold, as well as sourcing and distribution channel percentages for the 71 firms in the analysis clustered within their groups.



Fig. 2. Data scatterplot of hypothesized two-by-two differentiation strategy model

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 0.445. Table 2 shows the cross tabulation of the four clusters and the size of the corresponding respondent winery. Pearson Chi-Square tests were not significant at 0.501 indicating that winery size was not significant within any of the four clusters.

To test H1, GPM and ROA data were averaged across the five years and entered as the dependent variables. Four quadrants (groups), representing the degree of supply choice and degree of distribution choice, 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=4.426 (Roy's Largest Root), Sig.=0.007 with an observed power of 0.855 offering support for H1. While the univariate test results for ROA were not significant at α =0.05 cutoff with an F-statistic=1.179, Sig.=0.325, the univariate test results for GPM were significant at $\alpha = 0.05$ cutoff with an F-statistic=3.902, Sig.=0.013. Fig. 3 shows the yearly GPM means plots for years 2006–2010 for all four groups, and the 5year average GPM, where significant differences were found between Groups 1 and 4 (Sig. = 0.024) and between Groups 3 and 4 (Sig. = 0.085) from the Scheffe post hoc tests.

An examination of the raw average GPM data in Fig. 3 shows that the wineries in Group 4 were more profitable over time than the other three groups of wineries. The GPMs each year, except for 2006, as well as the aggregated five year average for Group 4 wineries were higher than the other three groups of wineries.

While ROA was significant in the omnibus MANOVA, it was not significant in the univariate test. To examine ROA further, ANOVA tests were performed to determine whether or not the differences each year among the four groups were

Table 1 Sample characteristics.

	Gp 1 (N=31)		Gp 2 $(N=12)$		$Gp\ 3\ (N=15)$		Gp 4 (N=13)	
Averaged 2006–2010	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Case sales	18,679	3646	10,138	3283	50,258	20,111	11,799	2773
Case production	22,112	3984	13,614	4155	54,655	21,250	14,398	3183
Sourcing channels (totalin	ig 100%)							
At estate	9.3	2.5	28.2	4.8	87.7	4.4	95.2	2.3
Purchased grapes	90.5	2.5	71.8	4.8	12.3	4.4	4.4	2.4
Bulk wine purchase	0.2	0.2	0	0	0	0	0.4	0.4
Distribution channels (total	aling 100%)							
Direct-to-consumer	18.6	2.5	67.3	6.6	21.1	3.1	68.4	6.2
In-state wholesale	20.3	4.0	11.2	3.6	9.8	3.3	13.4	3.2
Out-of-state wholesale	52.1	3.7	21.6	5.7	69.1	3.6	20.0	4.6

Table 2 Cross tabulation of winery size and four clusters (groups).

Winery size	Group	Total			
	1	2	3	4	
< 4000	6	1	2	3	12
4000 - < 20,000	11	8	5	6	30
20,000 > (4 wineries omitted)	11	3	8	3	25
Total	28	12	15	12	67

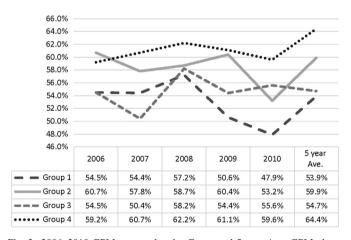


Fig. 3. 2006–2010 GPM means plots by Group and 5-year Ave. GPM plots—H1 post hoc tests.

statistically significant. No year revealed differences between the groups at α =0.10 cutoff, but we chose to show the ROA data to visually compare the profitability of the four groups. Fig. 4 shows the yearly ROA means plots for years 2006–2010 for all four groups, as well as the 5-year average ROA.

