

Appendix II

Oversupply of Small, Thin Markets

This appendix presents the general economic theory behind the operations of small, thin commodity markets and provides three case studies to illustrate the consequences of oversupply.

General Economic Theory

Agricultural commodities are generally homogeneous and undifferentiated. Small, thin (niche-like) markets may develop due to changes in demand, such as a shift in consumer tastes, or changes in supply, such as a new production technology, a new product, or a new use for a traditional product. Oversupply in small, thin markets can result from supply-side phenomena, demand-side phenomena, or both.

When the stimulus comes from the supply side, innovators may actually have to cultivate a market for their product. Provided that expectations about production efficiencies hold true, early firms that discover and serve the market are able to realize a significant return. However, the early firms may not be able to deter new entries. When new firms enter, they are not aware of the number of other new entrances or the extent to which original firms are expanding production. Total supply may increase by more than what firms expect, driving prices down. For less efficient firms, price may be below average cost and they will exit the market. As the market matures, information is exchanged among buyers and sellers and parties develop more accurate expectations of market behavior.

On the demand side, changes in consumer preferences may stimulate a new or added demand for a product. With expectations for continued growth in demand, producers respond to initial price incentives by entering the market. If demand does not expand as expected, the market finds itself oversupplied and prices decline.

In some cases, expectations about production efficiencies and future growth in demand combine to define a potential niche market. When one or both of the expectations fall short, the market becomes oversupplied and prices fall.

The extent of any price decline in small, thin markets that are oversupplied depends on secondary markets. The availability of a secondary market limits the price

decline in the primary market; its absence sharpens the price decline and may force out all but the most efficient producers.

Losses incurred by producers/growers in an oversupplied niche market are a function not only of net returns to the production process, but of the size and specialized nature of the initial investment. Investment losses of the firms who exited the market will depend on the firms' sunk costs and the degree of specialization. If the initial investment was high, the losses may be greater. The degree of specialization is also important. If the plant and equipment can be used for another economic activity, some of the losses may be recouped or offset. However, if the equipment is specialized, the salvage value may be low.

Case Studies

A review of particular niche markets—poinsettias, emus, and mesclun—may serve to illustrate the issues involved in oversupply.

Poinsettias. *Large numbers of entrants led to oversupply. No secondary markets were available, so prices declined. Investment in specialized resources was minimal, so that many producers were able to shift resources to other horticultural products.*

U.S. growers produce more than \$900 million of potted flowering plants annually, with poinsettias the most important. Only small quantities are imported from and exported to Canada. Poinsettias are a perishable product, demand is highly seasonal (November-December), and no secondary markets exist. Therefore, with imperfect knowledge about market supply and prices, growers can easily overproduce and prices can fall quickly, particularly since no secondary markets exist. Grower numbers probably peaked in 1992 and have since trended downward due to declining profit margins. Similar cases are found with other potted flowering plants, such as Easter lilies. Because production processes are similar, growers will typically switch to producing other flowering plants, foliage plants, or bedding and garden plants if profit margins decline.

Emus. *Significant investment in specialized resources (breeding stock), unexpectedly high production costs, and limited demand created substantial losses to growers.*

Production of ratites—ostriches, emus, and rhea—has occurred on a small scale in the United States for about 100 years. Starting about 1985, a few studies indicated that ratites might be efficient converters of feed. At the time, there was a known, albeit small, market for meat, hides, emu oil, eggs, and feathers, but it was expected to expand as production increased. This raised the price of breeding stock. U.S. ratite production entered into what is called the breeder phase. As more producers became convinced that ratites would be profitable, the demand for birds grew and the price of breeding stock skyrocketed. As long as producers were convinced that more breeding stock (and eventually products) could be marketed, the price remained very high. When the demand for products did not develop as growers had hoped, the demand for breeding stock declined and the price of breeding stock plummeted. Investment in the production of ratites, particularly in breeding stock, expanded much more rapidly than demand for products. Emus have received the most attention, as producers have let them run wild or killed the birds to avoid having to feed and care for them. In many cases, growers incurred significant losses when prices fell. There will probably continue to be a small market for some products and market size may even expand over time, but investment and production increased too fast, too soon.

Organic Mesclun. *Increased consumer demand for a popular new product led to high prices. Production costs and efficiencies for organic mesclun were not distinctly different from alternative (nonorganic) production practices. Nonorganic mesclun producers entered the market, supplies increased, and prices declined. Requirements for highly specialized investments were minimal. Firms with land certified for organic production could switch to other organic products with more profitable returns, which limited losses from oversupply of this market.*

For several years, USDA's Agricultural Marketing Service (AMS) has collected data on prices for organic mesclun mix (salad mix of baby lettuces, herbs, and

greens) in the Boston wholesale market. Organic mesclun prices are higher than regular (nonorganic) mesclun, but the price premiums have declined in recent years. In 1996, regular mesclun from California or Arizona cost an average of \$8.64 per 3-pound carton (ranging from \$7.50 to \$10.00) and organic mesclun cost \$9.72 per 3-pound carton (ranging from \$7.75 to \$10.75). The monthly organic premium averaged 14 percent, ranging from 8 percent in November to 22 percent in December.

Mesclun is a relatively new commercial crop in the United States. Initially, mesclun was a very small market; it was produced organically and garnered high prices. Other producers—both organic and regular—entered the mesclun market, attracted by high returns. By 1996, only about 30 percent of the mesclun in the Boston wholesale market was organic. As production expanded, mesclun prices declined and the premium between organic and regular mesclun narrowed. Industry insiders say that as long as there is a large supply of regular mesclun, organic prices will continue to be low. The market will bear a very small premium for organic mesclun.

As the gap between organic and regular mesclun prices decreased, organic mesclun producers could remain in the market because variable production costs are not much higher than for regular mesclun. Since the lettuces and greens are harvested when quite small, they are not in the ground very long and are less prone to insect and disease problems than other organic crops.

The investment required to make land certified for organic production can be significant. Some industry experts think the organic share of the mesclun market will continue to decrease. But, since the production of organic mesclun requires little, or no, specialized investment, producers exiting the market will shift to other organic crops that yield a higher return on relatively expensive certified organic land.