Market Opportunities for Michigan Fruit Products

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This analysis focuses on some of the major fruits produced in Michigan with a particular emphasis on those that are produced or processed by cooperatives. These include apples, tart cherries, grapes currently produced for juice and blueberries. This analysis is a result of a conversation with a leader in the fruit industry who mentioned a need for innovation in the sector, due at least in part, to increased foreign competition. Funding for this study comes from a grant provided by the U.S. Department of Agriculture Rural Development.

Introduction

Michigan's fruit sector faces a number of issues. Among the issues facing fruit producers and processors includes mature markets with limited growth potential. Another issue is increased foreign competition. In both of these instances one solution is to develop new products and markets that appeal to consumers. This analysis focuses on some of the major fruits and fruit products produced in Michigan. These include grapes produced for grape juice, apples, tart cherries, and blueberries. Michigan is a major producer of these fruits, and in the case of cherries the dominant producer in the U.S. These fruits are amongst those most often produced, marketed and processed by members of cooperatives. Through cooperatives, farmers are able to take advantage of economies of scale and reduce their cost of production and negotiate higher prices.

Cooperatives are among the largest marketers of fruit, Sun Maid Growers, Sunweet Growers, and Ocean Spray are among the top six marketers of fruit products in the U.S. (Fruit, p.24). Although it should be noted that private label is the dominant seller of fruit and fruit products.

In some respects, the potential for increased fruit consumption is great. The per capita consumption of fruit is still about 50 percent of the recommended amount according to the USDA. This is despite the fact that more than 90 percent of consumers surveyed purchased fruit within the last three months (Fruit, p.30). Fruit is widely consumed, but at a comparatively low level. Fruit also has the ability to be consumed in many forms: fresh, canned frozen, juice, and smoothies. The growing interest in alcoholic beverages is another potential outlet for fruit.

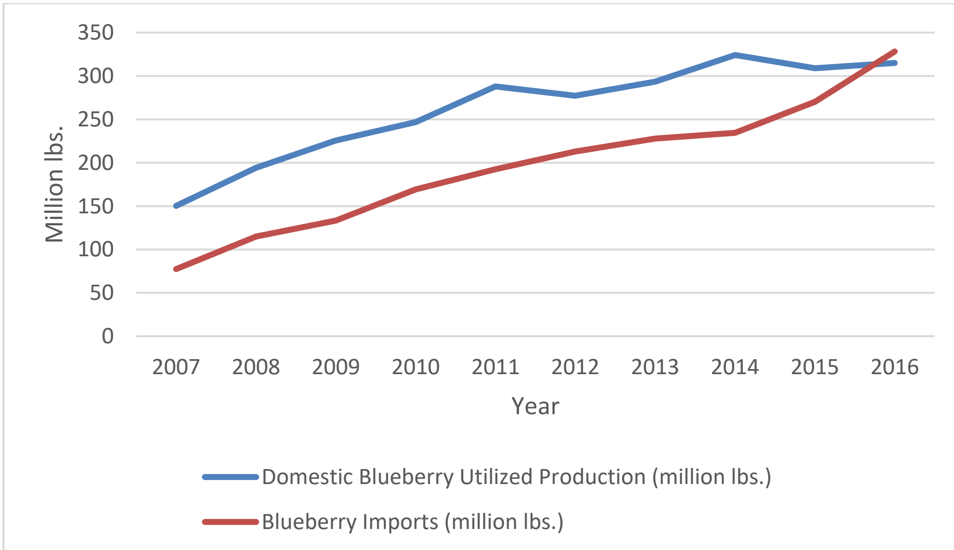
While there are several positive trends that fruit processors and producers can take advantage of, there is no single solution to the issues facing the sector. Instead of one commodity wide solution that focuses on being the low cost producer; this analysis outlines several products that could present an opportunity for enhanced profits.

This analysis will analyze current production trends for these commodities. Then some of the sectors will be analyzed. This includes the fresh market and beverages sectors. The focus will be on the consumer. Over time, the fresh market has grown in importance and traditional product forms, such as frozen and especially canned, have declined in importance. This has threatened some old line businesses but creates opportunities for others.

Trends in U.S. Production

National trends vary from commodity to commodity. The production of blueberries and blueberry imports have shown a consistent increase from 2007 through 2016. This is shown in table 1. Michigan is a major blueberry producer, ranking third in the nation in 2016.

