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SP 2000-06
June 2000



Staff Paper

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Processed Apple Product Marketing Analysis: Hard Cider & Apple Wine

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Hard Cider & Apple Wine

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Acknowledgements

This paper is issued as a preliminary section of the final report for the project:
“Development of an Environmentally Sound, More Profitable System for Production and Marketing of Value Added Processing Apple Products in the Northeastern United States.” Funding for the project is provided by an anonymous grant.

I would like to thank Brian Henehan (Senior Extension Associate, Department of Agricultural, Resource, and Managerial Economics) at Cornell University, and Bob Kime (Manager, Fruit and Vegetable Research Pilot Plant, Department of Food Science and Technology, NYS Agricultural Experiment Station) for their comments on the draft paper. I would also like to thank Ian Merwin (Associate Professor, Department of Fruit and Vegetable Science, Cornell University), Peter Saltonstall (King Ferry Winery), Bill Barton (Bellwether Hard Cider), and Carleton Yoder (American Hard Cider Company) for sharing their knowledge as I developed this paper.

Abstract

Hard cider and apple wine offer new value-added marketing opportunities to the apple industry. Both products are situated in rapidly growing categories of the beverage industry. The development of effective marketing strategies for these products requires an understanding of the forces driving competition in these markets. This paper provides background information to support competitive analysis and strategy development. Development of these markets will be positive for the apple industry, but the effect is likely to be limited in volume.

This paper is issued as a part of a larger project focused on the processing apple industry. The purpose of the paper is to provide apple growers and processors with preliminary information on the markets for hard cider and apple wine to support the analysis of marketing opportunities and the development of effective competitive strategies. This paper will be updated with additional consumer marketing research findings that will be included in the final report for this project.

Table of Contents

Section I	Introduction	1
Section II	Product Descriptions	5
Section III	Hard Cider Market and Industry Overview	7
Section IV	Apple Wine Market and Industry Overview	21
Section V	Apple Industry Impacts	27
Section VI	Summary	31
	Bibliography	32

Tables

Table 1	Hard Cider Products in the U.S.	11
Table 2	Apple Wine Products in the Northeast	22

Figures

Figure 1	Forces of Industry Competition	14
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Section I

Introduction

This paper is a preliminary section of the final report for a larger project focused on the Northeastern apple processing industry. As described below, the purpose of the project is to assist growers and processors in the industry to face the challenges presented by a changing market and to take advantage of opportunities offered by new information and technology related to production, pest control, product development, and marketing. This paper focuses on one segment of the processing apple industry, the market for hard cider and apple wine.

The New York Processing Apple Industry

New York State is the second largest producer of apples in the United States and the largest producer in the Northeast. An important part of the state's agricultural economy is the processing apple sector of the state's apple industry. Processing apples account for over half of the apples produced in the state each year, and apple processors have long provided an important marketing outlet for the state's apple growers.

The processing industry extends beyond the state's borders. In 1998, almost 20% of the state's processing apples were shipped to processors in other states. On the other hand, in the same year, over 90% of the apples processed by New York State processors were from New York State (NY Agricultural Statistics Service, 1999). While the in-state markets for processing apples are clearly the most important to the state's apple industry,

processors in other East Coast states also play an important role in providing a market for the state's apples.

In recent years, the processing apple sector has experienced increasing economic pressures: declining prices for raw product supplies, stagnant consumption of apple products, closure of major apple processors in the region, competition with low-priced imports of apple juice concentrate, and increased environmental regulation. These pressures are requiring the industry's growers and processors to respond with competitive strategies that will help to ensure their sustainability.

Cornell University Processing Apple Industry Research

To assist the industry in meeting the challenges of the changing market, Cornell University is conducting research on the production of processing apples and the development of new value-added apple products. This research is conducted with the support of an anonymous grant for a project entitled, "Development of an Environmentally Sound, More Profitable System for Production and Marketing of Value Added Processing Apple Products in the Northeastern United States."

The goals of this project are:

1. To develop a more environmentally sound, cost-effective apple production and integrated pest management system,
2. To stimulate growth of apple processing industry with new technologies that support commercial production of diversified, high value apple products, and
3. To assess economic impacts, marketing potential, and consumer reactions to new products.

The project includes faculty and staff from six Cornell Departments: Entomology, Plant Pathology, Horticulture, Food Science, Cornell Cooperative Extension, and Agricultural, Resource, and Managerial Economics.

Objectives of This Paper

This paper is issued as a part of the project described above. It concerns an important part of the processed apple industry, the markets for hard cider and apple wine. The purpose of this paper is to provide the industry with information on this industry segment that can be used in analyzing market opportunities and challenges and developing effective marketing strategies. Similar papers concerning other important segments of the industry will also be issued through this project.

This paper is a work in progress. Over the next year, additional marketing research, including consumer focus groups, will add to the findings of this paper. Furthermore, research conducted by other departments involved in the project will provide complementary findings. The final project report will incorporate all of these results.

Organization of this Paper

This paper begins with brief descriptions of the products. The main body of the paper is split into two sections focused on the hard cider and apple wine industries. Because more information is available on the hard cider market, the analysis of this industry is more detailed. These two sections are followed by an

analysis of the potential effects of trends in these processing markets on the apple industry. The paper concludes with a summary outlook for these markets.

Section II

Product Descriptions

Fermentation of apple cider or juice yields an alcoholic beverage known in the U.S. as hard cider. In some cases, the product is called apple wine. The distinction between hard cider and apple wine is usually made based on alcohol content, but there is much overlap between the two products. Apple wine is usually above 7% alcohol content, and hard cider is usually below 7%.

