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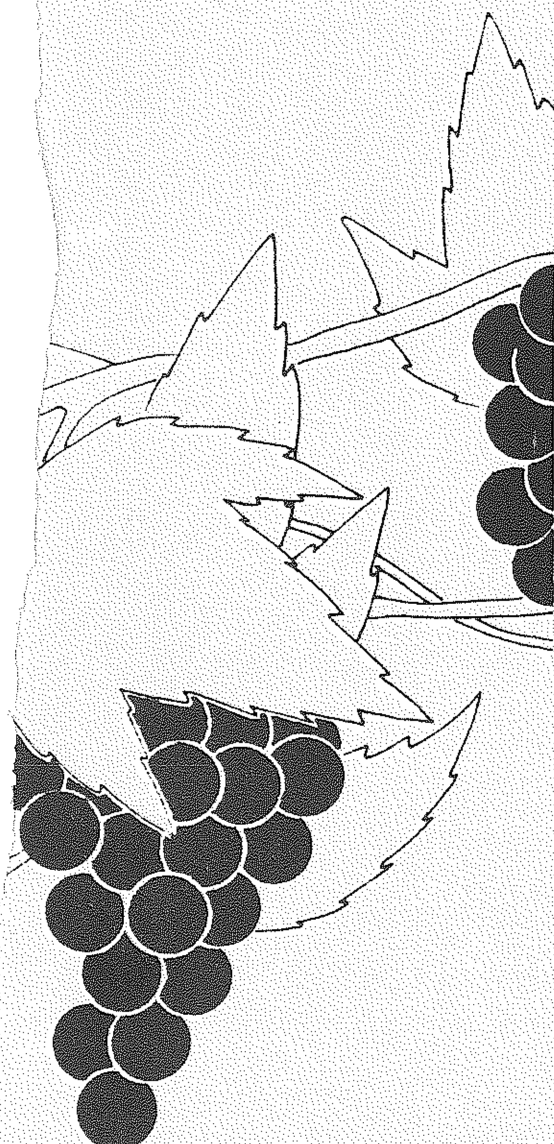

SOME ECONOMIC ASPECTS OF SMALL WINERIES IN NEW YORK

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INTRODUCTION

Wine production in the United States grew rapidly over the period 1960 to 1979. California led the increase in domestic production but New York maintained its position as the second largest wine producing state. In 1978, New York produced 9.6 percent of total U.S. production. Most of the growth in wine production in recent years has been in table wines, particularly white wines.

The New York industry has traditionally been dominated by a small number of large wineries. In the last 5 to 10 years, however, the New York wine industry has changed substantially due to the establishment of a number of small wineries, analogous to the "boutique" wineries in California. This development was encouraged by the New York Farm Winery Bill, passed in 1976, which enabled certain wineries producing less than 50,000 gallons of wine a year to be licensed at a preferential rate. The stated purpose of the bill was:

> "to expand the market for New York State fruit products by encouraging farmers of limited means and objectives to market their produce as fermented wine in order to guarantee that they realize a reasonable economic return on their fruit."
> (Memorandum of State Executive Department)

Five years after the passage of the Bill some of the farm wineries had grown beyond the 50,000 gallon limit, so for the purposes of this study, small wineries are defined as those fermenting less than 200,000 gallons of grape wine per year.

By definition this group of wineries has limited capacity, often producing a few thousand gallons compared to one million gallons or more produced by the largest wineries in the state. Typically the small wineries are owner operated by principals with widely differing backgrounds, who may have limited experience in both grape growing and wine production. As a result, the group is particularly diverse in terms of product characteristics, management, and marketing.

The grape and wine industry, in general, is a significant part of New York agriculture. Within the fruit sector, grapes rank second only to apples in crop value. Farm revenues from grapes used for wine were $22 million in 1978, and $16 million in 1979. Revenues per ton for some grape varieties have grown considerably over the last 10 years, but New York is also beset by problems of adjustment to changing demands, particularly in the wine market. Some traditional varieties have been faced with declining sales in primary markets, few viable alternative outlets, and the attendant problem of declining real prices. This situation was highlighted in the fall of 1979 when some contract agreements between large wineries and grape producers were reduced, or in some cases, terminated.

The value of the wine industry in New York is difficult to estimate. A group of wineries in the Finger Lakes that in 1978 accounted for 90 percent of the New York grapes crushed for wine, estimated their group sales to be $131 million (Finger Lakes Wine Growers Association). The total value of the U.S. market at retail including all domestically produced and imported wines was estimated to be $4 billion in 1979 (Gavin).

The primary objective of the study of the State's small wineries was to provide background data which could be used to make relevant policy judgements regarding the future of the industry, and to provide information for those about to enter and those who have recently entered the industry.

Secondly, in view of the problems associated with disposal of some grape varieties over the last two years, it was considered desirable to establish what effect, if any, the increasing number of small wineries might have in alleviating the excess grape supply situation.

Personal interviews were conducted with 21 winery owners or managers in the summer of 1980. Early in 1981 a further set of telephone interviews were conducted with an abbreviated questionnaire to survey respondents that were unavailable for the first round of interviews. At the same time, additional data were collected from the original 21 wineries. After completion of the 1981 telephone interviews, there were 28 respondents out of a possible total of 35.

The data collected and presented in the study refer only to table wines, the most significant category of wines produced by the group. Four wineries in the sample also produced limited quantities of champagne and/or sparkling wine, and two produced some dessert wines.

To try to determine underlying relationships, the individual wineries were divided into three size groups, into three geographic regions within the state, and grouped by age of winery. Wine pricing was studied by grouping the wines into varietal and non varietal categories, by color and by grape type.

The Farm Winery Act

The Farm Winery bill was passed into law in June 1976 and became effective the following month. The bill removed some of the barriers which had been seen as obstacles to entry by farmers wanting to ferment their own grapes. The major benefit was claimed to be the reduction in the license fee for farm wineries, from the regular level of $625 to $125 per year. In addition, farm wineries were exempted by the legislation from the requirement to pay an extra fee for a license to sell wine at retail from the winery. Farm wineries were not required to pay an annual or initial license filing fee. The benefit, therefore, amounts to $825 in the first year and $725 in subsequent years.

The original Act has been amended a number of times since 1976. In 1977, an addition was made to enable any winery to sell its own brands of New York State wine at retail through a second premise. No small wineries in the survey had taken advantage of this concession.

New legislation in 1977 allowed the sale of grape based, non wine products such as grape jellies, jams and juices from farm wineries. This in turn was extended in 1979 to allow products made from any fruit to be sold at retail from the winery.

Under earlier Alcoholic Beverage Control laws no more than 5 percent of total winery revenue could be derived from retail sales direct from the winery. In effect, this meant that farm wineries had no incentive to encourage a tourist trade. It was recognized that, with an increasing number of wineries offering tours to the public, the 5 percent limit was too restrictive. The provision, originally incorporated into the A.B.C. laws in 1934 to govern the sale of medicinal spirits, was repealed in 1977.

In the same year, the requirement to close a winery on one day each week and to only permit the sale of kosher wines on Sundays was repealed. The statement of support for the amendment recognized the important role that Sunday trading plays in the viability of small wineries.

The most recent piece of legislation, passed in 1980, allowed wineries selling at retail from the winery to accept major credit cards in payment for wine.

In interviews, winery operators mentioned a number of less tangible benefits of the recent legislation. Aside from the financial advantages of the farm winery bill, it was accepted that the sheer volume of legislation has attracted great attention for the small winery cause from state agencies, the media, and the public, and has given considerable backing to image creation. Although much of the legislation in its intent has referred to both farm wineries and regular wineries, its effect has often been differential - being proportionately more beneficial to the smaller wineries than the large. The amendments permitting Sunday opening and more than 5 percent of revenue from retail sales at the winery are examples.

The disadvantage from the winery point of view is that the 50,000 gallon limit on production might be regarded as a barrier to further expansion. Few of the existing farm wineries producing less than 50,000 gallons intend to expand beyond this level of production by 1985. This seems to be due to managerial preferences rather than license limitations. Seven wineries in the sample were not classified as farm wineries, but the operators of these wineries did not see this as a serious disadvantage.

CURRENT STATUS OF THE NEW YORK SMALL WINERY SUBSECTOR

Winery Location

Only a limited number of small wineries have been established outside the generally accepted major grape growing areas (figure 1). In 1980, the Lake Erie region of New York had a total of six small wineries spread along the eastern shore of the lake. The southeastern New York area including the Hudson Valley and Long Island had eleven wineries. The Finger Lakes, the dominant wine producing region of the state, had a total of eighteen small wineries.

It seems reasonable to expect that there may be some peripheral establishment in the future but that the concentration of small wineries in existing major areas is likely to continue.

Size Characteristics

Total wine production in 1980 of 28 small wineries interviewed was 633,260 gallons. An additional 100,000 gallons were estimated to have been produced by the six wineries not interviewed, giving a state total for all small wineries of slightly over 730,000 gallons. The comparable figure for 1979 was 690,000 gallons, approximately 2.6 percent of the volume produced in New York by all wineries (table 1). The growth rate for the small wineries over the 1975 to 1980 period was 22 percent compared to a growth rate for the New York industry as a whole of -0.5 percent.