Table 1: Blueberry Production and Imports 2007-2016

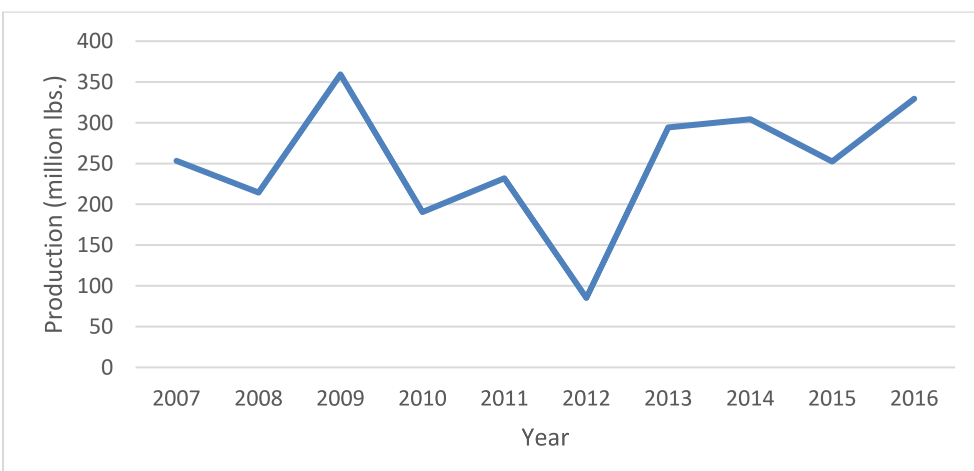


Source: USDA

From 2007 through 2016 domestic production more than doubled from 150 million pounds in 2007 to more than 324 million pounds in 2014. There has been a slight decline since then. Imports have increased even faster with imports increasing from more than 77 million pounds in 2007 to more than 328 million pounds in 2016. In 2016 imports exceeded domestic utilization. It should be noted that imports vary seasonally, at least in the fresh market there is somewhat limited competition between imports and domestic production. Nonetheless, the rapid expansion of blueberry production and imports could put downward pressure on prices in the future.

Tart Cherry production has varied widely from year to year but appears to be fairly stable. There appears to be no upward or downward trend. This is shown in figure 2.

Figure 2: U.S. Tart Cherry Production 2007-2016

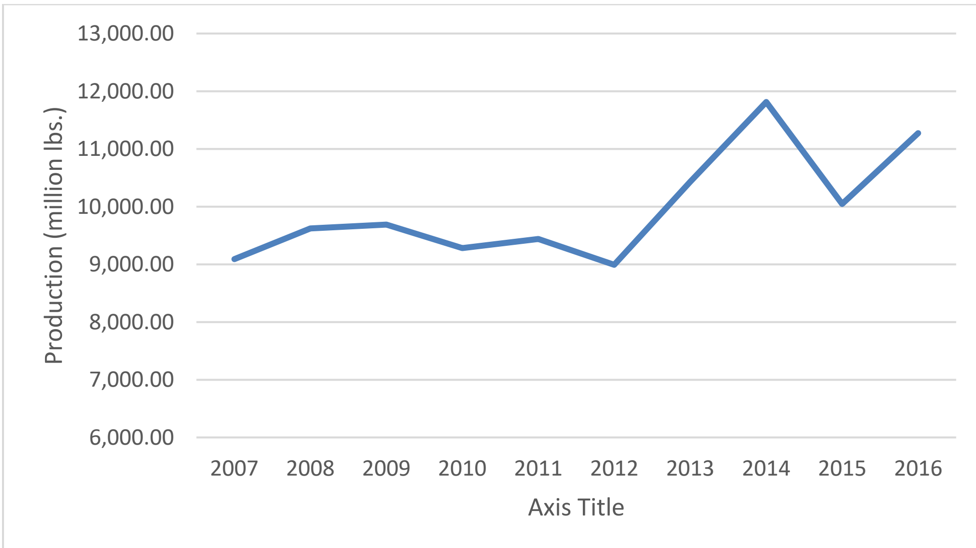


Source: USDA

Tart cherry production in the U.S. is dependent on what happens in Michigan which generally produces about 75 percent of the tart cherries in the U.S. A good example of this is the dramatic reduction in production in 2012 due to a crop failure in Michigan. The tart cherry industry faces strong foreign competition in some markets, this is particularly true for tart cherry juice concentrate.