4.2. Firm growth

Firm growth is often associated with increases in sales revenues over time (Brush and Vanderwerf, 1992). Compound annual

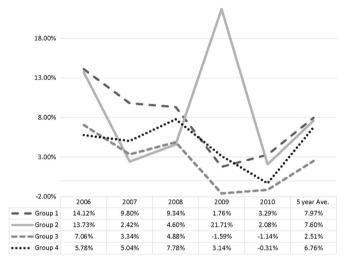


Fig. 4. 2006-2010 ROA means plots by Group and 5-year Ave. ROA plots.

growth rates (CAGR) for years 2006–2010 were computed for Case Production, Case Sales, and Net Cased Goods Sales. We again 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 0.526 and 0.831.

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. Four quadrants (groups), representing the degree of supply choice and degree of distribution choice, were entered as the independent variable. The MANOVA test statistic, Roy's Largest Root, was significant at alpha (α)=0.01 cutoff with an F-statistic=6.399, Sig.=0.001 with an observed power of 0.959. The univariate test results are shown in Table 3, of which the CAGR for Net Cased Goods Sales is significant at α =0.01 cutoff, and CAGR for Case Sales is significant at α =0.05 cutoff. The means for each of the four groups and the dependent variables are also shown. While the statistical analysis was significant offering support for H2, we hypothesized that Group 4 would

Table 3 Firm growth univariate test results – H2.

CAGR for 2006–2010	F	Sig.	Gp 1 mean (%)	Gp 2 mean (%)	Gp 3 mean (%)	Gp 4 mean (%)
Net cased goods sales	5.282	003 ^a	3.01	14.76	2.02	11.99
Case production	1.206	353	-2.07	4.14	2.86	1.72
Case sales	3.138	032 ^b	1.34	15.33	5.79	10.78

^aSignificant at the 0.01 level

^bSignificant at the 0.05 level

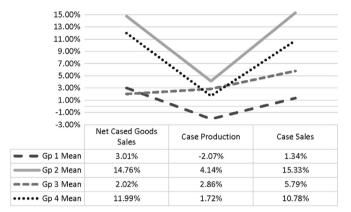


Fig. 5. CAGR for net cased goods sales case production, and case sales means plots-H2 post hoc tests.

outperform other groups, which did not happen, therefore nonsupport for H2.

Fig. 5 shows CAGR for Net Cased Goods Sales, Case Production, and Case Sales means plots from the H2 post hoc tests, which includes significant differences in the CAGR for Net Cased Goods Sales found between Groups 1 and 2 (Sig.=0.025), and Groups 2 and 3 (Sig.=0.035) in the Scheffe post hoc tests. Significant differences in CAGR for Case Sales were found between Groups 1 and 2 (Sig.=0.057) in the Scheffe post hoc tests.

5. Discussion, implications, and future directions

Porter (1985) opined that uniqueness does not lead to differentiation unless it is valuable to a buyer. "The ultimate basis for differentiation is a firm and its product's role in the buyer's value chain which determines buyer needs" (Porter, 1985: 34). SMEs can gain a competitive advantage over other rivals either through differentiation or lowest cost strategies (Barney, 1991; Hill and Jones, 2010). Actual SME winery financial data — never before available to researchers — provided a means to test SME winery strategies on measures of performance — using five continuous years' financial data to permit the evaluation of differences in the outcomes of prior strategic decisions. In this study, SME wineries were statistically clustered according to opportunities for developing new

products and markets and making internal innovations or developing new processes that facilitate growth and success (Kickul and Gundry, 2002). While the simple two-by-two model proposed relationships between two specific firm resources - degree of supply chain choice and degree of distribution channel choice, all three choices for supply chain and distribution channel, and the model of the winery were entered into the Cluster Analysis. Interestingly, the Cluster Analysis results found four distinct clusters that maximized the differences among the cases. These four clusters as shown in Fig. 2 can be seen to fall closely in line with the hypothesized two-by-two model using two specific firm resources - degree of estate grapes (supply chain choice) and degree of DTC (distribution channel choice). Specifically, Group 1 wineries source less than half their grapes with estate and less than half their production distributed through DTC channels, and Group 2 wineries source less than half their grapes with estate and more than half of their production distributed through DTC channels. Group 3 wineries source more than half their grapes with estate and less than half of their production distributed through DTC channels, and Group 4 wineries source more than half their grapes with estate and more than half their production distributed through DTC channels.

