

**DOES SIZE MATTER?
AN EMPIRICAL INVESTIGATION INTO
THE COMPETITIVE STRATEGIES OF THE SMALL FIRM**

Armand Gilinsky, Jr.
Sonoma State University
armand.gilinsky@sonoma.edu

Elizabeth Stanny
Sonoma State University
elizabeth.stanny@sonoma.edu

Richard L. McCline
San Francisco State University
rmccline@sfsu.edu

Robert Eyler
Sonoma State University
eyler@sonoma.edu

ABSTRACT

This paper examines whether different strategies are associated with different sized firms in a focal industry dominated by small family-owned businesses. In an effort to shed light on how strategic choice is determined, a well-defined and geographically concentrated industry, i.e., the Northern California wine industry, is selected to minimize environmental noise. Factor analysis is applied to fourteen strategic elements to extract a parsimonious set of five primary competitive strategies: new product/market development, consolidation, niche focus, proprietary processes, and flexibility. The factors, new product/market development and consolidation as well as the control variable, age, are found to be significantly associated with firm size.

INTRODUCTION

Entrepreneurship theory suggests that a preoccupation with growth distinguishes entrepreneurial firms from other small firms (Baumol, 1967; Carland, Hoy, Boulton, & Carland, 1984; Dollinger, 1999; Penrose, 1959). Differences in size can be explained by a smaller firm's agility amidst uncontrollable external forces, e.g.: social/demographic, economic, political/regulatory, industry/competition, and technology (Miller, 1998). Some mature industries, such as women's hairdressers or agricultural commodity producing industries, are very homogeneous in terms of marketing efforts, R&D expenses, or capital intensity (as measured by the ratio of assets to sales). Other industries tend to be very

heterogeneous with respect to firm size, comprising multiple strategic groups or tiers, such as accounting, pharmaceuticals, and automobile parts (Miller, 1998).

Mature industries are characterized by slowing growth, diminishing innovation, more product and process improvements, more sophisticated customers, and increasing concentration of producers (Baden-Fuller & Stopford, 1992; Porter, 1980). In a mature industry, defensible growth niches exist for firms that are successful in differentiating a commodity product or support service. Famous examples of this strategy in consumer products include: Starbucks Coffee, Perdue Chicken, and Orville Redenbacher Popcorn. These firms succeeded in "branding" commodity products and achieving leading positions in their respective markets. They hold differentiated positions, enjoying the higher margins derived from the premium prices that they charge (Miller, 1998).

Prior researchers in the fields of strategy and entrepreneurship suggest that small firms in a mature industry pursue growth strategies that result in consolidation of a fragmented industry and economies of scale (Miles, Snow, & Sharfman, 1993; Porter, 1985, 1996). Others suggest that growing firms pursue innovation and focus strategies (Maruso & Weinzimmer, 1999; McGee & Shook, 2000). For small, entrepreneurial firms, when cost-effectiveness and maintenance of coalitions, particularly among family or founding team members who are still owners/managers of the firm, are key objectives, other responses to change may emerge (Dollinger, 1999). These include: (1) contracting out those services rather than relying on internal capabilities (Miller, 1998); (2) contracting with special intermediaries (Birley, 1985); or (3) relying on networks such as trade associations to suggest tried and tested implementations of industry best practices (Falemo, 1989). The latter alternative may be desirable if change occurs infrequently and firm and industry perspectives on the issues involved tend to converge (Aldrich, 1979).

This paper seeks to address a gap in previous small firm research regarding how size is associated with strategic choice. The research question for this study is: to what extent is there an association between size and the strategy followed, i.e., do larger firms adopt different strategies than smaller ones in a mature industry? The next section examines prior perspectives regarding strategy and firm size. Procedures for constructing a sample and survey instrument are developed. Results from analysis of the association between size and strategy are presented. Implications for researchers of small firms and practitioners are given, culminating in suggestions for future research.