In Britain, where the product is popular, hard cider is known simply as cider. Other names for fermented apple juice are apfelwein (Germany), cyder (Devon and Norfolk, England), and scrumpy (Somerset, England).

To produce hard cider, apples are washed, then grated or hammer-milled, then pressed in a stone mill or hydraulic press. Many apple varieties can be used in the production of hard cider and apple wine, and the best selection of varieties is a matter of debate among producers of the products. However, the best products usually include some traditional cider varieties, which provide bittersweet and bittersharp flavors. Many different strains of yeast and methods of fermentation are used in producing hard cider.

Some hard cider contains only fermented fresh apple juice. In England, these ciders are known as “real” ciders. Other materials used in the production of hard ciders include apple juice concentrate, added sugar, acid, coloring, yeast, and preservatives. Most commercial hard cider producers use some of these ingredients.

Hard cider products may come in draft, keg, or bottled forms. Draught cider is clarified and stored in wooden barrels. Keg or bottled cider is pasteurized and stored in

aluminum casks. The product may or may not be carbonated. In the U.S., commercial hard ciders usually contain about 5.5% alcohol, and most are carbonated.

Apple wine is produced in a manner similar to the process for hard cider. The finished product is bottled, and it is usually not carbonated. Sugar or honey may be added in the fermentation process. Apple wine generally has an alcohol content of about 10-12%.

Section III

Hard Cider Market and Industry Overview

History of Hard Cider in the U.S.

In the U.S., hard cider is a recently re-introduced product for American consumers. The product was consumed widely in the 18th and 19th centuries in the U.S., particularly along the East Coast. Hard cider came to the U.S. with the first English settlers, who brought apple seeds with them to plant in their new home. The settlers used most of their apple crop for the production of hard cider. In 1767, per capita consumption of hard cider in Massachusetts is estimated to have been about 40 gallons per person annually (Fabricant, 1997).

In colonial America, hard cider was a family drink. Many people, including children, drank hard cider with meals. President John Adams was known to drink a pint of hard cider each morning to settle his stomach. Fermented cider sometimes offered a safe alternative to water because the alcohol prevented bacterial contamination. Cider mills were common throughout New York and New England. Families kept barrels of cider in their basements.

Cider remained a popular beverage until the Civil War when beer began to take its place in the American market. The influx of German immigrants to the U.S. boosted the popularity of beer. Made from grain, beer was cheaper to produce than cider. Beer was also easier to produce because it did not require the development of mature orchards to provide the raw material. This factor was especially important as settlers moved west and as population shifted from rural to urban areas. Beer also generally fermented faster

and more consistently, and therefore, it was more attractive to produce commercially. Early in the 20th century, prohibition dealt the final blow to hard cider's popularity in the U.S. until its recent resurgence.

U.S. Market for Hard Cider

In the U.S., hard cider was re-introduced to the market in the early 1990's. The product has experienced rapid growth over the past 10 years. In 1990, only 115,000 cases of hard cider were sold in the U.S. By 1995, the total was 1.6 million cases (Fabricant 1997). In 1997, the total was 2.7 million cases (Koeppel 1998).

Compared to other alcoholic beverages, hard cider is a small market in the U.S. In 1995, craft microbrewed beers had a market of 55 million cases in the U.S. (Sorini 1997). In 1999, hard cider accounted for less than 0.2% of the total U.S. beer market. However, the hard cider industry expects rapid growth. Domestic producers project sales of 75 million cases in less than 10 years (Fabricant 1997).

For comparison, in the late 19th century, U.S. hard cider consumption was about 22 million cases (Fabricant 1997). In the U.K. today, cider production is about 44 million cases per year. The population of the U.K. is about one fifth the size of the U.S. Imports and exports of cider must be considered to approximate U.K. per capita consumption accurately, but a rough estimate suggests that U.K. consumers purchase up to 75 times more hard cider per person than U.S. consumers do. This higher level of per capita consumption in the U.K. suggests an opportunity for further development of the U.S. market. At the industry's projected goal of 75 million cases per year, U.S. per capita consumption would still be many times less than that in the U.K.

In the U.S., hard cider producers are targeting 21 to 30 year olds as their primary market. In this group, hard cider consumers are split evenly between women and men. The product appears to appeal to female consumers more than beer products (Anonymous, 1998).

Hard Cider Industry Structure in the U.S.

Major suppliers of hard cider to the U.S. market and examples of regional and local suppliers are listed in **Table 1**. There are about 50 commercial producers of hard cider in the U.S. (Merwin, 1999). The largest domestic producers of hard cider are E. & J. Gallo and Boston Beer Company (producer of Sam Adams beer).

Until recently, two other major domestic producers were the American Hard Cider Company and the Green Mountain Cidery, producers of Cider Jack and Woodchuck ciders, respectively. Both of these companies were recently purchased by Bulmers of the U.K. (see next section for more information on Bulmers). After purchasing the Green Mountain Cidery in August 1998 and the American Hard Cider Company in December 1999, Bulmers accounted for almost 50% of the U.S. cider market. These U.S. facilities continue to product hard cider under their own brand names. Bulmers plans to produce 2.1 million cases of cider for the U.S. market through these two acquisitions. Bulmers also plans to increase distribution of its own cider products, Woodpecker and Strongbow in the U.S. and to add distribution of international beer brands to its U.S. activities (Truscott, 1999).