There can be concerns that the size of winery might affect results of a study, yet this was not the case with the data. Pearson Chi-Square tests were insignificant, and therefore, winery size for this data was not an issue.

5.1. 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, as is the value of sourcing wine from grapes at the estate. Groups 3 and 4 sourced more than 50% of their grapes at the estate, while Groups 1 and 2 sourced less than 50% of their grapes at the estate, and purchased more than 50% of their grapes. These variable differences can be seen in the sample characteristics in Table 1.

Wineries continue to make strategy choices in the distribution channel as a way to differentiate – whether to gain customers, increase its wine club membership, or mitigate the three-tier distribution. Groups 2 and 4 distributed more than 50% of their production via DTC, while Groups 1 and 3 distributed less than 50% of their production via DTC. Specifically Group 1 distributed more than 50% of their production via out-of-state wholesale with remaining even distribution going to DTC and in-state wholesale; whereas Group 3 distributed more than 50% of their production via out-of-state wholesale with remaining larger distribution going to DTC and remaining smaller distribution going to in-state wholesale. Again, these variable differences can be seen in the sample characteristics in Table 1.

Significant differences are evident when the profitability variables, Gross Profit Margin (GPM) and Return on Assets (ROA), are evaluated together using the four quadrants representing the degree of quality / status and degree of differentiation as the independent variable. While the

MANOVA test results indicate significant differences between both profitability variables, GPM differences are of singular significance: Those wineries in Group 4 (greater than 50% estate grapes and greater than 50% DTC) outperform Group 1 (less than 50% estate grapes and less than 50% DTC) and Group 3 (greater than 50% estate grapes and less than 50% DTC). Of note, Group 2 (less than 50% estate grapes and greater than 50% DTC) outperformed Groups 1 and 3, while not significant. It is of interest however, that wineries distributing greater than 50% of their production via DTC was a significant characteristic of those higher performing wineries.

Two questions arise from closer inspection of the data in Figs. 3 and 4: (1) When comparing GPM and ROA for Group 4 and Group 1, why is the average GPM for Group 4 higher each year, except for 2006, while the average ROA for Group 4 is actually lower each year, except for 2009? (2) Why was not the ROA analysis statistically significant while the GPM analysis was 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 wineries in Group 4 in 2010, and for differences in the annual GPM and ROA data.

5.2. 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. While we hypothesized wineries in Group 4 would outperform other wineries, they did not outperform Group 2 wineries. Group 2 wineries significantly outperformed Group 1 and 3 wineries in growth of Net Cased Goods Sales. Group 2 wineries also outperformed Group 1 wineries in growth in Case Sales. This is consistent with Edelman et al. (2005), who used compound annual growth rates in Return on Sales as a proxy for performance. Here again, we can see that Groups 2 and 4 distributing over 50% of their production DTC grew at higher rates for all three indicators, Net Cased Goods Sales, Case Sales, and Case Production, than the other two groups.

5.3. Limitations

Among the limitations of this study was the inability of SVB to provide the research team with its proprietary financial data set for the five years (2001–2005) just prior to the period under study (2006–2010), making it impossible to compare the impacts, if any, of changes in strategy antecedent or subsequent to the 2005 *Granholm v. Heald* decision. Similarly, we

were unable to compare performance during what was a prolonged growth period for premium wineries — in the years from 2001-2006 — both before and after the onset of the Great Recession in mid-2008. Firms that provided incomplete financial or operating data for each of the five years from 2006-2010, or that were no longer clients of the bank and exited the data set were excluded from the sample, resulting in a loss of 53 firms from the original set of 120. Including and examining the data of most of those other 53 firms, perhaps by comparing their performance in FY 2006 with their performance in 2010, but omitting the years in between, is a possibility for a future investigation. While we recognize that there are other dimensions to winery performance (such as environmental and or societal impacts) that could be used to measure winery performance, to our knowledge, data on these indicators are not available. Our research focus was on the profitability and growth figures that are available in the data set.