STRATEGY AND FIRM SIZE

Successful small firms "must seek a balance between the ends to which the organization aspires and the ways and means available to them" (Steiner & Solem, 1988). Prior researchers have suggested that there is no all-encompassing theoretical framework capable of explaining and guiding the strategic management of small firms, although several researchers have attempted to form such a theory (Churchill & Lewis, 1989; Flamholtz, 1986; Greiner, 1972; Scott & Bruce, 1984). Building on the approach developed by d'Amboise and Muldowney (1988), two strategic perspectives can be drawn from the literature: (1) specialization in the firm's task environment and (2) new product/market development to overcome barriers to growth. Taken together, these perspectives provide a useful taxonomy for organizing the competitive strategies of the small firm.

Specialization in the Task Environment

The task environment refers to those key factors that directly affect and are affected by a firm's competitive strategies. Among these factors are competitors, suppliers, stockholders,

local communities, governments, labor unions, special interest groups, and employees (Wheelen & Hunger, 1986). Scott and Bruce (1987) identified the entry of larger competitors as an important barrier to growth as the small firm attempts to grow. Yet, because of its narrower scope or specialization, a small firm can develop a competitive advantage using its flexibility to provide products and services or to perform activities better than its larger, more broadly-based competitors (Lau, 1996; Porter, 1985). Sources of advantage could include: (1) serving a market niche and defending that market segment (Clifford & Cavanagh, 1985; Porter, 1980; Taylor, Gilinsky, Hilmi, Hahn, & Grab, 1990); (2) following a path of least resistance relative to the industry's competitive forces (Miller, 1988; Porter, 1980); (3) leveraging a distinctive competence, i.e., a special skill or unique product that could be protected by a trade secret, brand name or copyright (Barney, 1991; Hamel & Prahalad, 1993; Porter, 1980); (4) investing and applying new technology to develop proprietary processes (Churchill & Lewis, 1989). Specialization of production or innovation in operations would develop a capability to support and defend the market niche. Staking out a niche or focus position, e.g. via serving a well-defined customer group and investing in new technology, should be negatively related to firm size. Pursuing a broad-based strategy, i.e. developing a wide range of commodity-type products, should be positively related to firm size.

New Product/Market Development

A small firm could pursue a new product/market development strategy involving the following elements: (1) diversifying into new products (Porter, 1980); (2) entering early into new markets or product/service applications (Biggadike, 1979); (3) expanding overseas (Brush, 1996; Lohrke, Franklin, & Kothari, 1999); or (4) diversifying via acquisition (Maruso & Weinzimmer, 1999). Inability to pursue at least one of the above strategic elements poses a barrier to growth. If small firms stake out positions or niches that make them less vulnerable to attack from competitors, then the niche may become a restriction on further growth. Lumpkin and Dess (1995: 1404) argue that, "excessive simplicity in the later stages of development affects an organization's ability to exploit existing or new product-market opportunities more than its ability to efficiently allocate and utilize resources." Pressures towards increasing complexity would indicate that new product/market development, e.g. via creating new product concepts or innovation in processes, should be positively related to firm size. Retrenchment, e.g. via decreasing the number of markets served or consolidation, should be negatively related to firm size.

METHODOLOGY

Sample

One means of examining the testing the real world strategy making processes of small businesses would be to ask them directly. In this regard we selected a focal industry that was regional and identifiable (to hopefully minimize environmental noise in the investigation) and sought to identify and evaluate sources of competitive advantages as noted by small business owners. The industry selected was the Northern California wine industry, concentrated in Napa and Sonoma counties. The Northern California wine industry is coping with an environment characterized by high growth in premium price segments, offset by declining domestic consumption of wine and industry consolidation in low-end price segments (Shapiro 1998; Tesconi 1998). In 1999, over 900 small California wineries produced 149 million cases of wine, accounting for 85% of the total U.S. wine market (*Wine Business Monthly*, 1999). Offsetting declining per capita consumption in the U.S. and flat export sales, Northern California premium wine sales and production have grown over 20% per year, leading to the entry of new wineries into the market and to the expansion of existing wineries. However, nearly all of this growth occurred in high-end market segments, while the lower-priced

segments experienced accelerating maturity and consolidation. This situation has raised the importance of exports, foreign subsidiaries, strategic alliances, all in the face of increasing competition from other "New World" wine producers (namely Australia, Chile, and South Africa, not to mention wineries in 49 other states).

