Commodity Profile: Avocados

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Overview
Avocados, a tree fruit, are thought to have originated in Mexico and Central and South America. They were first planted in Florida in 1833 and then in California in 1856 (U.C. Fruit and Nut). Today California accounts for the majority of U.S. avocado production followed by Florida and Hawaii. In 2004, California accounted for nearly 86 percent of total U.S. production. Florida’s share in 2004 was about 14 percent and Hawaii’s less than 1 percent (National Agricultural Statistics Service (NASS)).

The dominant variety of avocado grown in California is the Hass variety, which accounted for 85 percent of commercial production in California in recent years, while Florida growers typically produce larger, less oily West Indian or Mexican varieties including Booth, Lula, and Taylor. California and Hawaiian avocados are marketed year round and Florida’s market is from June through March (NASS 2005).

Marketing
The U.S. Federal Hass Avocado Promotion, Research and Information Order was established in September 2002, after the qualified lifting in 1997 of the U.S. quarantine that had prohibited entry of Hass avocados from Mexico and Central America since 1914. Funded by a 2.5 cent per pound assessment on all domestic and imported Hass avocados the order is aimed at advertising and promotion of avocados in the United States. The U.S. Customs service collects assessments from importers while first handlers collect from domestic producers (U.S. Agricultural Marketing Service 2002a). Research has indicated that this program has helped keep prices higher and more stable by increasing U.S. demand at a steady pace with imports (Carman and Rodriguez). Avocados have been marketed as a healthy dietary choice and as a good source of beneficial monounsaturated oil.

Demand
U.S. per capita consumption of avocados has followed a variable but generally increasing trend since 1970, increasing significantly in recent years from 1.5 pounds per capita in 1999 to a record 2.5 pounds in 2003 (Figure 1). A growing Hispanic population, an increasing awareness...
of healthier foods and the acceptance of monounsaturated fats has helped to spur demand (ERS 2005).

**Avocado Trade**
The United States was the world’s largest importer of avocados in 2004 accounting for 26 percent of world imports, followed by France with 23 percent. Japan and the Netherlands were the third and fourth largest importers in the world accounting for 8.1 and 7.4 percent respectively (FAO). The world’s largest exporters in 2004 were Mexico, Chile, and Spain, accounting for 35 percent, 15.6 percent, and 14.2 percent of world exports, respectively (FAO).

The United States is a net importer of avocados and avocado products with exports negligible in comparison. The gap between exports and imports widened substantially between 1995 and 2004 (Figure 2). Total U.S. exports amounted to $2.5 million in 2004, while total imports of fresh and prepared avocados were valued at $233.3 million. Total value of imports of avocados into the United States has increased substantially over the past decade and a half, from $4.4 million in 1989 to $233 million in 2004.

**Fresh** - Fresh avocado imports into the United States were valued at $157 million in 2004. Most fresh avocados were imported from Chile, with Chilean avocado shipments valued at $80.4 million, or 51.2 percent of total U.S. fresh import value. Mexico supplied 38.2 percent of U.S. fresh avocado imports in 2004. Avocado imports from Mexico increased in the late 1990s after the USDA announced it would allow Mexican Hass avocados to enter the United States November through February in 19 northeastern states and the District of Colombia after more than an 80 year ban. The change was the result of relaxing restrictions on Mexican imports consistent with the USDA commitment under the sanitary and phytosanitary rules of the World Trade Organization (WTO) to use sound science and adopt risk-reducing measures that are least trade restrictive (ERS 1997). U.S. imports of fresh avocados from Mexico increased from $5.9 million in 1997 to over $59.9 million in 2004. Additional fresh avocado imports came from the Dominican Republic (10.3 percent of the total) (Figure 3).

**Processed** - Mexico accounted for 99 percent of U.S. prepared avocado imports valued at $75.5 million in 2004. More than half of all Mexican imports come from processed avocado products.