Apple production was steady until the early 2010s and has increased since particularly since 2012. This is shown in figure 3.

Figure 3: U.S. Apple Production 2007 – 2016



Source: USDA

From 2007 through 2011 output varied from approximately 9 million pound to about 9.7 million pounds. There has been a large increase to almost 12 million pounds in 2014; it appears that overall, the potential production of apples has increased by 20 to 25 percent. Depending on the year Michigan ranks either second or third in the nation.

It is difficult to generalize apple production. Some varieties are well suited to the fresh market; some for baking; some for juice; and some are used for multiple purposes. As is the case with blueberries and tart cherries, there is strong foreign competition especially for apple juice concentrate.

It is very difficult to assess the grape sector. Nationally grapes are used for table grapes, raisins, wine and nonalcoholic beverages. In Michigan wine grape production appears to be increasing while juice grape production is steady at best. The vast majority of the juice grapes are grown by a cooperative who sell their grapes to another cooperative.

Major Developing Consumer Trends

Several trends that present both opportunities and treats to different industries. A major developing trend is trust. Consumers are less trusting in institutions, and are willing to spend dollars on products that retain their trust. The fact that many people get their information from social media means that firms engaged in fruit production and processing must track and protect their reputation. The good news is that for the most part Michigan has a good reputation for producing high quality products, and Michigan residents in particular have a strong attachment to Michigan made products.

One way to take advantage of this is to market these products as part of a “Northern Diet”. As opposed to Mediterranean fruits such as oranges, grapefruit and lemons, the focus would be on fruits and berries such as apples, cherries, blueberries and strawberries. Marketing a “Northern Diet” would be similar to the increased interest in the Nordic Diet.

In order to take advantage of this need for trust consumers put a high value on transparency. This includes not just production practices but practices such as wages paid to workers, advertising and promotion that accurately portrays product characteristics and the firm’s values as well. While efficiency remains important it is no longer sufficient. Even farmers will face increased pressure from buyers to meet consumer expectations. This will entail additional paperwork; governmental regulations will become less important over time but non-governmental regulations will become more important. However, those farms and firms that are successful in meeting this changed environment will increase their likelihood of being successful.

Another trend is the consumer’s abiding interest in value. Value has long been a driver in the agri-food sector. Value became more important as a result of the recession in the late 2000s and early 2010s and it has remained very important as household incomes have stagnated. The way a consumer perceives value can be visualized in the following equation.

$$\text{Value} = \frac{\text{Perceived Benefit}}{\text{Price}}$$

Value is determined by the consumer and not the firm. Nonetheless there are two ways to boost value in the mind of the consumer. The first is to reduce the price; this is the traditional way to boost value in the agri-food system. This is a cost driven factor; the most efficient producers will be able to be successful. The other way to increase value is to increase the perceived benefit to the consumer. This can be done in a wide variety of ways including providing additional health benefits, enhancing convenience, and providing a truly indulgent or unique experience. By increasing the perceived benefit, it is possible for a firm to charge a higher price for its products.

Health and wellness remains a major consideration for consumers, and fruit products are in an excellent position to take advantage of this trend. This is particularly the case given the comparatively low per capita consumption of fruit. Some fruits such as apples have the added benefit of being a healthy option that can be consumed on the go. The tart cherry industry has also been successful in tapping into this trend by developing the dried cherry industry. However, dried cherries are still less widely available than raisins, a close substitute. One potential market for some fruit products is people with diabetes; approximately 9.5 percent of the U.S. population has diabetes.

Fresh, Canned, Dried, and Frozen Fruit

The fresh, canned and frozen fruit markets are mature, and sales are essentially growing at about the rate of growth for the U.S. population; although the fresh market is estimated to grow by 2 to 3 percent per year through 2023 (Fruit, p.17). The market for fresh fruit is growing at the expense of frozen, and especially canned and jarred fruit (Fruit, p.10). Overall, purchases of fruit were in excess of $50 billion in the U.S., of which 91 percent was fresh fruit (Fruit, p.10,17). One positive aspect of consumer behavior is that a 27 percent of consumers surveyed say they have difficulty in eating enough fruit and 25 percent say that fruit often goes bad before they can eat it (Fruit, p.12). Developing products that make it easier for consumers to eat fruit, and packaging that preserves fruit could be successful.