Table 1. GROSS WINE PRODUCTION
New York State, 1975-1980

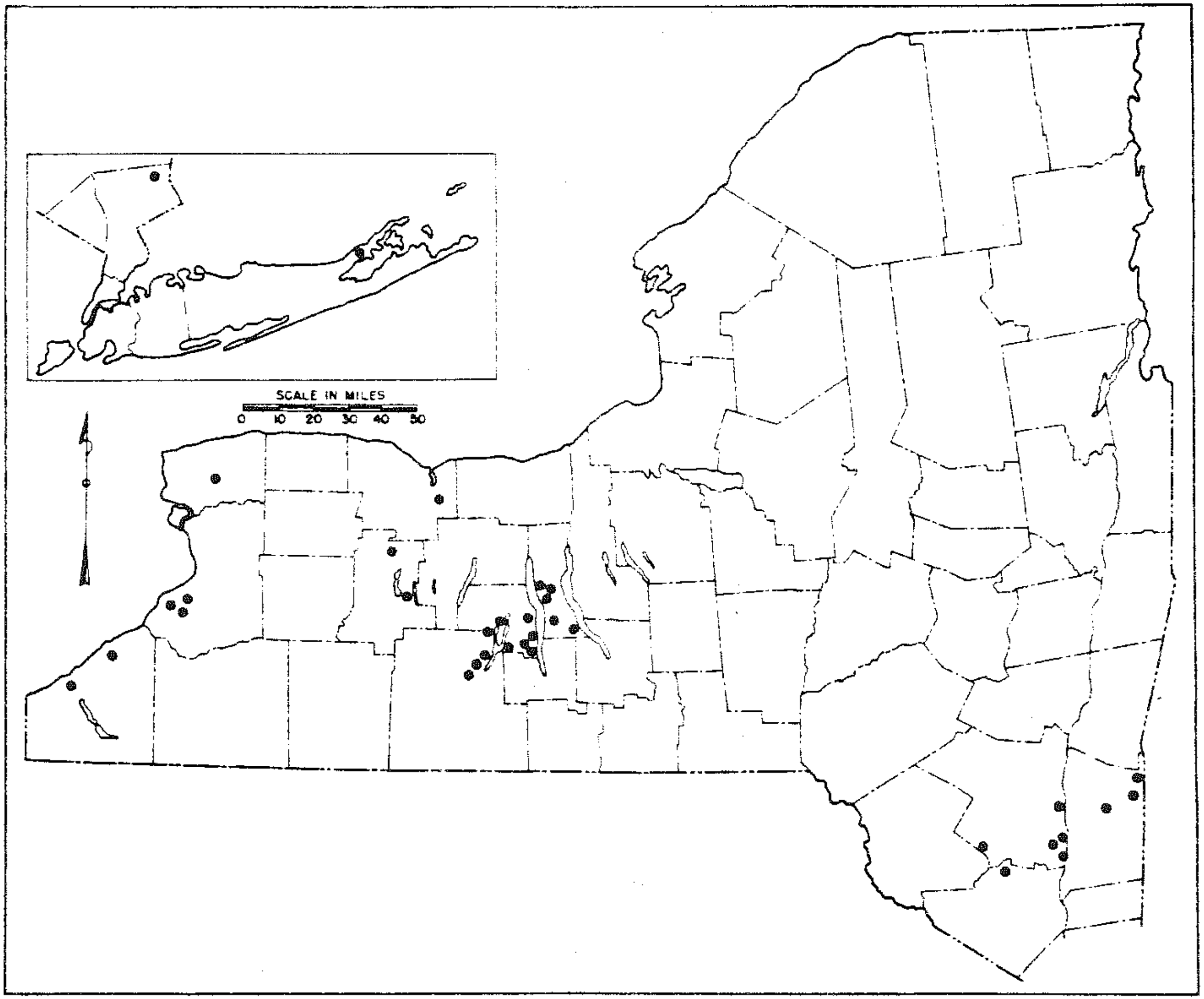
Year	All Wineries	Small Wineries[a]	Small Winery Production As Percent of Total
	gallons	gallons	percent
1975	36,664,000	180,000	0.49
1976	32,932,000[b]	245,000	0.74
1977	33,772,000[b]	325,000	0.96
1978	35,833,000[b]	460,000	1.28
1979	26,249,000[b]	690,000	2.63
1980	NA	730,000	NA

[a] Estimate for all wineries producing 200,000 gallons or less per year.

[b] Estimate based on figures published in Wines and Vines, Vol. 62, Number 7, July 1981, p. 43, using Bureau of Alcohol, Tobacco and Firearms data.

NA - Not available.

Figure 1. Location of Small Wineries Producing Less than 200,000 Gallons of Wine Per Year, New York, December 1980



The average size in 1980 of small wineries included in the study was 22,616 gallons (table 2). This belies a considerable diversity in size. Some of the southeast New York wineries produced less than 1,000 gallons while at the other extreme, one winery produced in excess of 100,000 gallons. Production was quite highly concentrated in the upper size categories. The six largest wineries in 1980 contributed 52 percent of the production of the sample.

Table 2. WINE PRODUCTION OF THREE WINERY SIZE GROUPS BY MEAN AND VARIATION
28 New York Small Wineries, 1980

	Under 10,000 Gallons	10,000-29,999 Gallons	30,000-200,000 Gallons	All Sample Wineries
Number in class	14	8	6	28
Mean (gallons)	3,554	25,375	63,583	22,616
Standard deviation (gallons)	3,316	6,994	55,392	33,908
Contribution of total small winery production (percent)	6.8	28.0	52.3	87.1

Table 3 gives an indication of numbers of wineries in each of the three wine producing areas of the state and the average size in each area. Statistically there appears to be no difference between the size of wineries in the Finger Lakes and those in southeastern New York. Comparison of the above two areas with Lake Erie was hindered by the very low number of observations from the latter area.

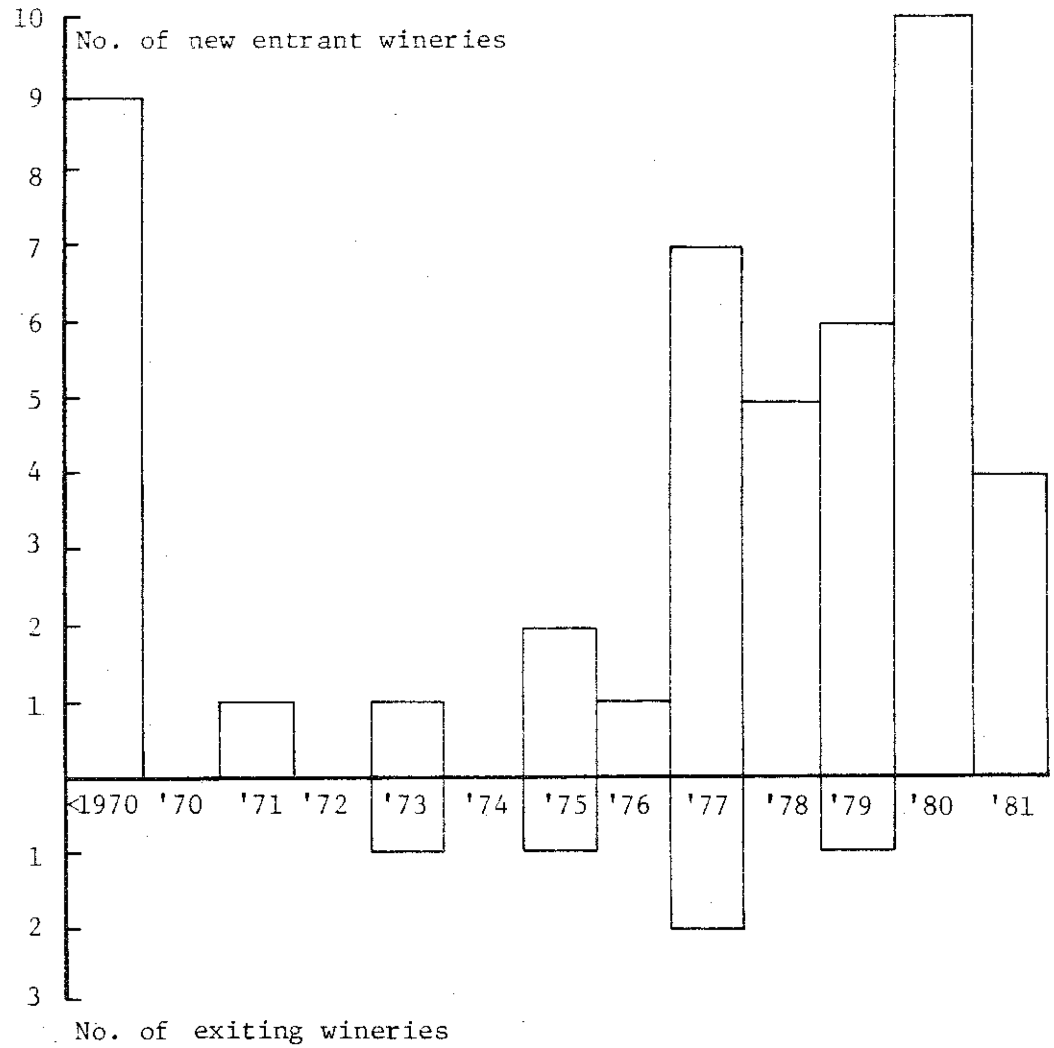
Table 3. WINE PRODUCTION FOR THREE REGIONS BY MEAN AND VARIATION
28 New York Small Wineries, 1980

	Finger Lakes	Lake Erie	Southeastern New York
Number in class	15	3	10
Mean (gallons)	29,467	25,500	11,576
Standard deviation (gallons)	44,589	4,093	11,682

Trends in Entry and Exit

The small winery subsector has shown a net gain in numbers since 1976, with entries exceeding exits by a factor of at least 3 to 1 (figure 2). The Farm Winery Act, passed in 1976, appears to have induced an initial surge of entries. The number of wineries coming into the industry since

Figure 2. Entry and Exit of Wineries Producing Less Than 200,000 Gallons of Wine Per Year[a]
New York, 1970-1981



[a] Year of entry based on year of first crush of interviewed wineries and on year of licensing for all others.

1978 showed a strong upward trend reaching a record number of 10 new entrants in 1980.

It was difficult to categorize the wineries that left, and thence draw implications for those remaining in the industry. The reason why wineries left the industry were not clear and there appeared to be no commonalities in the available data. Three of the seven that left were based in New York City, while the other four were dispersed through the rest of the state.

The average size on entry for a group of 21 small wineries having their first crush in the years from 1976 to 1980, was 6,600 gallons. Two-thirds of the group, however, entered at volumes below 4,000 gallons production. The number and size of wineries coming into the industry over the last 5 to 6 years tends to suggest that barriers to entry due to scale economies in production may be relatively low.

Winery Operator Backgrounds and Methods of Entry to the Industry

The farm winery legislation was introduced in order to:

> "encourage New York State growers to develop an alternative marketing form for their grapes, that being as fermented wine ......"
> (Memorandum of State Executive Department)

The dominant mode of entry, therefore, might be expected to be for existing grape growers to establish a winery in order to use their own grape production. Of four modes of entry detailed in table 4, this was in fact the most common, however 64 percent of respondents fell into the three alternative categories. This suggests that in aggregate, other forms of entry have been encouraged even more than the method intended in the Farm Winery Act.

Table 4. ESTABLISHMENT UNDER FOUR MODES OF ENTRY
28 New York Small Wineries, 1980

Size Group	Operator Had Already Established Vineyard	Bought Vineyard With Intention to Establish Winery	Established New Vineyard and Winery	Bought Existing Operating Winery
gallons		number of wineries		
Under 10,000	4	4	6	0
10,000 - 29,999	4	1	2	1
30,000 - 200,000	2	2	0	2
All Wineries	10	7	8	3

To start a small winery (12,000 gallons capacity) requires considerable capital. The most recent available figures suggest that the cost of equipment and buildings alone in 1981 dollars would be $135,660. This figure does not include operating expenses in the first or subsequent years (Ledgerwood). In itself, this is likely to be a substantial barrier to entry for grape growers. A further potential barrier for existing grape growers is the grape varietal mix. It was clear from the study that grape varieties utilized by small wineries did not correspond to the existing distribution of varieties grown throughout the state. A grower would have to consider whether his varietal mix had sufficient emphasis on the varieties most widely used in wines. Limited knowledge regarding the technology of wine making is also likely to hinder free entry.