Predominantly family-owned, wine businesses provide the backbone for job creation and growth in Northern California's agricultural economy, yet relatively little is known about them. There is sparse rigorous research that captures the strategic issues faced by this important industry. Prior empirical research into the behavior of firms in this industry has focused on documenting the frequency of organizational entry and exit (Delacroix & Swaminathan, 1991; Stoerberl, Parker, & Joo, 1998), the creation of inter-organizational networks (Brown & Butler, 1995) and the evolution of specialist organizations (Swaminathan, 1995). Studies specifically addressing wine industry strategic management are needed (Brown & Butler, 1995; Hartley, 1997).

Data

An initial database of 568 wineries in Northern California (primarily Napa, Sonoma, and Mendocino counties) was built from *Wines & Vines* (1999) and *Wine Business Monthly's Wine Industry Directory and Almanac* (1996) and verified by a panel of experts from the wine industry. The initial database of 568 firms was then scrubbed to eliminate duplications (i.e., of firms owned by another winery or part of a consortium), or for no longer participating in the industry; at this point 200 firms were eliminated for a universe of 368 firms. A pilot version of the questionnaire was sent to 12 owners and/or CEOs of wineries and wine-support businesses, equally divided among small, medium and large wineries and between Napa and Sonoma counties, dominant in the Northern California wine industry. Results of the pilot test indicated that the questionnaire was too lengthy and a section asking respondents for anecdotal information was cut from the final version. The resulting questionnaire booklet sent to the owners/CEOs of the remaining 356 wineries consisted entirely of Likert-scale questions. Respondents were asked to describe their business and to rate the importance of fourteen competitive strategies that they were currently using.

Survey Response

The historically private nature of the wine industry (only six firms in the sample were public firms, representing the entire universe of public firms in the industry) posed a major obstacle to gathering data about competitive strategy. In an attempt to increase response rates, we adhered to the Dillman (1991) mail survey methodology. Initial response was 59 firms with completed surveys; four responded by a letter of inability to participate rather than a completed survey; and 34 surveys were returned partially completed and discarded. On a second mailing, postcards were sent to remind the remaining 263 firms that they had been sent the survey and to ask again if they would participate, and 12 completed surveys were returned. After a third reminder mailing, 12 more completed surveys were received. No statistically significant differences were found between surveys completed by early respondents and later respondents. We received 118 surveys: 83 complete and 34 incomplete and one unidentifiable, for a total response rate of 32.0%. After elimination of incomplete or unidentifiable surveys, the response rate was 83 out of 368 or 22.6%. Questionnaire length was deemed to be the major cause of non-response. Neither size nor ownership (public vs. private) appeared to cause significant differences in response rates of sample firms.

Consistent with the fact that firms in the Northern California wine industry are predominately privately-held (Tesconi, 1998), our sample of 83 firms consisted of 77 firms that were sole proprietorships or partnerships and seven firms that were publicly-owned. Consistent with

industry segment sizes reported in *Wines & Vines*, over half of the respondent wineries in the sample sold one brand only (57%), reflecting the small size of the preponderance of respondents. Twenty-one percent sold two or three brands, 16% four or more brands, and four percent no branded products, presumably subcontracting to larger wineries.

Data on production output for 1999 and age of the winery (based on self-reporting) for 67 wineries in the sample were available from *Wine Today's* web site. Data on the remaining 16 wineries were unavailable. Production output was considered more reliable a measure of firm size than was sales for two reasons. First, we caught these firms during a period of rapidly rising wholesale and retail demand for premium wines, causing upward pressure on prices. Second, because of the nature of the wine product itself, firms could generally charge and receive higher prices for older inventory (as unit and case wine prices typically rise with bottle age).

RESULTS

Table 1 provides descriptive statistics about the 67 wineries that have production data. Panel A indicates that the majority of the wineries are private (94%), are organized by function (68%), distribute and sell only one brand (56%), are estate wineries (54%) and produce wine at their own facilities (71%). Panel B of table 1 shows that most of the wineries compete in the deluxe and over \$25 price categories, 38% and 23%, respectively. On average, the wineries sell 53% of their product in the U.S. (excluding California), 38% in California and 7% internationally. On average, the most popular method of distribution is brokers/agents (29%), followed by sales force (23%), external sales and marketing company (23%).