International supplies of hard cider to the U.S. are primarily from the U.K. In addition to the dominant Bulmers, Miller Brewing imports Taunton Cider to the U.S.

from England. The major exporter to the U.S. is Bulmers, which in addition to owning two U.S. cider companies, exports its Woodpecker and Strongbow cider products to the U.S.

Another large U.K. cider producer, Matthew Clark, was purchased in 1999 by Canandaigua Brands, an alcoholic beverage producer, distributor, and importer based in upstate New York. Canandaigua purchased Matthew Clark in part to access the company's well-developed distribution channels in the U.K. However, Canandaigua is also beginning to import a Matthew Clark cider brand, "K", to the U.S. The product was being test-marketed by Canandaigua in St. Louis and Atlanta in the spring of 2000.²

² K Cider will be packaged in 9.3 ounce bottles. The name is derived from a Middle Ages short-hand mark used by monks to indicate cider quality. The US product will contain 6.9% alcohol by volume. In Britain, the same product contains 8.4% alcohol. US laws require that products with an alcohol content of more than 7% be marketed through channels for wine and spirits. K cider will sell for about \$7 for a six-pack, and it will be targeted to 21 to 29 year olds. The product will be introduced by under the leadership of Canandaigua's marketing director Rob Vlosky, who developed and introduced the company's Arbor Mist fruit wine (see case study in apple wine section) (Kherrmouch, 2000).

Table 1: Hard Cider Products in the U.S.

Company	Product
<u>National</u>	
E. & J. Gallo	George Hornsby Draft Cider George Hornsby Dark 'n Dry Cider
Boston Beer Company	HardCore Crisp HardCore Black HardCore Cranberry Cider
Bulmers	Cider Jack Hard Cider Cider Jack Cranberry Hard Cider Cider Jack Raspberry Hard Cider Woodchuck Amber Draft Cider Woodchuck Dark & Dry Draft Cider Woodchuck Granny Smith Draft Cider Woodpecker English Cider
Taunton Cider (imported by Miller Brewing)	Dry Blackhorn Fermented Cider
Canandaigua Brands	K Cider
<u>Regional/Local</u>	
Bellwether Hard Cider Co. (Ithaca, NY)	Bellwether Hard Cider
Hock's Hard Cider (Proctorsville, VT)	Hock's Extra Dry Cider
Dodd Brothers (Hartwood, VA)	Dodd Brothers Moonbeam Hard Cider
California Cider Company (Graton, CA)	Ace Apple Cider Ace Honey Cider
Original Sin (New York, NY)	Original Sin Hard Cider
Jones Brewing Company (Smithton, PA)	Rebel Draft Cider
Hudson Valley Draft Cider Co. (Staatsburg, NY)	Maeve's Draft Cider Hudson Valley Farmhouse Cider
Berkshire Cider Company (Richmond, MA)	Johnny Mash Oak-Aged Hard Cider
West County Winery (Colrain, MA)	West County Cidre Doux West County Dry Cider West County Winery Baldwin

Global Hard Cider Industry

Historically, hard ciders were very popular across Europe. As in the U.S., the product's popularity waned, and consumption declined. In recent decades, cider has made a comeback in Europe. The West Country in England, Brittany and Normandy in France, and northern Spain have been the focus of renewed interest in cider. In these areas, cider is not only an important product, but also a tourist attraction. "Routes des cidres" attract tourists to on-farm tastings and restaurants featuring apples and cider. The European Union has supported this renewal in an effort to assist rural economies, and several European countries support the cider industry with research on technology, varieties, and production. A French government research center in Rennes has 20 full-time staff working on cider related research. In some areas in Europe, cider is the main market for local apples, and cider varieties offer farmers greater profitability than apples grown for the fresh market (Merwin, 1999).

One European company, Bulmers, is clearly a dominant player in the global cider market. In late 1999, the company reported strong profit growth (19.3%) due in part to its growth in the U.S. Bulmers has about 50% market share of cider in the U.K., and it has maintained strong domestic brands (e.g., Strongbow) despite a declining U.K. market. In late 1999, Bulmers reported 9% revenue growth in the U.K. while the cider market in that country was down by 3% overall (Truscott, 1999).

Bulmers intends to expand its global presence rapidly. It plans to pursue aggressive acquisitions in North America, Europe, Asia, and Australia, with a goal of earning 50% of its profits from its international investments (Truscott, 1999). In 1998-99, the company had sales of £315 million (U.K.).