**Supply**
Mexico is the world’s largest producer of avocados, representing over one-third of global production. The United States was the second largest producer in 2004 accounting for nearly 6.5 percent followed by Indonesia with 5.75 percent and Colombia and Chile with about 5 percent each (FAO).

U.S. avocados are commercially grown in California, Florida and Hawaii. Most California avocados are grown along the Pacific coast between San Luis Obispo and the Mexican border where climate is mild. California made up 90.3 percent of the U.S. bearing acreage, while Florida accounted for 9.3 percent and Hawaii less than 1 percent. U.S. bearing acreage decreased substantially between 1992 and 1995 from about 80,000 acres to just over 65,000
acres. Between 1995 and 2001 acreage remained steady at around 65,000. Acreage, however, has increased since 2001 and reached 68,670 in the 2004-2005 marketing year (Figure 4).

The value of avocado production has been increasing since the early 1990s, from $118.1 million in 1992 to nearly $400 million in 2003. However, in 2004 the value of production dropped by $100 million, from $394.4 million to $294.4 million (Figure 5). This drop is consistent with a decrease in California production in 2004 in combination with lower prices.

U.S. production of avocados in 2004 amounted to 203,400 tons, a decrease of roughly 30,000 tons from the previous year. U.S. production peaked in 1992 at 291,600 tons and has been variable throughout the 1990s (Figure 6). The entire U.S. avocado production is utilized in the fresh market (NASS).

Prices
Despite rising imports, prices for avocados have increased since 1980 due to increasing demand and a growing population but have been highly variable. U.S. prices (in year-2000 inflation adjusted dollars) peaked in 1988 at $2,316 per ton and similar, but smaller peaks were notable in 1992, 1998, and again in 2002. However, since 2002 prices have decreased from $1,843 per ton to $1,329 per ton in 2004. Florida prices were $473 per ton in 2004. The price for California avocados is higher than that of Florida avocados in part because of varietal differences. California prices peaked in 1998 at $2,933 per ton and in 2004 were $1,467 (Figure 7).

Current Issues - Border Openings to Mexico
Beginning in 2003, Mexico exported avocados into the allowable U.S. states duty-free. As of January 31st, 2005 imports of Hass avocados from the state of Michoacan may be shipped into 47 U.S. states year round. In preceding years imports were allowed first into 19 northeastern states in November through February and then later into 31 states between October to April 15 if grown, harvested and packed under specified conditions. Assuming no problems develop, after January 31, 2007 they may be distributed into the last remaining U.S. states—California, Florida and Hawaii (the three major U.S. avocado producing states). Provisions were put in place to curtail Mexican production in an effort to avoid saturation of the U.S. market as border restrictions were relaxed.

Sources
California Avocado Commission, About Avocados. Available at: http://www.avocado.org/


United States Department of Agriculture, Foreign Agricultural Service (FAS). Trade Database. Available at: http://www.fas.usda.gov/ustrade/


FIGURES

Figure 1. Per Capita Consumption of Avocados, Farm Weight, 1970-2003

Source: USDA Economic Research Service, Food Consumption Per Capita Data System

Figure 2. U.S. Total Fresh and Processed Avocado Imports vs. Exports, 1990-2004

Source: USDA Foreign Agricultural Service
Figure 3. U.S. Fresh Avocado Imports, 1990-2004

Source: USDA Foreign Agricultural Service

Figure 4. U.S. Bearing Acreage of Avocados, 1970-2003

Source: USDA Economic Research Service, Food Consumption Per Capita Data System
Figure 5: U.S. Value of Avocado Production, 1980-2004

Source: USDA Economic Research Service, Fruit and Tree Nuts Yearbook

Figure 6: U.S. Avocado Production, 1980-2004

Source: USDA Economic Research Service, Fruit and Tree Nuts Yearbook
Figure 7: U.S. Avocado Prices (year-2000 inflation-adjusted dollars), 1980-2004

Source: USDA Economic Research Service, Fruit and Tree Nuts Yearbook