

# Federal Reserve Bank of San Francisco

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## Cranberries Bounce Back

Roughly 0.00004 percent of the nation's total output of goods and services is attributable to cranberries.

Some might call this peanuts, but peanuts are considerably more important (about 20 times so) in the general economic scheme of things. In fact, cranberries don't even make it on a regular basis into that monthly market basket which the Bureau of Labor Statistics people push around when calculating increases in our cost of living. That means that cranberry prices could go up by a million percent tomorrow and the official inflation rate might not budge by even a hair. In short, for people who only think about the big picture (i.e., about such things as GNP, the secular increase in  $M_1$  velocity, or the rate of growth in world money), cranberries just don't matter.

Even nutritionists don't spend much time pinning ribbons on the cranberry. It's true that sailors on whaling ships could ward off scurvy (the vitamin-C deficiency disease) by eating a cup of cranberries a day, but, we've since discovered that a single orange does roughly ten times better. And any modern day sailors who subscribe to Linus Pauling's theories of vitamin C and health would have to put away some 200 cups of cranberries a day just to meet minimum standards.

### Christmas cheer

So who does care about cranberries? Only the millions of Americans who gobble down cranberry sauce at Thanksgiving and Christmas and in-

creasingly take occasional swigs from an assortment of cranberry juices throughout the rest of the year. If everyone did their equal share during this past year, then every man, woman and child in the country consumed just over a pound of cranberries in one form or another.

Whether it all started back in 1621 is for historians to argue, but it is clear that the first colonists picked wild cranberries and used them in tarts, pies and even juices. It is also clear that those even-earlier settlers, the native Americans, also used the cranberry as a food, a medicine and a dye.

However, as the new settlers began to demand cranberries in greater quantities than Mother Nature was able to supply, colonial legislatures passed laws limiting picking to particular periods of time. As the pressure on the wild berries increased with the growing population, the only way out was domestic cultivation. But successful domestication required time, and the first commercial cranberry bog did not appear for some 200 years after the Pilgrims first jumped off the boat.

Massachusetts eventually became established as the cranberry center, but the art of cultivation later spread to the hinterland, reaching New Jersey, Wisconsin, Washington and Oregon at roughly twenty-year intervals during the middle of the 19th century. Because of the unique requirements of the cranberry (i.e., an acid-peat soil,

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with adequate supplies of sand and fresh water), these five states are the only ones supporting commercial cranberry production, even to this day.

### **Wisconsin's pride**

Wisconsin recently has begun to take over Massachusetts' leading position in the industry. First, while Massachusetts has been losing some of its cranberry land to such intrusions as urbanization (a 14-percent decline since 1960), Wisconsin cranberry land has increased dramatically (by 62 percent since 1960). Second, Wisconsin is able to extract roughly 60 percent more cranberries from an acre of land than is Massachusetts.

Wisconsin, in effect, is to Massachusetts in cranberries what Japan is to the U.S. in industrial production. The former, being relative newcomers on the scene, have adopted technologies far superior to the sometimes antiquated processes of the latter. Thus, the large Wisconsin bogs lend themselves much more readily to modern, large-scale harvesting equipment than do the smaller, older and more fragmented bogs of Cape Cod. For example, practically all of Wisconsin's berries are water harvested—a technique which insures that virtually every ber-

ry in the bog floats to the surface of the flooded field and finds its way into a waiting truck. Back East, roughly half of the crop still comes in through dry harvesting, a method which inevitably skips over a number of berries.

Despite the Wisconsin advantage, technological change has been prevalent throughout the cranberry industry, which is why the little bittersweet berries are still such a bargain. In 1976, for example, the farm price of cranberries was lower than it had been in 1929, which is no easy trick given the 232-percent rise in the general price level over that same period.

### **Industry without bounce**

Now, all cranberries strive to become part of the fresh market—which generally runs from September to Christmas—partly because growers are paid a premium for those berries which meet the necessary high standards. Only about 30 percent make it. However, even the more lowly status of processing berry is not guaranteed. Each berry which hopes to become a member of a sauce or juice team must pass a test in botanical gymnastics. All berries are dropped from a height, and only those whose bounce enables them to surmount a four-inch hurdle are deemed fit for processing. The dark fate of the others can only be guessed. The logic is that those berries which don't bounce after several tries must be bruised, rotten or otherwise impaired.

There was a time when practically all processing berries had but a single destiny — to become sauce. Then one day, shortly before the Thanksgiving of 1959, cranberries received some negative advertising from the Health-Education-Welfare Department. In what has become the first of the food-industry cancer announcements, H.E.W. declared that because of contamination by a certain herbicide, a portion of that year's crop could cause cancer. In fact, only a few West Coast growers used the chemical, but producers felt obliged to remove all cans from supermarket shelves, since from the outside, all cans of cranberry sauce look pretty much the same. The government provided some compensation that year to growers who couldn't sell their product, but the market price fell 24 percent between 1958 and 1960, and production flattened out for years thereafter.

The industry literally became bogged down with a tarnished image and plummeting sales. The fact that the alleged cancer association was not with cranberries themselves but rather with a no-longer-used herbicide made no difference. Somewhere, in the unconscious portion of the consumer mind, cancer and cranberry were filed next to each other.

**Bouncing back**

The industry's only way out of the mire was to create a new product, and juices held the secret. In 1967, the

Ocean Spray cooperative, which controls about 85 percent of all cranberry sales came out with a blend of cranberry and apple juices. This laid the groundwork for a 64-percent increase in cranberry production over the next five years. Soon cranberry juice came to be blended with the juices of grapes, apricots, prunes and oranges, and today about two-thirds of all processed cranberries find their way into these juices.

This new cranberry boom is not limited to the domestic market. Over the past five years, cranberry growers have begun to devote an increasing (albeit still small) portion of their bogs to berries for the European and Japanese markets. The sauce-Turkey connection appears to generate a portion of the European demand, thus giving it a special boost at this time of year. In Japan, a two-year test marketing of cranberry/apple juice suggests that the drink will have no trouble becoming part of the increasingly-Westernized Japanese diet. So while the individual cranberries go along bouncing across their little four-inch barriers, the industry they serve has already bounced back successfully from the bog in which it was mired a decade or more ago.

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