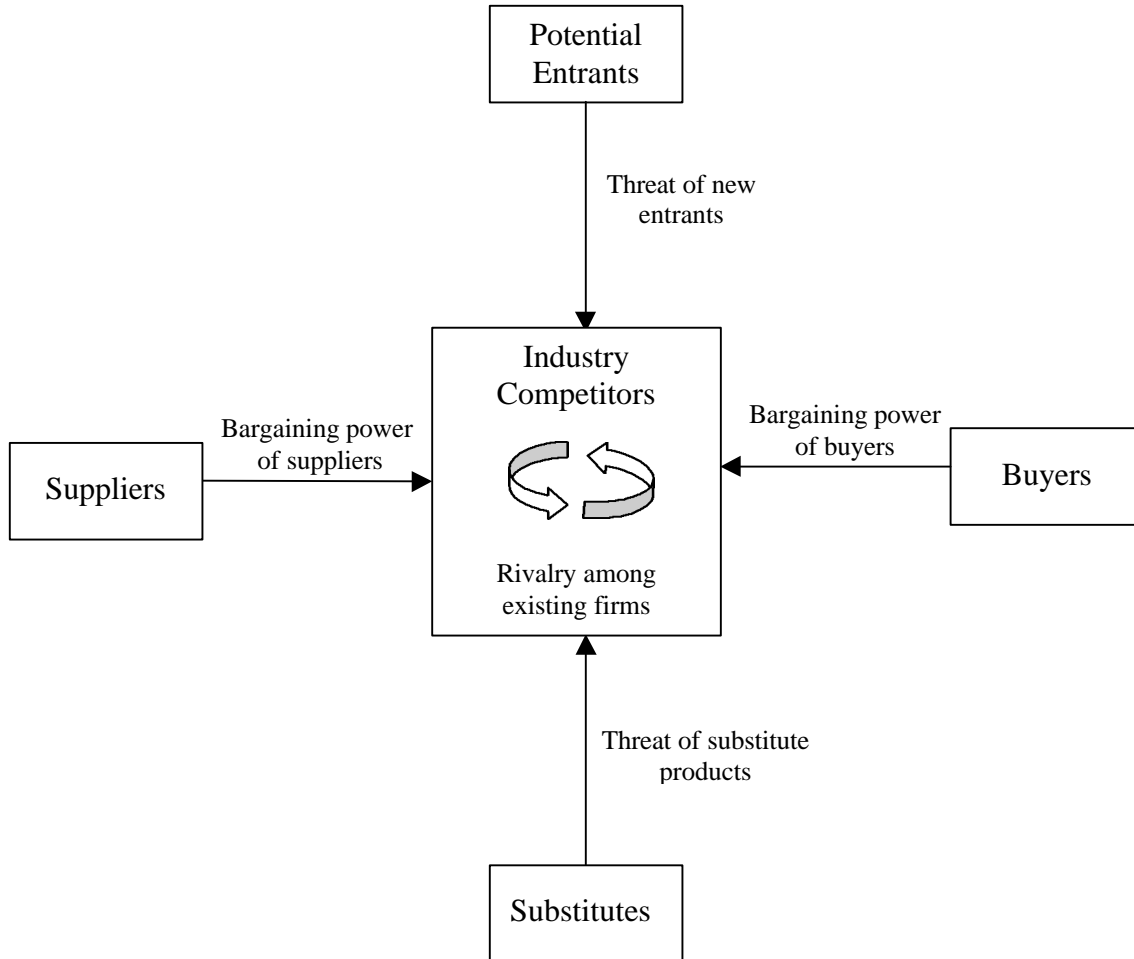
In addition to its recent acquisitions in the U.S., Bulmers has been active in China where it has a new joint venture with San Kong Brewery. Through this arrangement, Bulmers will invest £200,000 (U.K.) in upgrading a brewery in the Shandong province where it plans to produce its cider brands for the Chinese market. With 40% of the world's apple production located in China, there should be no shortage of raw apples to support this venture (Truscott, 1999).

In its home market, Bulmers introduced an organic hard cider in the spring of 2000. This product is the first mainstream organic cider on the U.K. market. Most organic ciders and beers have been offered by niche marketers. This product launch reflects Bulmers interest in capturing a part of the rapidly growing market for organic products. The product is priced at a premium above other mainstream ciders, but the price is lower than other organic brands. The product is expected to be carried widely in retail distribution in the U.K. (Dennis, 2000).

Competitive Analysis of the Hard Cider Industry

The hard cider industry can be analyzed in the framework suggested by Porter (1980) for competitive analysis. The Porter model includes five components, illustrated in **Figure 1**: threat of entry, pressure from substitute products, bargaining power of buyers, bargaining power of suppliers, and the intensity of rivalry among industry competitors. These factors are the driving forces of competition in any industry, and understanding these forces is critical to the development of an effective competitive strategy. The model is applied to the hard cider industry below.

Figure 1: Forces of Industry Competition (Porter, 1980)



Potential Entrants: Barriers to entry in the hard cider industry are fairly low. The industry does not require extraordinary investments in equipment. Barriers are particularly low for established beverage manufacturers that can use existing equipment and add hard cider to their product lines. Production requires some knowledge specific to the product, and knowledge will improve production efficiency and quality, but the knowledge needed to start production is not difficult to obtain.

Rapid growth will attract new entrants to the industry. Good margins also make the industry attractive. New niche producers of hard cider will likely continue to enter the market frequently over the next few years.

An example of a new potential entrant is the City Brewing Company, which purchased the former G. Heileman Brewing Company of Wisconsin from Stroh Brewery Company in late 1999³. The new company plans to produce and market beer, but it also views the hard cider market as favorable. While announcing plans for the brewery, one of the co-owners noted the company's interest in hard cider: "It's a fast-growing market. The margins are very good. So that's a market we're going to get into." The company plans to buy a hard cider brand name and to make use of apples grown in the region (Anonymous, 1999).

Suppliers: The bargaining power of suppliers of raw apples and apple juice concentrate to the hard cider industry is relatively low. A global oversupply of apples and apple juice concentrate make the raw products widely available and inexpensive.

However, traditional cider formulations require specialized apple varieties to provide bittersweet or bittersharp flavors. These cider varieties are not widely available in the U.S. and could be in greater demand by some cider manufacturers in the coming years. Some U.S. hard cider producers make use of bittersweet and bittersharp apple juice concentrates from Europe to provide the desired flavors. Suppliers of specialty hard cider varieties and juice concentrates have more bargaining power than other apple and apple product suppliers.