One bright spot is the increasing demand for organic fruit (Fruit, p.10). Consumers still appear to be interested in organic products despite the fact that they often command a price premium compared to conventionally produced fruit. Conventional fruit products can also take advantage of the lack of trust in GMO products to inform consumers to the fact that their products are GMO free. Conventional producers could also focus on reducing or eliminating pesticide residues in fruit. This appears to be a particular problem for apples and cherries (Fruit, p.20).

A major issue facing the fruit sector is the low birth rate which hit a record low in 2017. In 2017, only 27.2 percent of households had children under 18 (Fruit, p.11). Fruit producers and processors need to develop products that appeal to adults. Single serve packaging and products with an adult taste profile (e.g. less sweet, less sugar added), may find a willing market. One example would be fruit cups that are targeted to adults (Fruit, p.25), such as fruit cups mixed with grains to promote digestive health.

As mentioned in the previous section, authenticity and trust are product attributes consumers are interested in. Fresh fruit can use this trend to its advantage, and while it may be more difficult, so can processed fruit products. Products will no added ingredients, little or no added sugar, and packaging that focuses on freshness and all natural ingredients can be used to promote new products.

One area of growth is the frozen fruit industry. While it has been stagnant, the industry is expected to grow by 61 percent from 2018 to 2023 (Mintel, p.18). Waste is less of an issue with frozen products, and there is a widespread belief that fruit for the frozen market is picked when it is most ripe. Frozen fruit is also well suited to be used in smoothies and other fruit based drinks. While dried fruit is a smaller market than the frozen market, dried fruit is also poised for growth. Convenience is a major draw for dried fruit, and dried fruit has a wide variety of potential applications, including snacks, salad toppings, and granola just to name a few.

The primary outlet for fresh, canned, frozen, and dried fruit remains supermarkets although mass merchandisers such as Walmart, Meijer and Target are of growing importance. One possible outlet could be drugstores, especially for dried fruit products. This could be marketed as a healthy option to candy and chocolate that is usually for sale at drugstores.

Nonalcoholic Fruit Drinks and Juice

The juice market is an important outlet for Michigan grapes, apples, and cherries. It is estimated that retail sales of juice will be $19.5 billion in 2018 (Juice and Juice Drinks, p.10). The U.S. leads the world in per capita juice consumption at about 10 gallons per person according to Mintel's Global New Product Database. However, the market is declining; the decline in 100 percent juice the primary reason for decline in juice purchases. Concerns about sugar content is an underlying cause for the decline (Juice and Juice Drinks, p.10). Consumers' primary juice preferences are for products that are natural and low in sugar (Juice and Juice Drinks, p.53).

One consumer segment that has potential is young consumers known as the iGen, these consumers are just beginning to enter adulthood. They are interested in juice products, especially those with increased functionality – added vitamins, electrolytes, etc. (Juice and Juice Drinks, p.11). These consumers might also be interested in juice products that are naturally low in sugar (Juice and Juice Drinks, p.59), such as cherry juice. Juice drinks also remain popular with parents of small children (Juice and Juice Drinks, p. 12). Many of these parents are interested in organic juices (Juice and Juice Drinks, p.31). Popular product claims are environmental friendly packaging, kosher, and no additives or preservatives according to the Global New Products Database. Most fast food restaurants juice offerings are somewhat limited. Working with a restaurant chain to sell more juice, especially grape, could be an outlet.

One market that has potential is fruit smoothies. Smoothies are defined as blended drinks made with fruit and/or juice, with some type of thickener often a dairy product such as milk or yogurt (Made to Order, p.8). These products are particularly popular with young adults and teenagers (Made to Order, p.11). Smoothies can be consumed on the go and prepared smoothies have the advantage of being very convenient. While some smoothies can have a high calorie content they are also an easy way for a consumer to get their daily serving of fruit. Fruit smoothies have the potential to be marketed as a healthy indulgence (Made to Order, p.19). In addition, among those consumers surveyed, fruit and berries were the smoothie ingredients with the most interest (Made to Order, p.34).

Smoothies could also be used as a dinner drink. Fruit is most often consumed at breakfast and lunch; it is much less commonly served for dinner (Fruit, p.36). In addition to smoothies, dried fruit as a salad ingredient or fruit cups designed for adults could also be an opportunity to increase fruit consumption during dinner. They can also be marketed to men as an after workout beverage (Made to Order p. 25).