Wineries entering the industry that were associated with an existing vineyard tended to enter at higher production levels. It might be inferred from this that the technology of grape production and possibly the handling of wine in volume restricts the entry size of some wineries.

Table 5 details the previous experience of 60 principals and senior winery staff. Over half had no relevant training prior to their involvement with the winery and only 23 percent had previous winery experience or training in enology. Of 21 wineries, 8 had a winemaker with previous experience at another winery or formal training. It might be expected that growth rates for wineries without a trained winemaker might be slower. These wineries, however, tended initially to be smaller but were growing at least as fast as wineries with trained winemakers.

Table 5. PREVIOUS BACKGROUND AND TRAINING OF PRINCIPALS AND SENIOR MANAGERS
21 New York Small Wineries, 1980

Size Group	Grape Growing Only	Winery Related	Other
gallons			
Under 10,000	3	4	18
10,000 - 29,999	7	2	11
30,000 - 200,000	4	6	5
All Wineries	14	12	34

Five wineries had principals that were only involved with their wineries on a part-time basis, spending the rest of their time in a wide range of occupations which may or may not have been related to grapes. Their initial reasons for entry were often not commercial, and some had developed wine making as a hobby. A number had spent time in Europe and California and wanted to "try their hand" in the East.

Grape Varietal Use by Small Wineries

An estimated 879 acres of bearing and nonbearing grapes were owned by 21 small wineries in 1980. The vineyard size varied from 2 to 3 acres to more than 150 acres. Eleven varieties accounted for 66 percent of the small winery acreage (table 6). Of the total acreage owned by those interviewed, approximately 28 percent was in labrusca varieties, 47 percent was French-American hybrids and 24 percent was vinifera.

Table 6. ACREAGE COMPARISON BY GRAPE VARIETY
21 New York Small Wineries, Finger Lakes Region and New York State, 1975 and 1980

	Small Wineries 1980		Finger Lakes[a] 1975		New York State[a] 1975	
	acres	percent	acres	percent	acres	percent
Aurore	71.5	8.1	1,441	9.4	1,727	4.0
Baco Noir	44.5	5.1	572	3.7	643	1.5
Catawba	50.25	5.7	2,341	15.0	3,477	8.2
Concord	59.5	6.8	5,743	37.0	27,568	64.6
DeChaunac	56.5	6.4	583	3.8	899	2.1
Delaware	32	3.6	1,356	8.8	2,051	4.8
Marechal Foch	30	3.4	131	0.8	276	0.6
Pinot Chardonnay	44.5	5.1	82	0.5	107	0.25
Pinot Noir	32.25	3.7	b	b	b	b
Seyval Blanc	97.3	11.0	71	0.5	187	0.4
White Riesling	58	6.6	106	0.6	123	0.3
Miscellaneous	302.7	34.4	2,948	19.1	5,595	13.1
Total	879	100.0	15,374	100.0	42,653	100.0

[a] New York Crop Reporting Service, New York Orchard and Vineyard Survey, 1975, Release No. 31 (Albany, New York: June 1976).

[b] Acreage not recorded separately.

The leading acreages on small winery vineyards were in the French-American varieties, Seyval Blanc and Aurore. The three American varieties, Concord, Catawba and Delaware were represented in lower proportions in comparison to the Finger Lakes acreage. In the case of Concord, the farm winery acreage was a much smaller proportion than for the state as a whole.

One of the most significant results to emerge was the considerable emphasis placed on vinifera varieties by small wineries. Three varieties, Johannisberg Riesling (6.6 percent), Pinot Chardonnay (5.1 percent) and Pinot Noir (3.7 percent) appear on the basis of acreage, in the top 10 varieties grown by small wineries.

Table 7 illustrates the considerable difference in the proportion of tonnage utilized according to varietal groups, compared to acreages reported. In 1979, vinifera accounted for only 6 percent of the grapes crushed by small wineries although constituting 24 percent of the acreage. The difference was due to the substantial amount of nonbearing acreage and the lower yields relative to the other two varietal groups.

Table 7. UTILIZATION OF GRAPES BY MAJOR VARIETAL CATEGORIES
21 New York Small Wineries, 1979

	Under 10,000 Gallons		10,000-29,999 Gallons		30,000-200,000 Gallons		All Small Wineries	
	tons	percent	tons	percent	tons	percent	tons	percent
Labrusca	33	14.4	19	3.8	664	28.3	716	23.2
French-American Hybrids	160	69.9	352	70.4	1,667	71.0	2,179	70.8
Vinifera	36	15.7	129	25.8	17	0.7	182	6.0
All Varieties	229	100.0	500	100.0	2,348	100.0	3,077	100.0

Future Planting and Varietal Mix

Winery operators were asked their intentions for future planting, and specifically what their varietal acreage would be by 1985. Few were able to give a precise answer, and no acreage estimates for future years were obtained. Those that had plans indicated increases in the acreage of some varieties of as much as 300 percent.

Operators implied that their future plantings would be concentrated among the best of the white French-American varieties, with Seyval Blanc taking an increasing share of the acreage and Cayuga White and Ravat 51 also likely to increase. White vinifera varieties are also scheduled for further increases in acreage in vineyards of existing wineries.

The trend in black grape plantings is much as expected. There will probably be a fall in the acreage of Concord grown by small wineries, and De Chaunac acreage will remain stable or fall slightly. Most other black French-American hybrids will maintain their present share of the small wineries vineyard acreage.

THE WINE MARKETING PROCESS AND DISTRIBUTION ALTERNATIVES

Legal Origins

The Twenty-First Amendment, which repealed Prohibition, at the same time placed control of alcoholic beverage sales and distribution in the hands of the individual states. Now 18 states have made distribution and retail sales of alcohol a state run monopoly. The other 32 states have adopted a system which allows private firms to operate production facilities, distribution, and sales under state licensing.

This has led to the three tier system now in operation in New York, (Switzer). The tiers are the producer, whether in New York or out of state, the wholesale distributor, and the wine and liquor retailer. The original motivation for the system was a desire to preclude suppliers (producers) from dealing directly with retailers, the situation which had prevailed before Prohibition. This was accomplished by making it mandatory for a wholesaler to act as an intermediary between supplier and retailer.

Along with 10 other states New York has modified the three tier system. New York suppliers are permitted to hold wholesaler licenses, allowing them to deal directly with retailers. As a result, New York small wineries have three options open to them for distribution. They can sell through a wholesaler, they can themselves act as the wholesaler and sell directly to liquor stores and restaurants, or they can sell to the public at the winery. A fourth but less significant channel allows for the distribution of wine to private customers by carrier on a retail mail order basis, within New York.

Marketing Channel Use

The results of the study show that a number of combinations of sales channels are used and in addition there is great variation in the proportion of wine supplied to each channel. The size of the winery does appear to play a significant role in determining which market channels are used and in what combination. The smaller the winery, the more likely it is that the majority of wine will be retailed at the winery. This is a recognition that wide distribution of limited quantities of wine can be uneconomical, particularly if the unit price is low. Sales at the winery also provide the opportunity for family involvement in the sales and marketing process. The fact that a higher proportion of wine can be sold in this way does not necessarily imply that sales from the winery will be the most profitable. Overhead costs may be high in terms of both staffing and the provision of adequate facilities for wine tasting.

Size of production is clearly not the only factor that determines the use of, and allocation to market channels. Other factors either singly or in combination influence allocation. The location of the winery, the grape variety-quality-price relationship and the operator's personal preference all help to determine how the distribution channels are used. Because they tend to be interrelated it is difficult to generalize on the combination of factors that result in the observed use of market channels.

Location close to a substantial population center or within a recognized tourist area, given a site that is easily accessible from main highways, is likely to increase the viability of sales at retail from the winery. Less favorable locations may result in the use of wholesalers as a means of reaching distant markets.

The price per bottle, the wine type and the perceived quality of the wine are also seen as affecting the choice of marketing channel. Winery operators producing higher priced varietal wines, particularly viniferas, appear to put greater emphasis on direct supply to liquor stores and the use of wholesale distributors in order to reach a wider, more discriminating audience.

Overlying all the above are the personal preferences of the winery operator. His interest in becoming involved with sales himself, and the availability of staff to perform the sales function may significantly affect the distribution channels that he chooses.

Table 8 indicates the different channel use according to different size groups. In general, larger wineries sold a smaller proportion of their wine at the winery, but a larger proportion through wholesalers. Proportion of sales direct to liquor stores was highest for the 10,000 - 29,999 gallon size group but lower at sizes over this range. In all cases, sales via mail order were relatively insignificant.

Table 8. AVERAGE ALLOCATIONS OF PRODUCTION BETWEEN MARKET CHANNELS BY SIZE GROUP
21 New York Small Wineries, 1979

	Under 10,000 Gallons	10,000-29,999 Gallons	30,000-200,000 Gallons	All Small Wineries
		percent		
Retail at winery	59	25	32	33
Via wholesaler	6	7	17	15
Direct to retailer	32	61	49	49
Via mail order	3	7	2	3
Total	100	100	100	100

Table 9 suggests that there were only small differences between the three wine producing regions in terms of the marketing channels that were used by the wineries in these areas. Of significance was the relatively high sales from the winery by Lake Erie group. As a result, there was a smaller proportion of sales direct to liquor stores compared to the other regions.

Table 9. SMALL WINERIES ALLOCATION OF TOTAL PRODUCTION BETWEEN MARKET CHANNELS BY REGION 21 New York Small Wineries, 1979

Sales Method	Finger Lakes	Lake Erie	Southeastern New York	All Small Wineries
		percent		
Retail at winery	30	46	38	33
Via wholesaler	17	16	6	15
Direct to retailer	50	37	51	49
Via mail order	3	1	5	3
Total	100	100	100	100

Southeastern wineries made relatively less use of wholesalers. This could be due to their smaller average size and their proximity to New York City, allowing these wineries to take advantage of direct distribution to liquor stores in the city.

Sales at Retail From the Winery

The proportion of sales from the winery were found to be negatively correlated with size, suggesting that while volume sold from the winery may increase, its share when compared to volumes going into other markets, declines. Four of the smallest wineries marketed more than 80 percent of their wine direct from the winery.

Sales from the winery were usually the first choice of the four alternatives for the smallest size groups. Where production was limited, winery sales were usually made by a husband and wife, or family team. All but one of the wineries in the size group producing less than 10,000 gallons relied heavily on family labor to administer sales from close to 100 gallons to almost 5,000 gallons. Number of visitors per winery ranged annually from less than 1,000 up to 25,000.