³ In the spring of 2000, the City Brewing Company dropped plans to purchase the Genesee Brewing Company of Rochester, NY.

The demand for traditional cider varieties will depend on product formulations. In the U.K., a shortage of cider apples has given growers that produce these varieties increased bargaining power. Some producers receive higher prices for these varieties than for fresh market apples (see Section V).

Buyers: The bargaining power of distributors and retail buyers in the U.S. is high. Hard cider is primarily distributed by beer distributors in the U.S. This distribution system is well-established and difficult to break into. Beer distributors generally do not have experience in handling hard ciders. They will usually want higher margins on hard cider products to compensate for the higher risk and costs of taking on new and lower volume products. Close coordination with distributors is needed to develop good working relationships.

Distributors serve as a critical link between producers and consumers by serving retail stores and foodservice establishments. In the retail grocery sector (where hard cider is sold in many states), rapid industry consolidation is changing the industry structure and increasing the bargaining power of retail buyers. Consolidated retail chains are increasingly seeking to deal with fewer suppliers, which limits opportunities to access retail distribution. Many retail chains are also requiring additional payments from suppliers for shelf space. Some retail stores are charging “slotting fees” to add new products and “failure fees” when new products fail to sell well. These fees reflect the increased bargaining power of retail chains.

Foodservice placement of hard cider is important to building category awareness. Consumers often sample a new product at a restaurant or bar before buying a multi-pack

at a retail store. Because hard cider nicely complements certain foods, an opportunity exists to build interest in the product through the foodservice sector.

Foodservice distribution may be through direct sales to restaurants or through foodservice distributors such as Sysco or US Foodservice. The large distributors have relatively high bargaining power. Like retail stores, these distributors limit the number of products they will carry. This industry is also experiencing consolidation. However, distributors respond to their customers and offer the products that customers request. Developing demand among the managers and chefs of foodservice operations to pull the product through the distribution system could be a more effective and efficient marketing strategy than trying to push a product through the system by focusing sales efforts on foodservice distributors.

Substitutes: The threat of substitute products is high for the hard cider industry. Hard cider competes directly with beer, but also with wine and other alcoholic beverages. Hard cider is a very small part of the alcoholic beverage market, and substitute choices for consumers are abundant. Producers must remember that the competitive frame for the product is broad. Most consumers will see the product as one choice among several alternatives, including beer, wine, and other beverages.

Hard cider offers a unique experience, but consumers can easily substitute other products when the novelty wears off. The industry hopes to avoid the path of trendy beverages (e.g., wine coolers) by returning hard cider to its traditional role in the U.S. and making hard cider a well-known alternative to beer. Achieving that status will require substantial investment in improving category awareness, as well as a bit of good luck.

Microbrewed beers have carved out a small, but sustainable category; hard cider may be able to follow a similar path.

Industry Competition: Competition within the hard cider industry is increasing. The emerging industry structure has three major national players: Bulmers, Boston Beer, and E&J Gallo. With its recent U.S. acquisitions, Bulmers is dominating the U.S. industry, and it seeks to expand aggressively, both in the U.S. and globally. Bulmers brings substantial marketing muscle to the U.S. market.

A new national player is entering the industry; Canandaigua Brands will soon enter the market with K Cider, a brand from Matthew Clark, a British cider maker that Canandaigua recently acquired. Canandaigua will bring additional marketing power and experience to this market. Their entry could also intensify competition in the national cider market.

The market still has openings for regional and craft producers. In their local markets, these producers will compete with the national brands for shelf space and brand awareness if they choose to distribute through retail stores. However, competition among the national brands will also help build category awareness that will assist the marketing of niche products.

Hard Cider Industry: Summary and Outlook

The hard cider industry is poised within the beverage market for continued growth. Cider appears to be following in the footsteps of microbrewed beers, which have been the fastest growing segment of the beer industry. This path offers great opportunity to the industry, but may also present limitations. Microbrewed beers have created a new

and seemingly sustainable segment in the beer market. However, microbrews remain a small segment of the market. Furthermore, the success of microbrews offered by small brewers brought rapid imitation from large breweries aiming to enter growth markets and maintain market share.

If cider is to achieve US consumption of 75 million cases per year, industry growth will have to surpass that seen in the microbrew industry over the past ten years. Thus, while the future of the industry appears to be bright, significant challenges and increased competition lie ahead.

In addition to its recent rapid growth, the hard cider industry has the strength of uniqueness working in its favor. The product offers a unique beverage that is positioned between beer and wine. It offers consumers a new choice or a new experience in the beverage category. Uniqueness is usually a favorable trait in the beverage market.

Hard cider is a versatile product, and it can be positioned to offer consumers sophistication, tradition, history, quality, and refreshment, among other experiences. The also product seems to appeal to women, who are not usually avid beer drinkers. This may offer a marketing opportunity to increase consumption.

The main industry weakness is the need to build a new category. A high level of investment is needed to create consumer awareness about the category. Another weakness is a lack of an organization to represent the industry in legislative matters and to collectively build consumer awareness. The industry faces legislative issues at the national and state levels regarding taxation and labeling. Current tax rules treat the product more like wine than beer and result in higher tax rates relative to beer products

that have a similar alcohol content. A coordinating organization would enhance the industry's ability to lobby for favorable legislation.