5.4. Future directions

The recent prolonged economic downturn attenuated financial performance in the wine industry and most likely adversely impacted the results for FY 2009 and FY 2010. Along these lines, future researchers might consider other defining characteristics to further differentiate SMEs, e.g. during periods of relative prosperity. Indeed, part and parcel of a future investigation would be for researchers to compare the strategies of primarily equity-owned firms to those in a bank's database, i.e. that presumably have relied upon lines of credit or long-term debt financing. Researchers might also investigate the impact of a firm age (years in business), or number of employees (difficult to determine as many winery staff are seasonal due to the harvest cycle), data that were not available for use in this investigation. Researchers could also compare the financial performance of similar-sized SMEs across countries and markets to ascertain if differentiation strategy choices consistently result in superior financial performance. 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, 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. Firm size (in this instance, case production unit volume) is likely to be an explanatory variable for use of DTC channels: some industry observers opine that it is easier to move 2000-3000 cases of wine direct from a winery and through wine clubs than to sell 30,000-100,000 cases via DTC channels.

5.5. Practical implications

SMEs with a well-defined, proactive strategy are not only more likely to identify opportunities for developing new products and markets, but also willing to make internal innovations and develop new processes that facilitate growth and success (Kickul and Gundry, 2002; Chang et al., 2011). This investigation

seeks to break new ground by discovering which mix of differentiation strategies most clearly impacts SME performance over time, and confirms a recent study by Banker et al. (2014), i.e., firms with a differentiation strategy had continued higher performance over those with a cost leadership strategy. By holding industry and geography constant (using a cluster approach) we attempted to minimize the environmental 'noise' that has distorted many prior multi-industry or multi-regional studies.

Box and Miller (2011: 57) write: "Because [during our investigation of small businesses] interviewers had to explain generic strategy to business representatives, we infer strategy, in general, and generic strategy in particular were not front burner issues for them. This is troubling because a consistent strategy has been demonstrated to correlate with performance in a large number of empirical studies." To assist SME practitioners in translating the results of this investigation into strategy for future resource allocations, we believe that it is necessary to:

- 1. Ask your lender to share with you their analysis and interpretations of client financial data to assist you in understanding industry best practices,
- make an effort to increase your financial literacy, e.g. understanding what drives margins, returns on investment, and compound annual growth rates (and how those are calculated) to enable you to benchmark the impact of strategic choices against rivals,
- 3. pursue quality differentiation strategies to sustain growth, and
- 4. pursue selective innovations in supply chain choices, both backward for raw materials and forward for distribution and sales, as those choices positively impact performance.

We hope that the additional insight gained from the typology of differentiation strategies and the use of proprietary financial data will enable SME owners and managers and their financial advisors to more effectively direct scarce resources to choosing the supply chain configurations and distribution channel choices that not only tend to absorb the majority of managerial attention, but also result in the greatest, most consistent revenue growth and profitability over time.

Acknowledgments

The authors thank the Wine Business Institute for funding of this research.

References

- Banker, R.D., Mashruwala, R., Tripathy, A., 2014. Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy?. Manag. Decis. 52 (5), 872–896.
- Barney, J., 1991. Firm resources and sustained competitive advantage. J. Manag. 17 (1), 99–120.
- Bernabeu, R., Brugarolas, M., Martinez-Carrasco, L., Diaz, M., 2008. Wine origin and organic elaboration, differentiating strategies in traditional producing countries. Br. Food J. 110 (2), 174–188.