In the two larger size groups, a higher proportion of part-time hired labor was used. The average size of staff, including management, for these groups was close to five full-time, with an average of five part-time. This compares to an average of three staff of all types for the smallest size group. The largest size group had an average of twelve full-time employees and six part-time. These figures also included staff that were involved in other winery and vineyard operations whose time would not have been costed to the marketing operations. The number of visitors per year for these two groups ranged from a low of 1,000 in the 10,000 to 29,999 gallons size group up to a maximum of 85,000 in the 30,000 to 200,000 gallon group.

The number of visitors per 1,000 gallons of wine produced was higher at Southeastern New York wineries compared to the Finger Lakes wineries (table 10). However, sales per person for the two areas suggest that individual customers at Finger Lakes wineries are likely to purchase higher volumes of wine.

Table 10. VISITORS PER THOUSAND GALLONS OF PRODUCTION AND SALES PER VISITOR, BY REGION
13 New York Small Wineries, 1979

	Finger Lakes	Southeastern New York
Average production/winery	44,175	14,346
Visitors/1,000 gallons of production	530	1,100
Sales/visitors (gallons)	0.69	0.35

Lower sales per visitor at Southeastern New York wineries may reflect a different social composition of the visitors, who are most likely to be from the New York City area. It may also suggest that these wineries may have the opportunity to increase sales per winery visitor.

The major marketing costs associated with retailing from the winery are the fixed cost (depreciation and interest on investment) of a facility where wine can be tasted, and a number of variable costs including management time and other staffing for winery tours and tastings.

Wine used in tastings should also be viewed as a marketing cost. Every winery interviewed offered tastings but only one charged for the tasted wine. Estimates of the amount of wine used in tastings varied from less than 1 percent of total production to slightly under 10 percent. While the range appears wide and the figure of 10 percent surprisingly high, there is considerable agreement between respondents on the average quantity of wine used per visitor in tastings. Based on estimates of the number of visitors and number of cases used, 8 out of 10 wineries answering this section of the questionnaire gave an average of between 120 and 180 millilitres of wine per person per tasting or between a 1/6 and 1/4 of a bottle per person.

The marginal cost of marketing (the cost associated with marketing each additional unit of wine) could not be measured, but it is assumed that costs would follow a normal U-shaped curve. This suggests that the marketing costs per unit of wine sold fall over some volume of sales as this volume rises, but that having reached a minimum, costs per unit then begin to rise. As the winery tries to attract more visitors and increases its sales volume then increased numbers of staff and amounts of management time will be required. Probably as important will be the cost of advertising and promotion at the margin, as it becomes more and more difficult to raise the number of visitors coming to the winery. For example, classified advertisements in local papers might have to be replaced by half pages or the use of radio advertising.

Despite the fact that for each winery there will be an optimum level for sales through this channel, a number of factors may influence the operator's decision to sell below or above the optimum volume. He may sell less than the optimum volume in situations where the winery has yet to reach full capacity, or alternatively the operator, in order to achieve economies in other markets, may be forced to divert some sales from the winery to other outlets.

Sales to Liquor Stores

Not in every case were sales from the winery encouraged. Some operators put more emphasis on sales to liquor stores as the most effective means of reaching the customer groups they had identified. These operators generally felt that the tourist customer business was not compatible with the type of wines being produced. In these cases, small quantities of a limited range of varietal wines were usually being produced. The high per bottle prices reflecting the perception of high quality. In the future, this approach may be more widely adopted as a labor saving marketing technique by part-time operators and by those positioning their wines at the top end of the New York wine price range.

For most wineries either existing or entering, the more common approach was a mix between retail sales at the winery and direct sales to liquor stores. Although sales to liquor stores may only account for a small proportion of total sales in the initial stages of development, they may provide a relatively secure outlet during the period in which the winery is becoming established.

The most significant cost in the supply of wine to liquor stores (compared to sales at retail from the winery) is the loss of margin. While wine retailed at the winery sells for the full retail price, sales by the winery direct to liquor stores are made at the retail price discounted by 33 percent. Despite this loss in margin, this sales channel is widely used by small wineries.

The composition of costs for marketing through liquor stores varies considerably depending on the size of the winery. Wineries in the larger size group may employ a salesman to make deliveries with a van direct to liquor stores. In the smallest size groups, this function would most likely be taken on by the owner or manager. At least part, if not all, of the salesman's salary and other associated costs including the vehicle would be considered fixed cost. In addition, there are variable costs to be considered, particularly those for advertising and promotion and gas for the delivery vehicle. And as the sales territory is widened to more than one day's return journey from the winery, staff expenses for overnight accommodation and overtime are likely to rise.

Table 11 shows that the average number of liquor stores served and the average number of cases supplied to each for the three size groups differs. The wineries in the largest size group appeared to sell over 2-1/2 times as many cases through their liquor store outlets as the two smaller size groups. Increased opportunities to reach the best liquor stores and improved sales techniques may result in economies in distribution for the larger wineries.

Table 11. NUMBER OF LIQUOR STORES SERVED
21 New York Small Wineries, 1980

Size Group	Number of Wineries	Average Number of Outlets Per Winery	Average Number of Cases Per Outlet[a]
gallons			
Under 10,000	7	20	21
10,000 - 29,999	8	170	23
30,000 - 200,000	6	291	62

[a] One case (12 bottles) = 2.378 gallons.

Supply direct to liquor stores may be as high as 95 percent of total production in cases where by design sales at the winery are kept at a minimum. Table 8 indicates, however, that the normal figure was between 32 percent for the wineries below 10,000 gallons, and the highest level of 61 percent of sales for the 10,000 to 29,999 gallon group.

Some liquor stores collected their requirements from the winery, but the more usual situation was for the winery to arrange delivery. Cost and size of vehicle required, the distance to population centers and the availability of labor limit the extent to which direct supply can be developed.

The possibility of widening the geographic catchment area and increasing the potential number of consumers makes it feasible to target sales at specific sectors of urban and suburban populations. A small number of stores could be selected to carry the wine on an exclusive basis, and this approach might be adopted in cases where the store is recognized as a specialist wine retailer.

As well as liquor stores, restaurants are becoming an increasingly important outlet for wines of small wineries. Not only is the volume of sale considered a useful supplement to sales through the other channels, but the opportunity for repeat sales at the winery or liquor store as a result of exposure in restaurants is also important.

Sales Through Wholesale Distributors

Only eight out of the original sample of 21 wineries marketed their wines through wholesale distributors. Wineries in all three size categories were represented among those that used this channel. There was no statistical evidence that the use of distributors was influenced by the size of the winery and clearly a number of other factors such as location, wine pricing policies and wine varieties were important considerations. No more than 6 wholesalers per winery were being used by the wineries interviewed and in the majority of cases, only one or two. Usually these wholesalers operated in markets that did not overlap each other. They are also likely to be separate from the direct supply sales area of the winery itself.

The major cost associated with sales through this channel is the significant discount given to the wholesaler. Usually this is 50 percent of the retail price. In part, this explains why the use of this channel is quite limited particularly among those wineries where there are good opportunities for retail sales at the winery. There are few additional costs apart from management time, which is probably lower for this channel than for any other discussed above. In some cases, there will be costs of transport from the winery to the wholesaler's facility. Both management time and transportation are regarded as variable costs.

Despite the loss of margin, the wineries interviewed, including those not currently using wholesalers, identified a number of advantages of this channel. Most were seen to be in the wider distribution of wines to more distant parts of the state and in particular to New York City which is considered to be an extremely difficult and complex market to enter. Some wineries pointed out that their expansion would have been slower had they not used distributors. One limit to the expansion of sales direct to liquor stores is the speed and regularity of the service that can be provided. The ability of wholesalers to give retailers a faster and more regular service is clearly a factor in gaining shelf space in liquor stores, and will be discussed in a later section.

All wineries agreed that a wholesaler could free management for winery operations and selling through other channels. Not only were wholesalers seen as a necessary requirement for distribution of increased production, they were also seen as a means of targeting wines at clearly defined outlets. Wineries had identified specialist wholesalers, recognized as "wine men". These wholesalers had access to the leading restaurants and liquor stores that had pioneered the sale of wines of the small wineries both from New York and California.

In general, the use of this marketing channel was seen by the wineries to be an inevitable consequence of their expansion and most recognized considerable advantages in using a wholesaler. Approximately 50 percent of those who did not use a wholesaler expected to use one or more in five years time.

Retail Distribution of Wine by Carrier

Nine of 21 wineries interviewed offered a delivery service to retail customers using United Parcel Service. In only one instance did the percentage of total volume sold through this channel exceed 10 percent, and only two wineries shipped in excess of 5,000 gallons this way. Wine is sold to the customer at the retail price and an additional charge is made for delivery. Delivery can only be made within the state. This system of retailing makes the price to the customer high in relation to the same wines in a liquor store. Its use suggests that wines retailed in this way may be quite highly differentiated from competing wines. It is felt, however, that the wider distribution of small wineries' wines to liquor stores, and the increasing cost of transportation may limit the expansion of distribution by this channel.

Attitudes of New York Liquor Store Management Towards the State's Small Wineries

In December 1980, there were 4,360 liquor stores in New York State of which approximately 2,000 were in New York City. A telephone survey was conducted on a sample of 83 stores, selected at random and in proportion to population, from the seven State Standard Metropolitan Statistical Areas (S.M.S.A'S) and a limited number of smaller cities. Thirteen liquor stores did not respond. The respondents were asked whether they carried wines produced by New York small wineries, how they viewed the service they received from them, and how they would characterize the demand for these wines.

Table 12 suggests that liquor stores outside the New York City area were most likely to stock New York small wineries' wines. These results implied that most liquor stores outside the city stocked the wines of at least one New York small winery, suggesting that coverage and penetration of these markets was quite comprehensive. This figure does not, however, agree with the wineries own estimates which suggested that coverage was much more limited. This may be due to the fact that some wineries, dealing through wholesalers, were not aware of all the liquor stores that were being supplied with their wines.

Table 12. LIQUOR STORES CARRYING NEW YORK SMALL WINERIES' WINES
New York, 1981

	Stores Interviewed	Stores Carrying New York Small Wineries' Wines	
	number	number	percent
New York City	21	4	19
Non New York City	49	42	86
New York State Total	70	46	66

On average just under three New York small wineries were represented in liquor stores that stocked small wineries' wines. Over half of this group of retailers indicated that they had difficulty in obtaining the most popular wines. The wines of only one New York small winery were consistently mentioned as being stocked. Other wineries appeared to have significantly lower pentetration of the liquor store market. Retailers that were not stocking small wineries' wines often pointed out that they were not in wine drinking areas. This was particularly true in New York City, where certain areas were clearly designated as markets only for whiskey and other spirits. This tends to reinforce the impression gained from the wineries that selectivity is probably more important than wide coverage of the market.