Customer Segments

We divided the sample with production data into two approximately equal sized groups as a starting point in our investigation of the relation between size and strategy. Thirty-three wineries produced output greater than 20,000 cases and were labeled "high volume" and 34 wineries produced 20,000 or fewer cases and were labeled "low volume." All of the low volume and all but four of the high volume wineries are privately owned. We examined the high and low volume groups to determine what, if any differences there are in competitive strategies deployed.

Competitive Strategies

Table 2 lists the mean and median importance scores of competitive strategies divided for high and low volume wineries. For the high volume wineries the most important competitive strategies were: rapidly responding to customers' needs, attracting and hiring high quality staff, investing in new technology and serving a well defined customer group.

Several strategies were significantly more important to high volume than to low volume wineries. These strategies included: rapidly investing in new technology, rapidly responding to customer needs, developing exclusive processes, acquiring other companies, and selling to customers in new overseas markets. For the low volume wineries the most important factors were: serving a well-defined customer group and attracting and holding high quality staff. "Serving a local market or markets" was significantly more important to low volume than to high volume wineries as a competitive strategy.

We continue to investigate the relation between size and strategy by evaluating the association between changes in strategies used and changes in size using a linear regression. We perform a regression so that we can assess which strategies are significant in explaining size. Because

we have a limited data set including all the strategies in a linear regression would reduce the degrees of freedom in the regression and our ability to assess the incremental contributions of individual strategies on size. We address this data limitation by performing a factor analysis on the strategies to see if we could summarize 14 the strategies into fewer strategic factors. Finding a more parsimonious representation of the factors would allow us to increase the power of regression tests.

Table 1: Descriptive Statistics
(n = 67)

PANEL A

<i>Attribute of Business</i>	<i>Number of Wineries</i>	<i>Percentage of Wineries</i>
<i>Ownership</i>		
Public	4	6.0%
Private	63	94.0
<i>Organized by</i>		
Function	45	68.2%
Product	13	19.7
Region	2	3.0
Not specified	6	9.1
<i>Number of separate brands distributed and sold</i>		
1 brand	37	56.1%
2-3 brand	16	24.2
4+ brands	10	15.2
No Branded Products	1	1.5
Did not specify	2	3.0
<i>Nature of business</i>		
Bulk producer	2	3.0%
Custom crush facility	2	3.0
Grower	2	3.0
Estate winery	36	53.7
Negotiant	2	3.0
Winery	21	31.8
Other	1	1.5
<i>Where wine produced</i>		
Own facility	47	71.2%
Both types of facilities	9	13.6
Custom crush facility (exclusively)	9	13.6
Other	0	0.0
Did not specify	1	1.5

Panel B

Percentage of Respondents	Min.	1 st Quartile	Mean	Median	3 rd Quartile	Max.
Price Categories Wines Compete In						
Economy (< \$3)	0.00%	0.00%	0.00%	0.00%	0.00%	0%
Sub- Premium (\$3 - 7)	0.00	0.00	2.20	0.00	0.00	60
Premium (\$7 - 10)	0.00	0.00	8.45	0.00	0.00	90
Ultra- Premium (\$10- 14)	0.00	0.00	11.52	0.00	15.00	80
Deluxe (\$14- 25)	0.00	0.25	38.29	25.00	75.75	100
\$25 - 50	0.00	0.00	23.23	7.50	31.00	100
\$ >50	0.00	0.00	6.65	0.00	1.00	100
Geographic Sales						
California	0.00%	25.00%	38.25%	35.00%	50.00%	100%
National	0.00	41.25	53.31	57.50	69.50	95
International	0.00	1.00	6.61	5.00	10.00	75
Age (years)						
	5.00	14.50	28.51	20.00	25.00	144
Sales and Distribution of Products						
Brokers/Agents	0.00%	0.00%	28.50%	15.50%	50.00%	100%
Sales Force	0.00	0.00	22.79	0.00	36.50	100
Own retail outlets, tasting rooms(s)	0.00	0.25	11.98	10.00	15.00	95
Sales & Marketing Company (external)	0.00	0.00	22.56	0.00	60.00	95
Direct mail, telemarketing, wine club	0.00	0.00	9.34	5.00	10.00	100
Outside Services (Internet stores, other wine clubs)	0.00	0.00	0.23	0.00	0.00	5
Other	0.00	0.00	3.14	0.00	0.00	77