The strategic position of the industry appears to offer much promise at this time, but an increasingly competitive market awaits. The product still has growth potential, and the marketing muscle of the national players will likely benefit the industry as a whole by raising category awareness, as well as increasing rivalry among competitors within the industry. The entry of new competitors will probably continue over the next few years. Most new entrants will probably be local and regional cideries. Craft cideries will also likely grow in number. These operations will offer niche products including natural, organic, high quality, and specialty ciders.

For many regional and local hard cider producers, attempting to distribute through retail chains may not be the best primary marketing strategy. Competing with national brands, securing limited retail shelf space, and accepting the margins required by distributors will limit profitability in this marketing channel for those that lack the volume and marketing budgets of the national brands. However, direct marketing, similar to the European "routes des cidres", offers smaller cideries an alternate opportunity. This path has been very successful for craft and farm cideries in Europe. It may offer similar success in the Northeast, particularly in regions such as the Finger Lakes of New York where regional wineries have already established a stream of available consumers who are following the region's wine trails. Success in this industry may be difficult for niche products that are too similar to the national brands. Finding alternative marketing channels and product concepts will be important to the success of smaller producers.

Section IV

Apple Wine Market and Industry Overview

Very little information is publicly available on apple wine products and markets. In the Finger Lakes region of New York, five wineries produce apple wine products (see **Table 2**). In the Northeast, apple wines are produced at several New England wineries. These wineries offer several variations of apple wine, including varietal apple wines, wines blended from apples and other fruits, and cysers made from honey and apples.

Apple wine is a part of a small, but growing wine category of fruit wines and fruit-flavored wines. Fruit wines are produced at less than 200 fruit wineries across the U.S. Fruit wines are generally produced in colder climates, including the northern U.S. and Canada. Often fruit wines are perceived to be dessert wines or inexpensive, sweet wines that are consumed primarily for their low price. However, many fruit wines defy that perception. Fruit wines include a wide variety of products, some of very high quality. They are not always sweet, but can be semi-sweet or even dry.

In taste tests, people were not able to distinguish between traditional red wines and a blueberry wine produced by a Maine winery. That wine, “Winemaker’s Reserve Blueberry,” sells for \$23.99 and has been ranked in *Wine Enthusiast* magazine as one of the world’s top 40 red wines (Sharp 1999).

Fruit wine producers know that they are struggling uphill against consumer perceptions. Many consumers are quite impressed after tasting fruit wines, but getting them to taste the wines can be a major hurdle.

Table 2: Apple Wine Products in the Northeast

Winery	Product
<u>Finger Lakes</u>	
King Ferry	Apple Mystique
Hazlitt's 1852	Spyder Bite Apple Wine
Earle Estates Meadery	Apple-Raisin Wine Apple Cyser (apple/honey) Apple Enchantment (wine)
<u>New York</u>	
Applewood Winery (Warwick, NY)	Macintosh Apple Blossom Blush (apple and red grape wine, "Hudson Valley's White Zinfandel) Autumn Mist (dessert wine) Harvest Time (spiced with cinnamon and cloves) Stone Fence Hard Cider
<u>New England</u>	
Bartlett Estate Winery (Gouldsboro, ME)	Apple wine
Parson's Family Winery (York, ME)	Baldwin (like French white wine) Cortland (like Chardonnay) McIntosh (like White Zinfandel) Northern Spy (like Riesling) Maine Hard Cider
Nashoba Valley Winery (Bolton, MA)	Sparkling Apple Wine Baldwin Golden Russet Gravenstein Chryseton (dry red, elderberries and apples) Cranberry Apple Cyser (honey and apples) Maiden's Blush (antique apple variety with pears and elderberries) New England Cider (hard cider)

Over the past few years, several large U.S. wineries have been experimenting, quite successfully, with fruit-flavored wines, also known as “Wine with Fruit.” These products combine grape wines with fruit juices. The leading brands are Canandaigua Brands’ Arbor Mist and E & J Gallo’s Wild Vines. Canandaigua’s Arbor Mist was the first product in the market in this new category. The product is a fizzy, fruit flavored varietal wine with 6% alcohol. Flavors include Peach Chardonnay and Strawberry White Zinfandel (see Case Study).

The rapid success of fruit-flavored wines seems to reflect a consumer need that was previously unfulfilled. These products appeal to many consumers that find traditional varietal wines unappealing to their tastebuds and confusing to shop for. The new products offer these consumers the sophistication of wines with a more welcoming flavor and less need for consumer self-education. While one might expect the demographic appeal of these new wine products to be fairly narrow, the case study indicates that they may have broad appeal.

The wine market is highly fragmented. Most fruit wines (as opposed to the national fruit-flavored brands) currently serve regional niche markets. Unless one has the marketing resources of a national wine-maker such as E&J Gallo or Canandaigua Brands, niche-focused marketing is probably the best strategy in this category.

Many consumers drink wine for special occasions. Occasion-based promotion is an important strategy for marketing fruit-based wine products. Although limited market experience is available to evaluate apple wines, use of the product is thought to be highly linked to certain occasions. The product is well suited to summer activities, such as picnics and barbecues, and also to the winter holidays.

The market appears ready to accept fruit wine products, including apple wines. A recent wine industry study indicates fruit-flavored wines will become this decade's "wine coolers" (Hansen, 1999). The wine cooler comparison may be disturbing to some in the industry, because wine coolers were not able to sustain sales over time. The beverage market is highly affected by fluctuating consumer trends and interests. As with most beverage products, the long-term future for the fruit-based wine market is difficult to predict. In the near term, however, the market offers a good opportunity for launching new fruit-based wine products, including apple wines.