Of the sample, 39 percent of respondents claimed that there was no interest at all in the wines of this group of wineries. Some interest on the part of the public was indicated by 50 percent of the retailers, while only 11 percent suggested that there was great interest. The major problem in selling the small wineries wines was seen to be brand recognition. For all but one of the wineries mentioned by most of the retailers, wine stock turns were claimed to be slow. This was attributed to limited publicity, and a consequent lack of customer awareness. As a result, small wineries' wines needed the attention of the liquor store staff in order to generate interest on the part of the customer.

Most retailers suggested a number of areas where the wineries could improve their image with liquor stores. These were often related to the service the liquor stores received from the wineries who were supplying the stores direct, i.e., not using a wholesaler. The inability of wineries to provide a regular service, and to sell in lots of less than 10 cases were cited as significant barriers to further expansion of stockholding. This was compared with wholesalers who were generally regarded as the more effective suppliers, calling once a week and being able to split cases.

The conclusions from the survey suggest that the distribution of small wineries' wines to liquor stores may not be great. The wines of only seven or eight wineries were regularly mentioned as being stocked. This is almost certainly due to the limited volumes of wine available to the retail trade from some wineries. In addition, it reflects the fact that sales are concentrated among a few liquor stores that have developed wine specialities.

The Out-of-State Market

Reference has been made to the diversity of the liquor laws in individual states that developed after the repeal of prohibition. As a consequence, selling wine outside New York State can be a complex undertaking. In almost every case, state laws require that the first owner be a wholesaler. This means that New York wineries are prevented from selling direct to liquor stores other than in New York. This added cost and the perception that the New York market has been relatively buoyant, has discouraged wineries from entering out-of-state markets.

Six of the 21 wineries interviewed were already engaged in marketing out of state, all on a quite limited basis. None marketed more than 10 percent of total production in this way. Sales out of state ranged from 350 gallons to more than 5,000 gallons. All but one of the wineries felt optimistic about the prospects for this market. Most were able to identify a number of states and major cities as growing wine markets. These were primarily in the Northeast and the South, along the Eastern Seaboard. States identified were Massachusetts, New Jersey, Maryland, Virginia, Georgia, and Florida, and to the West, Ohio was seen as a promising market. In addition, a number of cities were identified as possible markets. They included Washington, D.C. (the highest per capita wine consuming area in the U.S.), Chicago, Pittsburgh, Baltimore and Houston. All are in the top 20 per capita wine consuming states or the top S.M.S.A.'s for wine consumption.

Two-thirds of the wineries not currently involved suggested that they would enter out-of-state markets in the next five years. The remainder regarded the market in New York as providing sufficient potential for growth without the added complication of marketing outside the state.

WINE PRICING

Between 1934 and September 8, 1980, the price of wine in New York State at all stages of distribution was controlled by the state. The regulation of wine pricing had been regarded as beneficial for all concerned in the wine trade from producer to consumer. Section 101-b of the New York Alcoholic Beverage Control Law clearly stated that the purpose of the Act was to "foster and promote temperance in the consumption of wines and respect for and obedience of the law". As well as protecting the individual, the law was seen as providing protection for smaller retail liquor stores against potential predatory pricing by larger stores.

The Act made provision for each manufacturer or his exclusive wholesale agent to file annually a schedule of retail prices. The Act also stated that no licensed retail liquor dealer should sell at a price less than the Minimum Consumer Resale Price (M.C.R.P.), set by the winery in its schedule. In addition, retailers were required to sell most wines at a markup of between 40 and 50 percent on the wholesale price. Thus the wineries were able to determine the retail price at which their wines were sold on a statewide basis.

In March 1980, M.C.R.P. was overthrown in California. In a decision, which closely paralleled the California Midcal case, M.C.R.P. was overthrown in New York in September of the same year on the grounds that price setting initiated by the wineries was in violation of Sherman Antitrust Act. Within New York there is at the time of writing, free trade in wine at the retail level. Any retailer can charge whatever price is desired without fear of reprisals from the State Liquor Authority. Discrimination is, however, still forbidden and no manufacturer or wholesaler is allowed to sell to one customer at a more favorable price than another.

The fear has been expressed that the deregulation of pricing might bring about a serious decrease in the number of liquor stores, and as a consequence decrease competition rather than increase it, as was the intention of the ruling (Kihss 1980 a). Initially the decision led to considerable price-cutting particularly on national brands and many high volume imports. Discounts in September 1980 averaged between 10 to 15 percent of the control price (Kihss 1980 b). A study in October implied that prices of wines retailed in New York City had fallen by 19.2 percent since decontrol (Kihss c).

The effect of this apparently substantial level of discounting on small wineries is thought to have been minimal. It is unlikely that many of the small wineries' wines would have been heavily discounted in view of their relatively low level of brand recognition, and slow stock turns compared to some imports and national brands. It is, therefore, likely to be true that small wineries' wines will continue to be priced at or close to the retail list price. This will also have the effect of avoiding the possibility of price competition between sales at the liquor store and those at the winery.

Throughout the examination of wine pricing by New York State's small wineries, reference will be made to the unweighted or simple average retail prices per bottle. Had sales volume figures for each wine type been available, the weighted average price would have been a more satisfactory measure.

With this reservation in mind, the next section will examine the general characteristics of pricing by small wineries.

The Average Retail Price

Table 13 indicates that across all wine classes the average price per label in 1980 was $5.10 for both under 10,000 gallon and 10,000 to 29,999 gallon size groups. The average price for the largest size group was significantly lower at $3.42 per bottle.

Table 13. RETAIL WINE PRICES PER BOTTLE BY SIZE OF WINERY, MEAN AND VARIATION
21 New York Small Wineries, 1980

	Under 10,000 Gallons	10,000-29,999 Gallons	30,000-200,000 Gallons
Number in class (label)	43	54	92
Mean price	$5.10[a]	$5.10[a]	$3.42[b]
Standard deviation	$1.58	$2.23	$1.37

[a] Not significantly different at the 5 percent level (one sided).

[b] Significantly lower at the 5 percent level (one sided).

There were wide differences in pricing within each group. For the largest size group, the lowest price recorded was $.99 for non varietal wines, while the highest was $12.000 for Pinot Chardonnay, a white varietal vinifera wine. The results imply that rather different criteria apply to the pricing of wines by the larger wineries, and may be an indication that as size increases proportionately more production is in the lower priced non varietal brands.

The modal group of 7 wineries had average prices within the $3 to $4 per bottle range (table 14). Over half the wineries had an average retail price per bottle of between $3 and $5. The earlier observation that as size increases average price appears to decrease seems to be confirmed by table 14 although with the small number of observations no strong inference could be drawn.

Table 14. DISTRIBUTION OF AVERAGE PRICE
20 New York Small Wineries, 1981

Average Price Range Per Bottle	Size Group: Under 10,000 Gallons	10,000-29,999 Gallons	30,000-200,000 Gallons	Number of Wineries
Under $3.00	--	1	1	2
$3.00 - $3.99	3	2	2	7
$4.00 - $4.99	2	1	2	5
$5.00 - $5.99	2	1	--	3
$6.00 - $6.99	--	1	--	1
$7.00 & over	1	1	--	2
Total	8	7	5	20

Varietal and Non Varietal Influence on Wine Prices

One of the most significant factors determining wine prices was the range of varietal and non varietal wines produced. In each size category, varietal wines were on average priced above non varietal (table 15). This reflects the fact that the winery operation has considerable flexibility in selecting the grape varieties that are used to produce non varietal wines. As a result, there are likely to be greater opportunities to use lower cost grape varieties that might not be used in varietal wines. It is also likely that the production of lower priced non varietal wine contributes to the overall marketing strategy of the winery.

The greater emphasis on non varietal wines puts the larger wineries into direct competition with major national brands. A brief survey of leading national wineries' prices for popular non varietals such as Chablis, Burgundy and Rhine wines in May 1981 confirmed that in New York, national brands sell within a very narrow band of prices, from a low of $2.49 up to $2.99 for comparable products. The mean price of $2.79 calculated for the 30,000 to 200,000 gallon small wineries suggests that for the most part the group is well aware of the competition it faces. There was, however, quite wide variation around this mean with the highest price being $6.99 for a non varietal red, the low being $.99 for both non varietal red and white.

Table 15. RETAIL PRICES OF VARIETAL AND NON VARIETAL WINES BY WINERY SIZE, MEAN AND VARIATION
21 New York Small Wineries, 1980

	Size Group					
	Varietal			Non Varietal		
	Under 10,000 Gallons	10,000-29,999 Gallons	30,000-200,000 Gallons	Under 10,000 Gallons	10,000-29,999 Gallons	30,000-200,000 Gallons
Number in class (labels)	26	37	51	17	17	40
Mean price per bottle	\$5.56[a]	\$5.62[a]	\$4.19[b]	\$3.99[c]	\$3.85[c]	\$2.79[d]
Standard deviation	1.88	2.26	1.59	0.47	1.81	0.99

[a] For varietal wines, no significant difference at the 5 percent level (one sided).

[b] For varietal wines, significantly lower at the 5 percent level (one sided).

[c] For non varietal wines, no significant difference at the 5 percent level (one sided).

[d] For non varietal wines significantly lower at the 5 percent unit level (one sided).

Pricing of varietal wines was also greatly influenced by the grape type from which the wine was made. The average retail prices per bottle for varietal wines falling into the three grape varietal categories are shown in table 16. Each mean was significantly different from each of the others, on average the price for French-American varietal wines was above that for labrusca, and wines made from vinifera grapes were in almost every case priced above wines from the other two categories.

The choice of varietal wine can play a major part in image creation for the winery. This was seen particularly among those wineries producing varietal vinifera wines. There was in this situation a clear attempt to differentiate the winery on the basis of wine variety and as an indirect result the wines also become differentiated from other New York State wines on the basis of price.

Table 16. RETAIL PRICES FOR WINES OF THE THREE GRAPE VARIETAL GROUPS BY MEAN AND VARIATION
21 New York Small Wineries, 1980[a]

	Labrusca	French-American Hybrids	Vinifera
Number in class (labels)	23	27	31
Mean price per bottle	$3.19[b]	$4.39[b]	$6.96[b]
Standard devaiation	$1.24	$0.72	$1.84

[a] Excludes wines where grape composition of the wine was not declared.

[b] Significant difference at the 5 percent level (one sided).

Variation in both the varietal price per ton for grapes and the bottle price for finished wine was in part a reflection of grape and wine color. The overall level of prices for white grapes has been above that for reds. Table suggests that for all red wines in comparison to whites there was no statistically significant difference between the two means. However, an analysis of red and white varietal, and red and white non varietals indicated that white varietal wines were generally priced at higher levels than varietal reds.