- Box, T.M., Miller, W.D., 2011. Small-firm competitive strategy. Acad. Strateg. Manag. J. 10 (2), 55–59.
- Brown, B., Butler, J.E., 1995. Competitors as allies: a study of entrepreneurial networks in the U.S. wine industry. J. Small Bus. Manag. 33 (3), 57.
- Brush, C.G., Vanderwerf, P.A., 1992. A comparison of methods and sources for obtaining estimates of new venture performance. J. Bus. Ventur. 12, 9–30.
- Brush, C.G., Chaganti, R., 1999. Businesses without glamour? An analysis of resources on performance by size and age in small service and retail firms. J. Bus. Ventur. 14 (3), 223–258.
- Brush, C.G., Greene, P.G., Hart, M., 2001. From initial idea to unique advantage: the entrepreneurial challenge of constructing a resource base. Acad. Manag. Exec. 15 (1), 64–80.
- Campbell-Hunt, C., 2000. What have we learned about generic competitive strategy? A meta-analysis. Strateg. Manag. J. 21, 127–154.
- Carter, N.N., Stearns, T.M., Reynolds, P., 1994. New venture strategies: theory development with an empirical base. Strateg. Manag. J. 15 (1), 21–41.
- Chandler, G., Hanks, S.H., 1994. Market attractiveness, resource-based capabilities: venture strategies and venture performance. J. Bus. Ventur. 9 (4), 331–349.
- Chang, E.P.C., Memili, E., Chrisman, J.J., Welsh, D.H.B., 2011. What can drive successful entrepreneurial firms? An analysis of Inc. 500 companies. J. Small Bus. Strategy 22 (2), 27–49.
- Cholette, S., Venkat, K., 2009. The energy and carbon intensity of wine distribution: a study of logistical options for delivering wines to consumers. J. Clean. Prod. 17, 1401–1413.
- Coppla, C.J., 2000. Direct marketing sales boom with the proliferation of wine clubs. Wine Bus. Mon. 7 (6), 20–23.
- D'Aveni, R.A., Dagnino, G.B., Smith, K.G., 2010. The age of temporary advantage. Strateg. Manag. J. 31 (13), 1371–1385.
- Degravel, D., 2012. Strategy-as-practice to reconcile small businesses' strategies and RBV?. J. Manag. Policy Pract. 13 (1), 46–66.
- Delmas, M.A., Grant L.E., 2008. Eco-labeling strategies: the eco-premium puzzle in the wine industry. In: American Association Wine Economists, working paper no. 13.
- Dess, G., Lumpkin, G., Covin, J., 1997. Entrepreneurial strategy making and firm performance: tests of contingency and configuration models. Strateg. Manag. J. 18, 677–695.
- Duquesnois, F., Gurau, C., Le Roy, F., 2010. Wine producers' strategic response to a crisis situation. Int. J. Wine Bus. Res. 22 (3), 251–268.
- Dyer, J.H., Gregersen, H.B., Christensen, C., 2009. Entrepreneurial behaviors, opportunity recognition, and the origins of innovative ventures. Strateg. Entrep. J. 3, 1–21.
- Ebben, J.J., Johnson, A.C., 2005. Efficiency, flexibility, or both? Evidence linking strategy to performance in small firms. Strateg. Manag. J. 26, 1249–1259.
- Edelman, L.F., Brush, C.G., Manolova, T., 2005. Co-alignment in the resource-performance relationship: strategy as mediator. J. Bus. Ventur. 20, 359–383.
- Eisenhardt, K.M., Sull, D.N., 2001. Strategy as simple rules. Harv. Bus. Rev. 79 (1), 106–116.
- Ellinger, A.E., Natarajarathinam, M., Adams, F.G., Gray, J.B., Hofman, D., O'Mara, K., 2011. Supply chain management competency and firm financial success. J. Bus. Logist. 32 (3), 214–226.
- Fearne, A., 2009. Sustainable value chain analysis: a case study of South Australian wine. Available at: (http://www.pir.sa.gov.au/_data/assets/pdf_file/0003/93225/V2D_Final_Report.pdf), 2015 (accessed 06.04.15).
- Fernandes, M.T., 2011. Business Strategy Model. Int. J. Innov. Manag. Technol. 2 (4), 301–308.
- Fernandez-Olmosá, M., Rosell-Martinez, J., Espitia-Escuer, M.A., 2009. Vertical integration in the wine industry: a transaction costs analysis on the Rioja DOCa. Agribusiness 25 (2), 231–250.
- Gimeno-Gascon, F.J., Folta, T., Cooper, A., Woo, C., 1997. Survival of the fittest: entrepreneurial human capital and the persistence of underperforming firms. Adm. Sci. Q. 42, 750–783.
- Goodhue, R., Heien, D., Lee, H., Sumner, D., 2003. Contracts and quality in the California winegrape industry. Rev. Ind. Organ. 23, 267–282.