Table 3 presents the results of factor analysis on the competitive strategies for the entire sample (n= 83). We used the varimax orthogonal rotation to estimate the factor loadings so that the factors would be easier to interpret. Because we have strategy data for 83 firms we included all firms in the factor analysis¹. Each of the estimated factors is labeled according to the competitive construct that we interpreted the factor to represent. The first factor was labeled "NEW PRODUCT/MARKETS," because it loaded heavily on selling of new ranges of products, creating new product concepts, investing in new technology and entering early into growth markets. The second factor was called "CONSOLIDATION," because it loaded heavily on decreasing the number of markets served and adjusting sales goals and profit goals

¹ The factor analysis and regression results using the production data sample (n=67) do not differ materially from the results presented.

downward. The third factor loaded most heavily on serving a well-defined customer group and investing in new technology and captured the notion of a "NICHE" strategy. The fourth factor was labeled "PROPRIETARY," because it loaded heavily only on "developing exclusive processes." The fifth factor was labeled "FLEXIBILITY," because it loaded heavily only on the strategy of rapidly responding to customer needs. The percent of variance explained by the five factors is 51%. The test chi-square statistic, 33.1 with a p-value of 0.36, demonstrated that above five factors were sufficient to represent the fourteen competitive strategy variables.

Table 2
Competitive Strategies of the Sample Firms (n=83)
(Scale: 1 = lowest importance, 7 = highest importance)

<i>Competitive Strategies</i>	<i>High Volume</i> (> 20,000 cases) n = 33		<i>Low Volume</i> (≤ 20,000 cases) n = 34		<i>Statistical Tests</i>	
	Mean	Median	Mean	Median	Wilcoxon Test Statistic	p-value
Rapidly responding to customer needs	5.5	6.0	4.3	5.0	2.75	0.01
Attracting and holding high quality staff	5.5	6.0	5.3	6.0	0.21	0.83
Investing in new technology	5.4	6.0	4.4	5.0	2.5	0.01
Serving a well-defined customer group	5.3	6.0	5.6	6.0	-1.38	0.17
Selling to customers in new markets overseas	5.1	6.0	3.9	4.0	2.46	0.01
Creating new product concepts	4.6	5.0	4.2	5.0	0.77	0.44
Entering early into growth markets	4.5	4.0	4.4	4.0	0.17	0.87
Selling new ranges of products	4.5	5.0	3.8	4.0	1.28	0.20
Serving a local market or markets	4.1	4.0	4.8	5.0	-1.67	0.09
Developing a exclusive processes	4.1	4.0	3.2	4.0	1.92	0.05
Becoming a smaller, more flexible organization	2.8	3.0	3.2	3.0	-0.62	0.53
Acquiring other companies	2.7	2.0	1.9	1.0	2.09	0.04
Decreasing the number of markets served	2.2	2.0	2.0	2.0	0.64	0.52
Adjusting sales goals and profit goals downward	2.2	2.0	2.2	1.5	0.36	0.72

Competitive Strategies and Size

Using the scores for each of the factors, we constructed variables labeled, "NEW PRODUCT/MARKETS", "CONSOLIDATION", "NICHE", "PROPRIETARY" "FLEXIBILITY", which were used as independent explanatory variables in a regression analysis. We included AGE of the winery as an independent variable to control for the effect of length of time in business on size. Table 4 reports the estimates from the regression of the natural logarithm output on the five strategic factors for the 67 of the 83 sample wineries that

we have production data for. We took the natural logarithm of output so that a few large or small producers did not drive the results. The factor NEW PRODUCTS/MARKETS and the control AGE were positively associated with the level of output. The factor CONSOLIDATION was negative and significantly associated with the level of output. Together the variation in these independent variables explained 41% of the variation in output.