Table 17. RETAIL PRICES FOR RED, WHITE AND ROSE VARIETAL AND NON VARIETAL WINES BY MEAN AND VARIATION
21 New York Small Wineries, 1980

	Red	White	Rose
Number in class (labels)	73	99	18
Mean price per bottle	$4.21[a]	$4.64[a]	$3.14[b]
Standard deviation	$1.95	$1.92	$1.07

There was no significant difference between the price for red and white non varietals. This was the result of wineries pricing all their red and white non varietal wines of the same brand, or within the same quality level at the same or very similar prices. This implies that it may be less easy to differentiate non varietal wines and the competition from national brands may dictate that smaller wineries adopt the same type of pricing strategy.

Pricing Decisions in Relation to Competition

Responses to the questionnaire indicated that small winery operators regarded their pricing decisions as being largely uninfluenced by national brands and imported wine prices. Most admitted, however, that the wine prices of other small wineries had considerable influence on their own pricing decisions. The price of some vinifera varietal wines apparently were influenced by the wine prices of some of California's "boutique" wineries.

Use of the coefficient of variation (the ratio of the standard deviation to the mean) indicates that prices of those wines produced by small wineries may have a tendency to cluster around a mean, suggesting some interdependency. The results show that prices for the French-American hybrid wines Aurore and Seyval Blanc covered a quite narrow range. Both are varietal wines produced by significant numbers of wineries (9 and 13 respectively) it would, therefore, be relatively easy for customers to make price comparisons. In view of the fact that both varieties are still not widely known by wine drinkers, wide variations in price from one winery to another might have an adverse impact on the consumer and this may contribute to the tendency to price around the mean.

Table 18. RETAIL PRICE VARIATION WITHIN WINE VARIETY OR TYPE
21 New York Small Wineries, 1981

	Aurore	Seyval Blanc	Riesling	Red	White	Rose
Number in class (wineries)	9	13	9	14	10	9
Mean price per bottle	$4.43	$4.72	$7.49	$4.37	$4.11	$3.97
Standard deviation	$0.47	$0.34	$1.04	$0.67	$0.90	$0.67
Coefficient of variation (percent)	10.61	7.20	13.88	15.33	21.90	16.88
High price	$4.99	$5.00	$8.99	$6.99	$5.99	$4.49
Low price	$3.50	$4.16	$6.50	$0.99	$0.99	$0.99

At the other extreme, non varietal wines can be more clearly identified with a range of other wines outside those produced by the small wineries. Here wineries see possible scope to differentiate on the basis of price and image, and as a result the prices for red, white and rose, as indicated in table 18 are likely to be more dispersed around the mean.

While the wineries themselves gave this factor generally low weighting, there apparently was sufficient commonality of price to suggest some tacit interdependency on pricing.

Pricing Strategy on Entry

The price on entry to the subsector for sixteen small wineries was compared with the average price for all the existing wineries for the relevant varieties. The results are shown in table 19. It appeared that the tendency was for wineries to price on entry within a quite narrow range around the mean for the existing wineries. This strategy might be adopted by wineries introducing a varietal wine such as Seyval Blanc or Aurore. Most wineries that entered close to the mean price stayed at or close to the mean in subsequent years.

Table 19. ENTRY PRICING LEVELS FOR SIXTEEN WINERIES COMPARED TO AVERAGES FOR ESTABLISHED WINERIES New York Small Wineries, 1977-1980

Variety or Wine Type	Within 10 Percent of Mean Price Above or Below in Year of Entry	Above Mean By 10 Percent or More in Year of Entry	Below Mean By 10 Percent or More in Year of Entry
		number of labels	
Baco Noir	1	2	2
Chancellor	--	1	1
Marechal Foch	1	--	--
Aurore	4	1	1
Seyval Blanc	6	3	1
Riesling	1	4	--
Red (non varietal)	3	3	4
White (non varietal)	3	1	2
Rose (non varietal)	3	2	0
Total	22	17	11

Wineries can also price significantly above or below the mean. By pricing above, the winery may be attempting to establish its image. In the case of Riesling, of six wineries producing this variety for the first time, four priced significantly above the mean, although it would appear that there has been a tendency for these wineries to return to the current mean after 2 to 3 years.

The logic for entering below the mean price is based on the assumption that a lower priced new product might be established more readily than by entering at the price level of competitors. Fewer wineries seem to have adopted this approach and two have now brought their prices up to the mean. This would seem to be either a recognition that the lower price would fail to cover costs, or that additional profit is available above entry pricing levels.

FORECASTS FOR GROWTH

The wine boom of the late 1960s and early 1970s clearly benefited the New York wine industry but by 1975 the over abundance of wine grapes and the high levels of inventory in California had started to exert a depressing effect on New York production. Volume of production declined to 33 million gallons in 1976 and has not since reached the 1974 level of 36.6 million gallons.

This sluggish activity is in part due to a continued decline in the market for dessert wines and the uncertain growth in the sparkling wine market, two of the state's traditional wine products. New York table wines in the lower end of the price range have, and will continue to face, increasing competition from Californian non varietal, and imported wines.

Estimates of wine production based on fitted trend lines suggest that by 1985 New York may be producing 42 million gallons of wine (table 20).

Table 20. GROWTH IN TOTAL OUTPUT FORECASTS FOR ALL NEW YORK WINERIES, 1980-1985

	Straight Line Trend 1970 - 1979	Second Degree Trend 1961 - 1979
	1,000 gallons	
1975 - 1979 (5 year average)	34,840	34,840
1980	37,870	38,638
1981	38,716	39,490
1985	42,107	42,170
Standard error	2,972	2,907

Wine Consumption

The continued growth in output of the wine industry is dependent, in part, on increasing per capita consumption rates. Adult per capita consumption of wine in the U.S. rose from 1.60 gallons in 1965 to 2.94 gallons in 1979. Over the same period New York consumption rose from 2.29 gallons to 3.73 gallons per capita.

Straight line projections for the period 1980 to 1985 suggests that New York's per capita consumption will rise to 4.4 gallons while the average for the U.S. as a whole will be 3.35 gallons by 1985 (table 21).

Table 21. ADULT PER CAPITA WINE CONSUMPTION FORECAST FOR NEW YORK, U.S., 1980-1985[a]

	New York	United States
	gallons	
1975 - 1979 (5 year average)	3.48	2.72
1980	3.89	3.08
1981	3.99	3.18
1985	4.42	3.35
Standard error	0.1908	0.1301

[a] Forecast based on straight line projection over the period 1965 - 1979.

The projected increases in per capita consumption will be dependent on continued growth in disposable personal income. Growth in per capita consumption was checked in the mid-1970's when the U.S. economy went into recession. A further recession in the early 1980's could result in growth in consumption below that projected in the trend lines.

A major factor in the wine market is the increasing size of the affluent over 24 year old group, the result of the post-war baby boom. U.S. Bureau of the Census figures suggest that there is likely to be a 15 percent increase over 1980 levels in the size of the 25 to 44 year old group by 1985. A further 9 percent is expected by 1990 (U.S. Bureau of the Census). It is this group that has been consistently identified as the prime wine consuming segment of the population.

In addition, relatively few people in the U.S. are wine consumers. Wine industry leaders hope to further expand the market by encouraging non drinkers to become wine consumers.

It is felt that small wineries are more likely to find their market among already committed wine drinkers. Increases in the wine consuming population are likely to have only a marginal effect on consumption of their wines. Committed wine drinkers are also likely to be less subject to the fluctuations in the economy that might otherwise register declines in the overall rate of increase in consumption.

Small Winery Growth

By any standards the rate of increase in production of wine by the small wineries has been rapid. Since 1975 output has grown at an average annual compound rate of 19.3 percent. The increase in 1980 was only 5.6 percent over the previous year but this was largely due to the very substantial downward adjustment in production by one winery.

The rate of increase in output is in no way comparable to the much slower growth in the New York industry as a whole. The growth in output of the small winery subsector shows the same type of characteristics associated with the growth of a new product. Typically these curves would exhibit a growth phase during which output would expand at an increasing rate. As maturity is reached, growth continues but at a decreasing rate. Almost all products follow this pattern, but for each, the time taken to reach maturity will vary considerably.

The wines of the small wineries could be regarded in some respects as a new product class, and having made this assumption, it might expected that at some time in the future growth would occur at a decreasing rate. Insufficient data were available to predict when this might be, however table 22 suggests what total small winery output might be based on two different assumptions.

Table 22. PROJECTED OUTPUT OF SMALL WINERIES FOR 1981 AND 1985 UNDER TWO ASSUMPTIONS, NEW YORK

	Straight Line Projection (1975 - 1980)	Compound at 19.3%[a]
	1,000 gallons	
Actual		
1980	730	730
Projected		
1981	862	871
1985	1,345	1,764

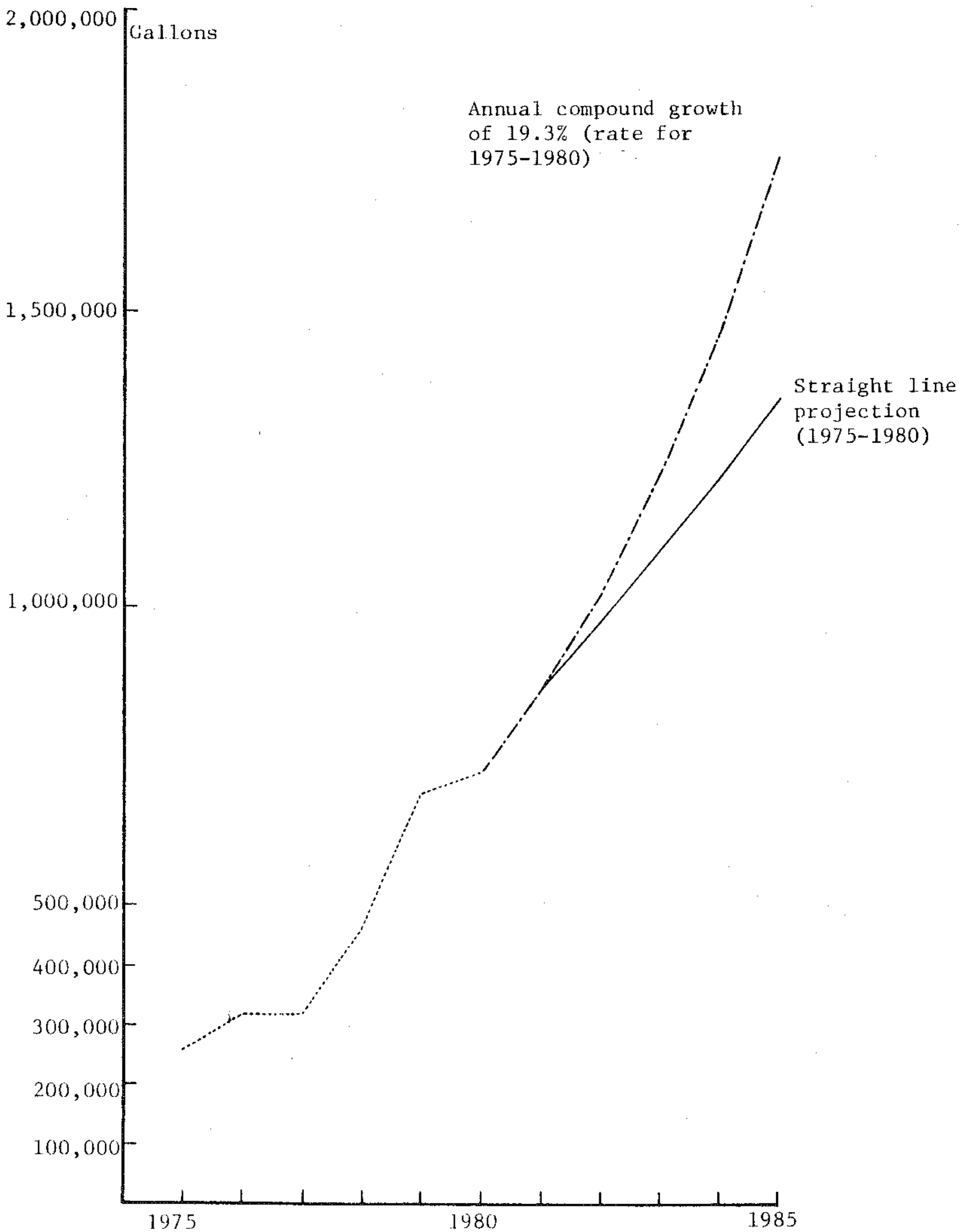
[a] Rate of growth in output 1975-1980.