- Gordon, J., 2015. DTC wine shipments grow 15% in 2014, Wines and Vines, \(\lambda\text{http://www.winesandvines.com/template.cfm?}\) section = news&content = 144614\(\rangle\), 2015 (accessed 25.06.15).
- Gurau, C., Duquesnois, F., 2008. Direct-marketing channels in the French wine industry. Int. J. Wine Bus. Res. 20 (1), 38–52.
- Hair, J.F., Anderson, R.E., Tatham, R.L., Black, W.C., 1998. Multivariate Data Analysis, 5th ed. Prentice-Hall, Upper Saddle River, NJ.
- Hammervoll, T., Mora, P., Toften, K., 2014. The financial crisis and the wine industry: the performance of niche firms versus mass-market firms. Wine Econ. Policy 3 (2), 108–114.
- Hill, C.W., Jones, G.R., 2010. Strategic Management an Integrated Approach. South-Western Cengage Learning, Mason, OH.
- Hofer, C., Sandberg, W., Miller, D., 1991. Generalists and specialists: two business strategies and their contexts. In: Shrivastava, P., Duff, J., Hutton, A. (Eds.), Advances in Strategic Management, 7. JAI Press, Greenwich, CT, pp. 3–41.
- Hsueh, L., Tu, Y., 2004. Innovation and the operational performance of newly established small and medium enterprises in Taiwan. Small Bus. Econ. 23, 99–113.
- Hunger, J.D., Wheelen, T.L., 2011. Essentials of Strategic Management. Prentice Hall, New Jersey.
- Jordan, R., Zidda, P., Lockshin, L., 2007. Beyond the Australian wine industry's success. Does environment matter?. Int. J. Wine Bus. Res. 19 (1), 14–32.
- Kickul, J., Gundry, L.K., 2002. Prospecting for strategic advantage: the proactive entrepreneurial personality and small firm innovation. J. Small Bus. Manag. 40 (2), 85–97.
- Leitner, K.H., Güldenberg, S., 2010. Generic strategies and firm performance in SMEs: a longitudinal study of Austrian SMEs. Small Bus. Econ. 35, 169–189
- Maruso, L.C., Weinzimmer, L.G., 1999. Developing a normative framework to assess small-firm entry strategies: a resource-based view. J. Small Bus. Strategy 10 (1), 1–12.
- McGee, J.E., Shook, C.L., 2000. Responding to industry consolidation in fragmented industries: the role of capabilities in small-firm survival. J. Small Bus. Strategy 11 (2), 21–32.
- Melnyk, S.A., Sroufe, R.P., Calantone, R., 2003. Assessing the impact of environmental management systems on corporate and environmental performance. J. Oper. Manag. 21, 329–351.
- Miles, R., Snow, C., Sharfman, L., 1993. Industry variety and firm performance. Strateg. Manag. J. 14, 1–21.
- Miller, D., 1988. Relating Porter's business strategies to environment and structure: analysis and performance implications. Acad. Manag. J. 31 (2), 280–308.
- Minai, M.S., Lucky, E.O., 2011. The moderating effect of location on small firm performance: empirical evidence. Int. J. Bus. Manag. 6 (10), 178–192.
- Orth, U.R., Lockshin, L., d'Hauteville, F., 2007. The global wine business as a research field. Int. J. Wine Bus. Res. 19 (1), 5–13.
- Pertusa-Ortega, E., Molina-Azorín, J.F., Claver-Cortés, E., 2010. Competitive strategy, structure and firm performance. Manag. Decis. 48 (8), 1282–1303.
- Porter, M.E., 1980. Competitive Strategy: Techniques for Analyzing Industries and Competitors. Free Press, New York, NY.
- Porter, M.E., 1985. Competitive Advantage: Creating and Sustaining Superior Performance. Free Press, New York, NY.
- Porter, M.E., 1998. Clusters and the new economics of competition. Harv. Bus. Rev. 76 (6), 77–90 Nov/Dec.