Table 3
Factor Loading Using Varimax Orthogonal Rotation of Competitive Strategies

<i>Strategy</i>	Factor 1 <i>"New Product/Market Development"</i>	Factor 2 <i>"Consolidation Strategy"</i>	Factor 3 <i>"Niche Strategy"</i>	Factor 4 <i>"Proprietary Process"</i>	Factor 5 <i>"Flexibility"</i>
<i>Entering early into growth markets</i>	0.495	0.317			
<i>Serving a well-defined customer group</i>			0.632	0.138	
<i>Serving a local market or markets</i>	-0.200	0.330	0.324	0.301	0.113
<i>Investing in new technology</i>	0.522	-0.153	0.496		
<i>Creating new product concepts</i>	0.660	0.131	0.259		
<i>Becoming a smaller, more flexible organization</i>	0.129	0.445			0.304
<i>Rapidly responding to customer needs</i>	0.283		0.280	0.218	0.889
<i>Developing exclusive processes</i>	0.328		0.156	0.916	0.165
<i>Selling new ranges of products</i>	0.709	0.124	0.358	0.189	
<i>Acquiring other companies</i>	0.392	-0.175			
<i>Decreasing number of markets served</i>		0.778		0.127	
<i>Adjusting sales goals & profit goals downward</i>		0.680			
<i>Selling to customers in new markets overseas</i>	0.311	-0.235	0.212		
<i>Attracting & holding high quality staff</i>	0.173		0.606		0.147
% of variance explained by factor	14.25 %	10.88 %	9.62 %	8.26 %	7.93 %

Table 4
Regression Analysis of Strategic Factors on Size

Independent Variables	Regression Coefficients	Std. Error	t-value	Pr(> t)
(Intercept)	9.39	0.22	41.86	0.00
New product/market development	0.38	0.21	1.74	0.09
Consolidation strategy	-0.37	0.19	-1.98	0.05
Niche strategy	0.10	0.20	0.54	0.59
Proprietary process	0.16	0.17	0.95	0.35
Flexibility	0.26	0.16	1.60	0.11
Age	0.02	0.01	4.23	0.00

Residual standard error: 1.29 on 60 degrees of freedom

Multiple R-Squared: 0.41

F-statistic: 6.88 on 6 and 60 degrees of freedom, the p-value is 0.00

DISCUSSION

This exploratory research has several implications for the entrepreneur. The most important is that small firms do not necessarily have to increase the variety of the strategies pursued in order to become larger. Consistent with prior research on strategic simplicity, there appears to be a salutary association of two strategies with firm size, namely entry into new product/markets and flexibility (Lumpkin & Dess, 1995; Miller & Chen, 1996). The maxim that, "Less is more," applies here. In industries that have several large, well-established competitors, smaller firms that desire expansion have to evaluate carefully their repertoire of competitive strategies to develop market learning and innovative techniques. Prior studies have shown that a minimum output of 50,000 cases per year is considered the minimum to capture any economies of scale in this industry (Brown & Butler, 1995; Swaminathan, 1995). Still, it may well be that these entrepreneurs were concentrating more on staying small and preserving their uniqueness, considered vital for "branding" and differentiating a commodity product like wine.

Regarding the leadership and strategic profile results, it appears that risk-taking, innovative, and proactive (entrepreneurial) entry strategies may be instrumental to achieving initial growth for smaller firms. New entrants in this industry should consider pursuing an "aggressive" strategy aimed at niche market definition and penetration via "entrepreneurial" behaviors. Established, growing businesses in this industry tend to experience diminishing efficacy of entrepreneurial behavior and during the transition phase, need to pay greater attention to building management systems and market share. For mature, slower growth firms in the wine industry, building more "administrative" processes to improve operating efficiency and cost competitiveness may lead to increased performance.

While among the sample respondents there are several examples of larger firms that had successfully pursued innovation, sometimes revolutionizing the industry, this proved to be the exception rather than the rule. Leaders of wine business eventually best served their interests by emphasizing the establishment of centralized control, standardized operations, formal rules and procedures, or other "mechanistic" tools designed to promote internal efficiency in an uncertain environment.

The changing dynamics of the wine industry in recent years have generated a desperate need for a comprehensive understanding of wine business best practices. In the words of several wine business leaders who responded anecdotally to our survey, the following seem to apply to all wine businesses, regardless of size or situation:

- Each management group must look to parallel industries to examine reasons for success.
- Leaders need to develop long-term financial and marketing planning tools (surprisingly this is not being done).
- Stay tuned with cutting-edge technology.
- Understand viticulture as a “key” component in marketing.
- Winery principals that are production oriented need to “learn” how to develop promotional skills.