The results of asking the winery operators what level of production they expect to be at by 1985 are shown in table 23. This tends to confirm the hypothesis that growth rates, at least for existing wineries will slow down, but that production will continue to increase, and by 1985 is almost certain to be well above the 1980 level of 730,000 gallons.

If the same rate of increase were to be seen over the 1981 to 1985 period as has been observed over the previous six years, output in 1985 would be more than double the 1980 figure of 730,000 gallons. While it is true that production increased by 2.8 times over the period between 1975 and 1980, this was from a much lower base.

There is little or no evidence on which to make a choice between the growth rates illustrated in figure 3. Both are dependent on assumptions made about new entrants to the industry and the rate of growth in output of individual wineries. In addition, consideration must be given to the effects of weather. It seems reasonable to expect that the wine production of most small wineries in 1981 will be no more than 1980 levels and in many cases it is expected to be below, due to the intensely cold weather during December 1980. What effect this might have on future expansion is

Figure 3. Projection of Total Production for New York Small Wineries, 1981-1985



not clear, but it may introduce a degree of caution especially in grape planting by winery operators and it may also discourage some new entrants to the small winery subsector.

Table 23. AVERAGE AGE AND GROWTH RATES TO 1980 AND 1985[a]
28 New York Small Wineries

Size Group	Average Age in Years to August 1980	Average Annual Growth to 1980[b]	Anticipated Average Annual Growth 1980 - 1985[c]
gallons		percent	
Under 10,000	1.3	126.6	37.0
10,000 - 29,999	9.1	30.4	12.7
30,000 - 200,000	7.8	32.1	13.8

[a] Age is defined the number of years the winery has been operating under current ownership.

[b] Growth rates based on data available from 1975 to 1980.

[c] Includes 7 entrants making first crush in 1980.

New Winery Entry and Exit

The number of new entrants to the small winery subsector has had a significant impact on the rate at which production levels have risen. In 1977 and 1978, new entrant wineries contributed almost 10 percent of the small winery production although in 1979 and 1980 the contribution was below 4 percent. The major impact tends to be in the first and second years after entry, when growth rates characteristically are high and volume of production can more than double from the entry level. The average growth rates by age of winery are given in table 24.

Table 24. AVERAGE GROWTH RATES FOR PRODUCTION, BY AGE OF WINERY
21 New York Small Wineries, 1975 - 1980

Year After Entry	Average Compound Growth Rate
	percent
1	160
2	83
3	66
4	25
5	14

The number of small wineries entering the industry has shown an upward trend since 1975, with the Farm Winery Legislation of 1976 producing a surge of entrants in 1977.

A slowing of the rate of entry seems likely. The effect of assuming a continuation of past entry trends would require that by 1985 there would be 76 new wineries in addition to the existing 35. This tripling of numbers in the space of 5 years would seem unreasonable especially in view of the fact that it would take an average entry of over 15 wineries per year.

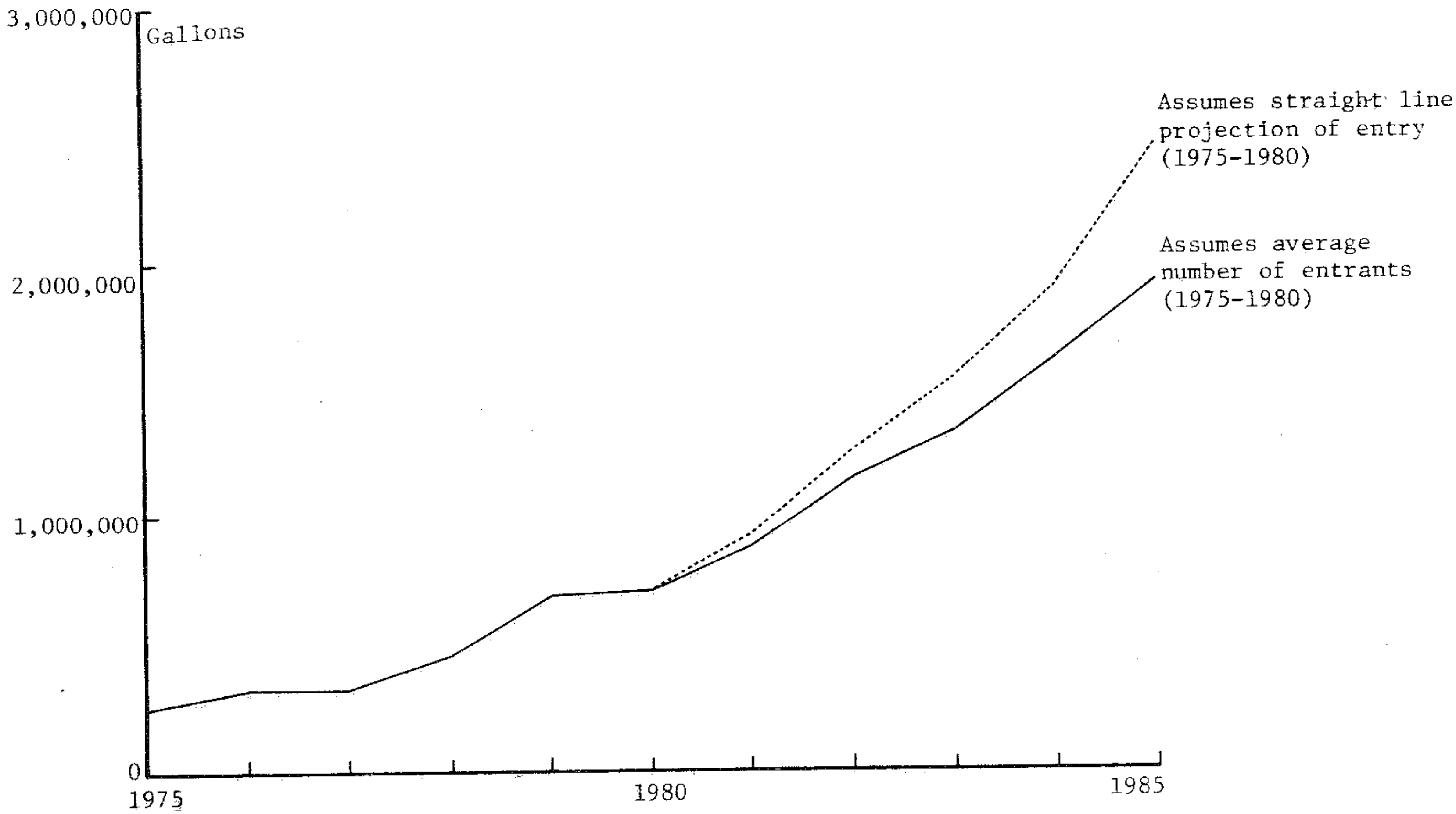
Table 25. GROWTH IN NUMBER OF WINERIES UNDER TWO ASSUMPTIONS
New York Small Wineries, 1981 - 1985

Year	Average Annual Entry 1975 - 1980		Straight Line Projection 1975 - 1980	
	Addition	Total	Addition	Total
1980		33		33
1981	5	38	9.8	42.8
1982	5	43	11.2	54.0
1983	5	48	12.5	66.5
1984	5	53	13.9	80.4
1985	5	58	15.3	95.7

Two alternatives to the above assumption are given in table 25 and illustrated in figure 4. They show the effect on total small winery output of assuming that entry will be continued on a straight line trend, based on the period 1975 to 1980, or that the number of entrants over the next five years will be at the average rate for the past six. A summary of the number of entrants, age distribution and output are given in appendix tables 1 and 2. With 5 new entrants a year and recent growth patterns the 58 wineries in 1985 would ferment 1.9 million gallons of wine. If the number of entrants increases in a straight line, then in 1985, 96 small wineries would produce over 2.4 million gallons. Both projections have the serious limitations that they assume that the growth of all wineries as they age follows the pattern exhibited over the last six years. While this was the only way of illustrating the entry and aging process, it seems likely that the rate of growth for individual wineries will decline over time. This would be a necessary assumption if realistic production levels were to be reached for 1985. In both the cases illustrated in figure 4, production for 1985 may be in excess of reasonable estimates. The straight line entry assumption is likely to produce a figure for total production that would be one million gallons higher than the earlier estimates given in table 22.

The previous assumptions regarding production levels for the industry have been made without taking into account possible exits from the small winery subsector. It would be unrealistic to ignore the possibility that some new wineries will fail, although there is currently no good evidence to suggest what the rate of failure might be. Dun and Bradstreet estimates

Figure 4. Effect on Total Production of Variation in Numbers of New Wineries, New York Small Wineries (1981-1985)



for all industries over a 20 year period up to 1976 suggest that between 30 and 45 firms will fail for every 10,000 registered firms (Dun and Bradstreet). Between 50 and 60 percent of the failures are firms that are five years or younger. In nearly all cases, failures were attributed to insufficient management expertise, and included in this was poor market research before product introduction.

SUMMARY

The rapid growth in the U.S. wine market over the period from the mid 1960's to the present time, and an increased awareness and use of wine has provided the environment in which the rapid increase in the number of small wineries in New York has taken place. At the time of the passage of the Farm Winery legislation in 1976, there were 14 small wineries, each producing less than 200,000 gallons of wine per year. At the time of writing in 1981, there were 35 of which 28 hold Farm Winery licenses. Mostly located in the traditional grape growing areas of the state, the 21 wineries in the sample group had an average crush of 22,616 gallons per year. Production ranged widely around the mean. Two wineries in 1980 produced less than 1,000 gallons, while one produced over 100,000 gallons per year. The average size on entry to the subsector was 6,600 although the majority of wineries entered at levels below this.