CASE STUDY

Canandaigua Brands **Arbor Mist**

Canandaigua Brands is a large international beverage company based in the Finger Lakes region of upstate New York. The company markets about 180 brands of wines, beer, spirits, cider, and bottled water in the U.S. and U.K. In the past several years, the company has built a diverse range of products through acquisitions of other beverage companies, and company sales have been growing rapidly. Sales for 1999-2000 were \$2.3 billion, an increase of 56% from the previous year.

Canandaigua is the second largest producer of wines in the U.S., after E. & J. Gallo. The wines it produces offer a wide range of products from inexpensive to premium brands. The company's wines include many well-known brands such as Paul Masson, Almaden, Inglenook, and Richard's Wild Irish Rose.

In 1998, Canandaigua introduced a new fruit-flavored wine product, Arbor Mist, which met with almost immediate success in the market. The company developed this new product with the support of extensive marketing research.

The research process started with an examination of how existing wine products fail to meet consumer needs. The company found that many consumers do not like the taste of wine and consider wine to be a drink for special occasions. Subsequent studies by the Wine Council in the U.S. have found similar results.

Canandaigua also found that these consumers were bored with beer and wine coolers. People want the sophistication that a varietal wine offers, but many do not like the taste. They found a surprising number of "closet Boone's drinkers" who liked the taste of Boone's fruity wines, but were too embarrassed to drink the product in public.

With these observations in hand, the company went on to develop a product that offers the prestige of wine, but a sweet, fruity, fizzy taste that would appeal to those consumers that do not like the taste of wine. During the product development process, Canandaigua experimented with 50 product prototypes and conducted 2500 consumer taste tests before developing the final product formulation.

For packaging, Canandaigua selected a frosted bottle, which has become standard for imitators in the category. Canandaigua selected a frosted package based on the success of this type of packaging in cosmetics and spirits (e.g., Absolut vodka). Consumers respond well to the packaging, and it offers the product an upscale look.

The company has carefully positioned the new brand. It offers less sweetness than wine coolers and other fruity wines, such as Boone's, but more sweetness and fruitiness than "entry-level" wines such as White Zinfandels. The wine is priced inexpensively enough to encourage sampling.

The product has been extremely successful. It was introduced with a \$2.5 million print ad campaign, a relatively small advertising budget for a national product introduction. In its first year on the market, the product sold 3 million cases and took a 3% share of the overall wine market. Of consumers that have purchased the product, 35% have made at least a second purchase. In the fruit-flavored wine category, Arbor Mist has 50% market share.

Since introducing Arbor Mist, Canandaigua has added new flavors and a new 1.5 liter bottle. The company has focused on generating sales through displays in retail stores. In the first year, about 50% of the volume was sold on display. The company has begun television advertising to maintain its lead over new imitation brands.

The company has been pleasantly surprised by the broad demographic appeal of the product. Women were expected to be the primary consumers of the product, but men have been drawn to the product as well. The company expected the product to sell best in the Southeast U.S., but found that it does well nationally, without much regional variation. Also, despite expectations to the contrary, experienced wine drinkers seem to be interested in the product and are counted among the product's consumers.

Some traditionalists do not like the product. They have complained it misuses varietal designations, such as Chardonnay. The product is regulated by the Food and Drug Administration because it has a low alcohol content, and the FDA does not regulate the use of varietal designations. Most wines are regulated by the Bureau of Alcohol, Tobacco, and Firearms, which regulates varietal designations and labeling.

Imitation products have quickly followed the successful introduction of Arbor Mist. Entrants include E&J Gallo, Sutter Home, and other major wineries. Together, these new products have carved out a new category within the wine market and created a new marketing opportunity for fruit-based wines.

Sources: Khermouch, 1999 [1], Khermouch, 1999 [2], Canandaigua Brands company publications

Section V

Apple Industry Impacts

Apple wine and hard cider are emerging apple product categories that can increase overall utilization of processing apples. On a local basis, new apple wine and hard cider producers can offer new markets for processing apples. However, both categories are small, and the effect on total apple utilization is likely to be limited on a national scale. Utilization of the U.S. apple crop for these products will also be limited by the lack of availability of traditional cider varieties and the use of apple juice concentrate.

Traditional European cider varieties are apples that have high tannin or flavonoid polyphenolic content. The tannins make the cider taste rich and complex, but they make the apples ill-suited for fresh consumption. The bittersweet and bittersharp flavors of these varieties are needed to produce high-end ciders. These varieties are generally not grown in the U.S.

In Europe, traditional cider varieties are more common, but many farmers destroyed their orchards in the early 1990's as a result of European Union subsidy programs, and recent growth in the cider market has caused shortages. Now, cider makers Bulmers and Matthew Clark are trying to secure their supplies by supporting additional plantings in the U.K. with low-interest loans, technical support, low-cost trees, and 30-year contracts to buy the fruit at prices higher than those received for some fresh market apples. These programs have encouraged the planting of over 4500 acres in cider varieties over the past few years (Merwin, 1999, Pickard, 1999).

Growing cider apples offers many benefits to growers. Production costs are lower than costs for fresh apples. Production is low-input because the apples do not have to meet fresh market cosmetic standards, and therefore they require little spraying or pruning. The tannins also make the fruit resistant to some pests. The apples can be mechanically harvested after being dropped to the orchard floor. Drops can be used because the fermentation process removes the threat of *E. coli* contamination (Merwin, 1999).