The results should be interpreted with caution in terms of their applicability to other mature industries. Because the study was exploratory in nature, no causal relationships are implied. Further research should explore the differential impact of competitive strategies on growth rates. Future research should also be designed to overcome some of the limitations of this study. The relatively small sample of firms and executives included in the field study may have led to some instability in the factor loadings obtained. For example, the negative loading of consolidation was somewhat surprising, in that one would expect that since the industry is highly fragmented and mature, merger and acquisition or retrenchment activities would have been more prevalent, particularly among those smaller wineries seeking greater scale economies while preserving their uniqueness as “brands.” Longitudinal research with larger sample sizes is needed to determine the nature and impact of consolidation strategies on firm size.

The Northern California wine industry was selected in order to eliminate industry differences and because it has a growing but identifiable membership, many of who are new entrepreneurial entrants competing against a few well-established corporate competitors. Rapid strategic shifts are difficult since the wine industry is highly regulated, capital-intensive, and has long lead times between planting grapes and selling wine. Despite the fact that very strong rate of growth in premium segments is the result of its current strategic mix, compared with firms in other wine producing countries, its players exhibit some significant weaknesses with respect to their longer-term competitive strategies (Orr, 1999). If the industry could work in concert to help smaller producers to develop strategies to enter new product/markets, particularly in export markets, it would further secure its position as a world-competitive manufacturer.

REFERENCES

- Aldrich, H. (1979). Organizations and environments. Englewood Cliffs, New Jersey: Prentice Hall.
- Baden-Fuller, C. & Stopford, J. (1992). Rejuvenating the mature business. London: Routledge.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 99-120.
- Baumol, W. (1967). Business behavior: Value and growth. New York: Harcourt Brace.

- Biggadike, R.E. (1979). Corporate diversification, entry strategy, and performance. Cambridge, MA: Harvard University Press.
- Birley, S. (1985). The role of networks in the entrepreneurial process. Journal of Business Venturing, 1, 107-177.
- Brown, B. & Butler, J. (1995). Competitors as allies: A study of entrepreneurial networks in the U.S. wine industry. Journal of Small Business Management, 33(3), 57-67.
- Brush, C.G. (1996). Export entry in small companies: Effects of timing on strategy and performance. Journal of Small Business Strategy, 7(3), 53-68.
- Carland, J., Hoy, F., Boulton, W. & Carland, J. (1984). Differentiating entrepreneurs from small business owners: A conceptualization. Academy of Management Review, 9, 354-359.
- Churchill, N.C. & Lewis, V.L. (1989). The five stages of small business growth. In H. Stevenson & W. Sahlman (Eds.) The entrepreneurial venture, 263-275. Boston: Harvard Business School Press.
- Clifford, D.K. & Cavanagh, R.E. (1985). The winning performance: How America's midsize high growth companies succeed. New York: Bantam Books.
- d'Amboise, G. & Muldowney, M. (1988). Management theory for small business: Attempts and requirements. Academy of Management Review, 13(2), 226-241.
- Delacroix, J. & Swaminathan, A. (1991). Cosmetic, speculative, and adaptive organizational change in the wine industry: A longitudinal study. Administrative Science Quarterly, 36(4), 631-662.
- Dillman, D.A. (1991). The design and administration of mail surveys. American Review of Sociology, 17, 225-249.
- Dollinger, M.J. (1999). Entrepreneurship: Strategies and resources, 2/e. Saddle River, NJ: Prentice-Hall, 5.
- Falemo, B. (1989). The firms' external persons: Entrepreneurs or network actors? Entrepreneurship and Regional Development, 1(2), 167-177.
- Flamholtz, E.G. (1986). How to make the transition from an entrepreneurial to a professionally-managed firm. San Francisco, CA: Jossey-Bass.
- Greiner, L.A. (1972, July-August). Evolution and revolution as organizations grow. Harvard Business Review, 50(4), 37-46.
- Hamel, G. & Prahalad, C.K. (1993). Strategy as stretch & leverage. Harvard Business Review, 71(2), 75-84.
- Hartley, B. (1997, December 28). Wine industry has been stunted by its lack of common strategy. The Sacramento Bee, B1.
- Lau, R.S.M. (1996). Strategic flexibility: a new reality for world-class manufacturing. SAM Advanced Management Journal, 61(2), 11-16.
- Lohrke, F.T., Franklin, G.M., & Kothari, V.B. (1999). Top management international orientation and small business exporting performance: The moderating roles of export market and industry factors. Journal of Small Business Strategy, 10(1), 13-24.
- Lumpkin, G.T. & Dess, G.G. (1995). Simplicity as a strategy-making process: The effects of stage of organizational development and environment on performance. Academy of Management Journal, 38(5), 1386-1407.
- Maruso, L.C. & Weinzimmer, L.G. (1999). Developing a normative framework to assess small-firm entry strategies: A resource-based view. Journal of Small Business 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. Journal of Small Business Strategy, 11(2), 21-32.
- Miles, R., Snow C. & Sharfman, L. (1993). Industry variety and firm performance. Strategic Management Journal, 14, 1-21.