- Qi, Y., Zhao, X., Sheu, C., 2011. The impact of competitive strategy and supply chain strategy on business performance: the role of environmental uncertainty. Decis. Sci. 42 (2), 371–389.
- Rocchi, B., Stefani, G., 2001. Identifying business typologies in the wine production chain: a structured financial analysis on Tuscan companies. Adv. Hortic. Sci. 15 (1–4), 85–91.
- Rubach, M.J., Cangelosi, J.D., Bradley, D.B., McGee, J.E., 2002. Industry effects and strategic convergence: a study of strategies of independent pharmacies. J. Small Bus. Strategy 13 (1), 18–31.
- Sandberg, W.R., Hofer, C.W., 1987. Improving new venture performance: the role of strategy, industry structure, and the entrepreneur. J. Bus. Ventur. 2, 5–28
- Shi, M., Yu, W., 2013. Supply chain management and financial performance: literature review and future directions. Int. J. Oper. Prod. Manag. 33 (10), 1283–1317.
- Steinthal, D., 2004. Growing profits by getting smaller. Practical Winery & Vineyard Journal Nov/Dec, (http://www.practicalwinery.com/novdec04/novdec04p5.htm), 2015 (accessed 6.04.15).
- Steinthal, D., Hinman, J., 2007. Theperfect storm, revisited. Wine Bus. Mon., (2007), 88-93.
- Stenholm, P., 2011. Innovative behavior as a moderator of growth intentions. J. Small Bus. Manag. 49 (2), 233–251.
- Stonebridge Research, 2008. The Economic Impact of Napa County's Wine and Grapes. (http://www.stonebridgeresearch.com/sites/default/files/Napa% 20Impact%20Study%2010.17.08%20Final.pdf), 2015 (accessed 6.04.15).
- Swaminathan, A., Delacroix, J., 1991. Differentiation within an organizational population: additional evidence from the wine industry. Acad. Manag. J. 34 (3), 679.
- Taplin, I., 2006. Competitive pressures and strategic repositioning in the Napa wine industry. Int. J. Wine Mark. 18 (1), 61–71.
- The Wine Institute, 2015. 2014 California Wine Sales Grow 4.4% by Volume and 6.7% by Value in the U.S., (https://www.wineinstitute.org/resources/pressroom/05192015), accessed 25.07.15).
- Thode, S.F., Maskulka, J.M., 1998. Place-based marketing strategies, brand equity and vineyard valuation. J. Prod. Brand Manag. 7 (5), 379.
- Verreynne, M., Meyer, D., 2010. Small business strategy and the industry life cycle. Small Bus. Econ. 35 (4), 399–416.
- Viviani, J.L., 2008. Capital structure determinants: an empirical study of French companies in the wine industry. Int. J. Wine Bus. Res. 20 (2), 171–194.
- Wagner, S.M., Grosse- Ruyken, P.T., Erhun, F., 2012. The link between supply chain fit and the financial performance of the firm. J. Oper. Manag. 30, 340–353.
- Walters, B.A., Priem, R.L., Shook, C.L., 2005. Small business manager scanning emphases and the dominant logic of the business-level strategy. J. Small Bus. Strategy 15 (2), 19–32.
- Wernerfelt, B., 1984. A resource-based view of the firm. Strateg. Manag. J. 2, 171–180
- Williamson, P.J., Zeng, M., 2009. Value-for-money strategies for recessionary times. Harv. Bus. Rev. 87 (3), 66–74.
- Wines & Vines staff, 2014. Number of Wineries Grows to 8,391 in North America. Wines & Vines. (http://www.winesandvines.com/template.cfm? section=news&content=127266), 2015 (accessed 25.07.15).
- Wright, R.E., Palmer, J.C., Perkins, D., 2005. Types of product innovations and small business performance in hostile and benign environments. J. Small Bus. Strategy 15 (2), 33–44.