A major barrier to growth to both juice and smoothies is consumer concerns with respect to sugar (Juice and Juice Drinks, p.16). Twenty percent of consumers surveyed believe that juice has too much sugar to be truly healthy (Juice and Juice Drinks, p.49). Lower sugar options could find a market as could naturally flavored water. Bottled water is now a major market but it is boring, and according to the Global New Products Database, 44 percent of juice drinkers cite hydration as the most appealing attribute when buying juice. A naturally flavored fruit water could be successful. A fruit flavored infused sport or energy drink could also find a market. These products could appeal to the demand drivers of authenticity.

It might be the case that consumers find single flavored juices dull. Juice from multiple fruits could find a market. One potential could be mixing a sweet juice such as grape or apple with a juice with a lower sugar content such as cherry. Mixing Michigan based juices with Mediterranean juices such as orange, lemon, and mangoes could appeal to younger consumers, and the growing Hispanic and Arab populations.

Juices that appeal to digestive health may be effective (Juice and Juice Drinks, p.43). Some juices are naturally high in fiber. Juices that promote digestive health are likely to appeal to older consumers; this is a growing market. Over 15 percent of the population is 65 years old or older, and the number of people 65 and older is to increase, rising to 71 million by 2030. Another way to appeal to health is to develop non-alcoholic juice products that have a taste profile similar cocktails (Juice and Juice Drinks, p.44). These juice products have the added benefit of being convenient compared to mixing cocktails.

Related to smoothies are drinkable yogurts. The increased production of drinkable yogurts could use both Michigan dairy and fruit products. Both blueberries and cherries could be used as a fruit base for a drinkable yogurt. Drinkable yogurt could be used as a on-the-go breakfast or an after workout snack (Juice and Juice Drinks, p.57).

Alcoholic Drinks

Alcoholic beverages present a strong opportunity for growth. The apple cider industry continues to grow although the rate of growth appears to be declining. Craft distilleries are growing rapidly (Dark Spirits, p.31), and are poised for growth throughout the state of Michigan. As is the case with craft beer, there is an increased interest in locally produced high quality spirits. Craft distilleries could be looking to develop fruit flavored products, especially for their clear spirits.

Dark spirits, including brandy has seen a 23 percent increase in volume sales over the past 5 years (Dark Spirits, p.10). Brandy has a particularly high potential for growth (Dark Spirits, p.17), and is well suited for fruit infusion such as cherries. Some white spirits such as vodka and gin have even more potential because they have a more neutral taste profile and are better for suited fruit infusions.

One barrier to the growth of dark spirit consumption is the fact that most drinkers are men. Fruit flavored dark spirits could appeal to women. Furthermore, women are more likely than men to drink flavored vodkas (White Spirits, p.35). They could also benefit from not directly competing against imported Scotch and Irish whiskies. Blended spirits could also provide the experience of a mixed cocktail without the work and skill needed to mix drinks.

Summary

Michigan is a major producer of some fruit, especially cherries, apples, blueberries and grapes for grape juice. Despite this fact these commodities are facing a series of challenges, particularly increased foreign competition and concerns about sugar content. In order to overcome these challenges, processors and producers will have to innovate to develop new products and markets. Cooperatives have the potential to drive this innovation due to their relationships with the members, their ability to take advantage of economies of scale, and in some cases, their experience has processors. Profitable innovation is possible, but there is no single commodity based solution. It will require multiple differentiated products.

On average, U.S. consumers eat about half the recommended amount of fruit. Non-traditional food and drink items could help consumers consume more fruit. Smoothies and alcoholic beverages have particular potential. Fruit products that position themselves as healthy indulgences have potential, this includes smoothies and fruit products that could be used as desserts. Juice also has potential for expansion, especially lower sugar juices and juices that are blended or are geared toward older consumers.

Consumers are also interested in products that are authentic and are high quality. Michigan has a good reputation for producing high quality products, and Michigan residents are very loyal to their state. Also, locally produced products are a strong demand driver throughout the country. Focusing on fresh high quality products could be a successful strategy. Another possible method is develop an Northern Diet, a diet that features fruits that are grown in Michigan and other Northern States, as an alternative to a Mediterranean diet.

References

Mintel (Dark Spirits). *Dark Spirits U.S.*, 2017.

Mintel (Fruit). *Fruit U.S.,* 2018.

Mintel (Juice and Juice Drinks). *Juice and Juice Drinks,* 2018.