- Miller, A. (1998). Strategic management, 3/e. Burr Ridge, IL: Irwin/McGraw-Hill, 126-128 and 228-230.
- Miller, D. (1988). Relating Porter's business strategies to environment and structure: analysis and performance implications. Academy of Management Journal, 31(2), 280-308.
- Miller, D. & Chen, M.-J. (1996). The simplicity of competitive repertoires: An empirical analysis. Strategic Management Journal, 17(6), 419-440.
- Orr, S. (1999). The role of quality management in manufacturing strategy: Experiences from the Australian wine industry. Total Quality Management, 10(2), 272.
- Penrose, E. (1959). The theory of the growth of the firm. New York: Wiley.
- Porter, M.E. (1980). Competitive strategy: Techniques for analyzing industries and competitors. New York: Free Press.
- Porter, M.E. (1985). Competitive advantage: Creating and sustaining superior performance. New York: Free Press.
- Porter, M.E. (1996, Nov-Dec.). What is strategy? Harvard Business Review.
- Scott, M. & Bruce, R. (1987). Five stages of growth in small business. Long Range Planning, 20(3), 45-52.
- Shapiro, L. (1998). A glass half empty. Newsweek, (October 5), 74-76.
- Steiner, M.P. & Solem, O. (1988). Factors for success in small manufacturing firms. Journal of Small Business Management, 26(1), 56.
- Stoeberl, P.A., Parker, G.E. & Joo, S.J. (1998). Relationship between organizational change and failure in the wine industry: An event history analysis. Journal of Management Studies, 35(4), 537-56.
- Swaminathan, A. (1995). The proliferation of specialist organizations in the American wine industry, 1941-1990. Administrative Science Quarterly, 40(4), 653-81.
- Taylor, B., Gilinsky, A., Hilmi, A., Hahn, D., & Grab, U. (1990). Strategy and leadership in growth companies. Long Range Planning, 23(3), 66-75.
- Tesconi, T. (1998). Vineyards face half-baked harvest. Santa Rosa Press-Democrat, (September 6), A17.
- Wheelen, T.L. & Hunger, J.D. (1986). Strategic Management and Business Policy 2/e, Reading, MA: Addison Wesley, 10.
- Wine Business Monthly. (1996). Wine industry directory and almanac—1996. Sonoma, CA: Wine Business Publications.
- Wines & Vines. (1999). 1999 Directory & Buyer's Guide. 79:12-A. San Rafael, CA: The Hiring Company.

Armand Gilinsky is Associate Professor of Strategy and Entrepreneurship and Director of the Entrepreneurship Center at Sonoma State University. His Ph.D. is from Henley Management Colleg/Brunel University in England, and his current research focus is on e-commerce adoption rates by small firms.

Elizabeth Stanny is Associate Professor of Accounting at Sonoma State University. Her Ph.D. is from The University of Chicago, and her current research focus is on marketing practices of accounting firms.

Richard L. McCline is Assistant Professor of Entrepreneurship and Co-Director of the Ohrenschall Center for Entrepreneurial Studies at San Francisco State University. His Ph.D. is from Tulane University, and his current research focus is into the behavioral dimensions of entrepreneurship along the life cycle.

Robert Eyler is Assistant Professor of Economics at Sonoma State University. His Ph.D. is from UC Davis, and his current research interests include comparative studies of the macroeconomic impacts of the wine industry in New World countries.