Despite these benefits, traditional cider varieties are not grown in the U.S. in significant quantities. Some growers may be reluctant to shift production to these varieties because their distinctive tart and sharp flavors limit the ability to sell them in other markets. Furthermore, the U.S. industry lacks the support for new plantings and technical expertise that is available in Europe from governments and cider companies. Research on the production of cider varieties in U.S. growing regions is not well developed, although some is being initiated.

Another limitation to increased apple utilization for hard cider and apple wine is the substitute use of apple juice concentrate in production. The low price of concentrate on the world market makes this an attractive alternative to pressing fresh apples. Concentrate also offers consistency of flavor, an important feature for nationally branded products. Some producers use concentrate to attain a specific flavor profile. To get the bittersharp and bittersweet flavors of traditional cider, some producers use European concentrates that provide these qualities.

Cider producers not only use juice concentrate; some cider product formulations include added sugars. For example, there are cider products in the U.K. that are made with only 30% apple juice.

Most U.S. brands of hard cider use primarily apple juice concentrate, with added malic acid. One exception is Hardcore Cider, which has two products that are made exclusively from fresh apple juice. Hardcore Crisp and Hardcore Black are made from special varieties of French and Italian apples. In 1999, the producers of Hard Core cider also made a limited edition specialty batch of cider for the Thanksgiving holiday. This batch was made from one hundred bushels of eight traditional cider varieties produced by a New England orchard that planted the varieties specifically for hard cider production. Hardcore, owned by Boston Beer Company, is interested in increasing its use of domestically grown cider varieties.

An alternative to the use of traditional cider varieties is the development of commercial blends using local varieties. For example, in New Zealand, Bulmers recently acquired a producer that makes hard cider from locally available Granny Smith apples. The cider is sweeter and less astringent than traditional ciders, but Bulmers is interested in exploiting the alternative flavor. It plans to introduce the product in the U.K. market (Anonymous, 2000).

Similarly, blends are being developed that utilize Northeast regional apple varieties. While some research at Cornell University is testing the production of traditional cider varieties in New York State, other research is exploring the potential use of common regional varieties in hard cider and apple wine products. For example, research has led to the development of a blend of Liberty and Northern Spy apples that

makes an excellent apple wine. Successful development and commercial adoption of blends that contain regional apple varieties would help to increase processing apple utilization.

Section VI

Summary

In the beverage market, uniqueness is a key factor to success. Apple wine and hard cider are unique beverages in categories that are currently experiencing rapid market growth. Each category has competition from nationally branded products that are backed by well-funded marketing efforts. Competition with these products will be intense in traditional wine and beer marketing channels. However, opportunities exist for the development of niche and regional products in both categories. New entrants should consider the potential of alternative marketing channels, such as direct marketing from farm cideries, and alternative products, such as craft ciders, varietal ciders and wines, and organic ciders and wines.

The effect of the development of hard cider and apple wine markets on the apple industry will be positive, but limited in total volume. Traditional cider varieties preferred for the production of these products are not available in significant quantities in the U.S. The development and commercial adoption of new blends using commonly available varieties would help to increase processing apple utilization. Research on such blends is being conducted at Cornell University through this project.

Over the next year, additional research on these and other apple products will be completed as a part of this project. This research will include the collection of consumer market information through focus groups and other marketing research methods. The final project report will incorporate these findings.

Bibliography

Anonymous. "Hard cider is expected to be the "microbrew" of the upcoming decade." *About Women & Marketing*, Vol. 11, No. 9, September 1, 1998.

Anonymous. "Sale of G. Heileman Brewery to Close by End of Week." *Associated Press Newswire*, October 27, 1999.

Anonymous. "Kiwi puts sparkle in British cider." *The Evening Post* (Wellington, NZ), March 17, 2000.

Dennis, Mike. "Bulmers Organic Debut Opens 'Fair Price' Sector." *Supermarketing*, April 7, 2000.

Fabricant, Florence. "Apple Juice with Grown-Up Fizz." *The New York Times*, January 29, 1997.

Hansen, Melissa. "Premium Wine Consumption Growing." *Good Fruit Grower*, April 1, 1999.

Khermouch, Gerry. "Canandaigua's Vlosky Notches His Last 'K'." *Brandweek*, Vol. XLI, No. 9, February 28, 2000.

Khermouch, Gerry. "Bill Enchermer/Rob Vlosky: Play Misty." *Adweek*, Vol. 40, No. 41, October 11, 1999 [1].

Khermouch, Gerry. "Made in the Mist." *Brandweek*, Vol. 40, No. 28, July 12, 1999 [2].

Koeppel, Fredric. "America turns its taste buds to hard cider." *The Detroit News*, February 24, 1998.

Merwin, Ian. "Hard Cider: An Old-New Apple Product." *New York Fruit Quarterly*, vol. 7, no. 3, 1999.

New York State Agricultural Statistics Service. *New York Agricultural Statistics 1998-99*, August 1999.

Pickard, Jim. "Cider with profits is hope of the west country." *Financial Times*, December 14, 1999.

Porter, Michael. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. The Free Press, 1990.

Sharp, David. "Maine Vinter Wants Respect for Fruit Wines." *Associated Press Newswire*, September 30, 1999.

Sorini, Marc. "US Cidermakers Sow Seeds for Future Growth at Historic Meeting." *Barley Corn*, May 1997.

Truscott, Brian. "HP Bulmers GBP1 Billion Global Vision Still On Track." *Dow Jones Newswire*, December 13, 1999.