Small winery operators entered the winery business from widely diverse backgrounds. The modal group had been grape growers for some time before starting wineries, but 63 percent entered by alternative routes. Over half the principals and senior management of the wineries interviewed had had no previous background in grape growing or wine making. Despite this apparent handicap their ability to survive was apparently not adversely affected, although there is some evidence that the average size of winery is smaller within this group.

Small wineries in 1980 were estimated to have a total of 880 acres of vineyards. The leading varietal acreages were in the white French-American hybrids, Aurore and Seyval Blanc. Over 15 percent of small winery acreage was in three vinifera varieties, compared to less than 1 percent of acreage for these varieties in the state as a whole in 1975. Seventy percent of all grapes crushed for wine were French-American hybrids.

Operators have three main channels through which to market their wines. The smallest wineries and new entrants retailed the majority of their wines at the winery. For most wineries, direct supply to liquor stores developed as an alternative outlet as wine production increased. The number of liquor stores served averaged 20 per winery for the smallest size group and 290 per winery for the 30,000 to 200,000 gallon size group.

Wholesale distributors were used by a limited number of winery operators as a means of expanding the area over which their wines could be sold and to target sales at specific markets.

Data concerning the costs of marketing through each channel were not available, but it was hypothesized that considerable costs would be incurred when selling at the winery. The major costs were identified as the tasting room, staff required to conduct tours and tastings, and the wine used in tastings. Marketing costs per case apart from price discounts were believed to be substantially lower in each of the alternative channels.

Most wineries used a combination of sales through one or more of the channels. A theoretical procedure was developed to illustrate how wine might rationally be allocated between markets. It was hypothesized that equalization of revenues net of marketing costs would form the basis for optimum allocation.

The results of a survey of liquor store operators in the state suggested that the distribution of small wineries wines among upstate stores was quite wide. Penetration of the New York City market, however, appeared to be limited. Liquor store operators regarded inadequate service by the direct supply method and slow stock turns as barriers to significant expansion of stockholdings.

Wine prices for the study group ranged from a low of $0.99 for a non varietal wine to a high of $12.00 for a varietal vinifera. The average retail price per bottle for the two smallest size groups was found to be $5.10, and for the largest wineries the average was $3.42. Varietal wines produced from French-American grapes were priced above varietal labrusca wines but generally were below vinifera prices.

Growth in total output for this group of wineries probably will continue but at a slower rate than over the last 5 to 6 years. Slower growth will be due to increasing numbers of existing wineries reaching their planned maximum size. In addition, the number of entrants over the last two years has been high (6 in 1979 and 10 in 1980) compared to the average for the 1976 to 1980 period of five new wineries per year. Five wineries per year may be a more realistic entry figure for the coming years. Wine production by small wineries in 1985 is likely to be between 1.3 and 1.9 million gallons.

CONCLUSIONS

The farm winery legislation passed in June 1976 without doubt had an impact on the small winery subsector of the New York industry. Whether the dramatic increase in entry since 1976 would have come about without the encouragement provided by the legislation is open to question. It occured, however, at a time of growing interest in wines produced by small wineries. Whether the reduced license fee for farm wineries has been any more than a token incentive is also debatable. The responses from the questionnaire suggested that at least some wineries would have been established even without the farm winery legislation.

Certainly one of the main objectives of the legislation appears not to have been met. The amount of established grape acreage directly utilized by small wineries has been limited. In addition, the small wineries did little to solve the surplus situation that has existed for certain varieties. Because of this conflict in varietal use, establishment of a small winery will remain an infeasible option for most grape farmers unless a substantial part of their grape production is in the better white grape varieties, particularly French-American hybrids.

Despite the still relatively limited contribution of the small wineries to total wine production in the state, the fact remains that their production could more than double between 1980 and 1985. The overall increase in total volume being marketed raises the question of how easily the small wineries will be able to find markets for this increased production.

In the case of sales at the winery, greater emphasis will need to be placed on a good location on or close to a well traveled highway. In addition, an attractive and visible building will be essential. A good location with respect to highways may also be desirable if a substantial part of the production is to be distributed direct to liquor stores. Ease of access to major urban areas will reduce the costs associated with the use of this channel. This will not, however, always be compatible with good grape growing sites. In situations where operators are attempting to obtain high volumes of sales from the winery, they should consider the possibility of separating the sales facility from the major part of the vineyard.

In 1979, visitors to the small wineries bought approximately 250,000 gallons of wine or 35 percent of total production. By 1985 if a production volume of 1.5 million gallons is assumed, approximately 540,000 gallons will need to be sold through this channel if its share of sales to total production is to remain the same. Based on previous estimates the purchases per visitor averaged 0.63 gallons per adult. This suggests that by 1985 something over 850,000 visitors to the wineries will be required, an increase of 535,000, or more than double the 1979 level.

There may be scope for increasing sales of wine per visitor. An increase of one bottle per person even at 1979 visitor levels would raise total sales at retail from all wineries by 65,000 gallons.

Such substantial increases suggest that wineries will need to put greater emphasis into their own promotion designed to attract visitors to the winery. The New York State travel offices on the major highways will continue to be an effective method for wineries to present their literature to visitors to the grape growing areas. Small wineries, however, are unlikely to have sufficient funds to be able to attract all of the additional numbers and a major role is seen for the New York State Commerce Department to highlight accessibility of the small wineries in their various travel publications.

Advertising and promotion are likely to become increasingly important to the small wineries, but their limited funds will restrict the audience that they can reach directly. In liquor stores, use of point of sale material will not only help consumers but will also provide a useful information source for liquor store staff.

The need for brand recognition was emphasized earlier in the study. Any promotional activity, including events at the winery, that keeps the winery name in the public eye is likely to be beneficial especially for sales through liquor stores.

The problems of increasing sales to liquor stores were alluded to earlier in the study and they should not be underestimated. Increased price competition may result in some decline in the number of liquor stores in the state over the next few years. This, and the increased volume of small winery wine will inevitably mean greater competition for liquor store shelf space. Already shelf space is fully committed. This means that a new winery or existing winery will have to displace an already established product line from the shelf. Wineries with relatively narrow product ranges may stand a better chance of gaining entry than those with many labels.

The winery of average volume in 1980 of 22,616 gallons production, would have sold approximately 60 percent of production or 13,500 gallons direct to liquor stores and wholesalers. This probably included by both methods about 170 retail outlets, primarily liquor stores. Assuming that the winery by 1985 will be producing 50,000 gallons and that it still serves the same number of outlets then each store will have to take approximately 185 gallons, over twice as much as in 1980.

If total production reaches the estimated 1.5 million gallons by 1985, the total volume likely to be sold through liquor stores via direct supply and through wholesales will need to be 946,000 gallons. This would be over double the 1980 figure.

This should serve to further emphasize the likely increase in competition that new and existing wineries are likely to face in trying to enter the retail liquor store marketing. The same problems may also face the wholesale distributors. If the market does become increasingly competitive it is an open question as to whether the wholesaler will be able to do a better job of selling than the winery operator or salesman.

A number of wineries have in the past regarded the use of wholesalers as the least attractive marketing option by virtue of the considerable loss of margin compared to retail sales at the winery and sales direct to liquor stores. If in the future wineries fail to sufficiently expand sales through these two marketing options, they may be faced with having to market increasing quantities of wine through the wholesale channel.

Heavy competition for shelf space from imported and other domestic wines, particularly in New York City may mean that wholesalers will not be able to gain entry to these markets at the prices set at the winery. If this happens, then winery operators should expect that average net prices will decline as the proportion of wine sold through the outlets yielding the highest revenues falls.

To date, restaurants appear to have been an underutilized outlet for the small wineries' wines. Their potential as volume customers is likely to be limited, but there is the advantage that the wines will be seen and tasted by the customer group most likely to make repeat purchases at liquor stores or the winery.

The out of state market was mentioned by some small wineries as a further possibility for broadening their sales. While this may take some wines out of the competitive New York State arena, there would still appear to be considerable costs involved. A wholesaler would in almost all cases have to be used. Both recognition of the winery name and the wine varietal name (particularly in the case of French-American hybrids) are also seen as limitations to the expansion of this market. Good publicity has been gained for the wines of some of the state's small wineries in major daily newspapers. Future success in specific out of state metropolitan markets may depend on astute use of available feature space.

Despite the reservations expressed above, New York small wineries would appear to have a healthy, but likely a more competitive future ahead of them. Undoubtedly total marketing costs will rise as wineries find it increasingly difficult to make sales gains at the margin. Merchandising innovations and adoption of more sophisticated sales and marketing techniques are likely to be the keys to success.

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Appendix Table 1. GROWTH IN OUTPUT ASSUMING ENTRY PER YEAR EQUALS AVERAGE NUMBER OF ENTRANTS FOR 1975 - 1980
New York Small Wineries, 1981 - 1985

Number of Years of Operation	Average Size of Age Group 1975 - 1980	1981		1982		1983		1984		1985	
		No.	Production	No.	Production	No.	Production	No.	Production	No.	Production
			gallons		gallons		gallons		gallons		gallons
1	6,610	5	33,050	5	33,050	5	33,050	5	33,050	5	33,050
2	13,754	10	137,540	5	68,770	5	68,770	5	68,770	5	68,770
3 - 5	17,122	12	205,464	17	291,074	19	325,318	20	342,440	15	256,830
Over 5	47,111	11	518,221	16	753,776	19	895,109	23	1,083,553	33	1,554,663
Total		38	894,275	43	1,146,670	48	1,322,247	53	1,527,813	58	1,913,313

Appendix Table 2. GROWTH IN OUTPUT ASSUMING STRAIGHT LINE PROJECTION OF ENTRY OF NEW WINERIES
New York Small Wineries, 1981 - 1985

Number of Years of Operation	Average Size of Age Group 1975 - 1980	1981		1982		1983		1984		1985	
		No.	Production	No.	Production	No.	Production	No.	Production	No.	Production
			gallons		gallons		gallons		gallons		gallons
1	6,610	9.8	64,712	11.2	73,833	12.5	82,625	13.9	91,879	15.3	101,000
2	13,754	10	137,540	9.8	134,652	11.2	153,632	12.5	172,475	13.9	191,180
3 - 5	17,122	12	205,464	17	291,074	23.8	407,332	31.0	530.098	33.5	573,585
Over 5	47,111	11	518,221	16	753,776	19	895,109	23	1,083,553	33	1,554,663
Total		42.8	925,937	54.0	1,253,335	66.5	1,538,698	80.4	1,878,003	95.7	2,420,428