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Fruit and Tree Nuts Outlook

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Citrus Crop Expected Smaller in 2002/03

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Prices for noncitrus fruit were higher in October 2002 than a year ago, with smaller apple and pear crops helping push the grower price index to average 2 percent above last year. In contrast, the new citrus crop is starting the 2002/03 season with lower prices. The small size of the fresh citrus marketed from California has held prices lower than a year ago for September and October.

The 2002/03 citrus crop is projected to total 15 million short tons, 9 percent less than last season, according to the U.S. Department of Agriculture. As a result of the expected smaller crop, growers are likely to receive higher prices for their product. An expected 14-percent decline in Florida citrus crops is driving the overall decline for the 2002/03 season.

California's and Arizona's orange crops are projected to reach 2.4 million short tons, 13 percent more than last season and potentially the largest since 1997/98. Texas' orange crop is forecast to be 8 percent smaller than last season and 28 percent smaller than 2 seasons ago.

Early projections put Florida's orange crop at 8.9 million short tons, 14 percent below a season ago. The lower production this season was due to drought this past winter during the tree bloom. Wetter weather during the summer helped fruit mature faster and resulted in larger than average oranges. The bigger fruit helped offset some of the loss in production volume.

USDA's Economic Research Service estimates that 1.2 billion single-strength equivalent (SSE) gallons of orange juice will be produced this year, the lowest since 1993/94.

Grapefruit production for 2002/03 only will reach about 2.2 million tons, the smallest crop since the freeze in 1989/90. The number grapefruit-bearing acres and trees have both declined in Florida, the major producer.

The forecast for the 2002/03-lemon crop is 904,000 tons, 9 percent above last season. Florida's tangerine crop, on the other hand, is estimated to be 21 percent lower.

Price Outlook

Noncitrus Driving Up October Grower Prices

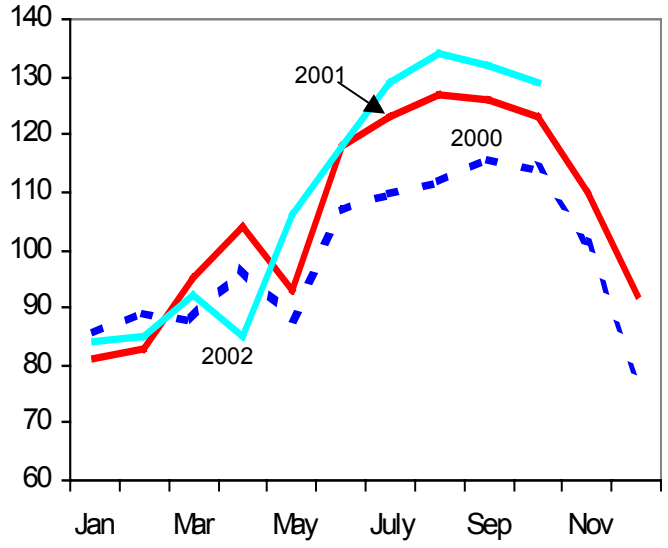
Prices for noncitrus fruit were higher in October 2002 than an year ago, with smaller apple and pear crops helping push the grower price index about 2 percent higher (fig. 1).

In contrast, the new citrus crop is starting off its 2002/03 season with lower prices (table 1). Smaller sized oranges from California at the beginning of its season as well as a larger crop have held prices below a year ago in both September and October. A similar situation has occurred for the fresh lemon crop out of southern California. The lower September and October fresh grapefruit prices in 2002 reflect the end of California's crop with Florida production just beginning to enter the market in October. As Florida's fruit takes over the market, prices are likely to rise because of its smaller crop. Bigger fruit this season may boost demand in the domestic market. Not all of the export markets, however, like very large fruit. With about half the crop going to export, prices could be held down from what might have been anticipated with the smaller crop, if export demand is lackluster.

Figure 1

Index of prices received by growers for fruit and nuts

1990-92=100



Source: National Agricultural Statistics Service, USDA.

Table 1--Monthly fruit prices received by growers, United States

Commodity	2001		2002		2001-02 change	
	September	October	September	October	September	October
	---- Dollars per box -----				Percent	
Citrus fruit: 1/						
Grapefruit, all	6.89	5.29	5.81	5.10	-15.7	-3.6
Grapefruit, fresh	7.62	7.55	7.32	7.05	-3.9	-6.6
Lemons, all	19.02	20.37	15.97	16.82	-16.0	-17.4
Lemons, fresh	23.81	25.21	26.94	21.99	13.1	-12.8
Oranges, all	6.53	5.12	6.31	4.71	-3.4	-8.0
Oranges, fresh	7.83	7.67	6.83	6.07	-12.8	-20.9
Noncitrus fruit:	---- Dollars per pound -----					
Apples, fresh 2/	0.187	0.242	0.300	0.301	60.4	24.4
Grapes, fresh 2/	0.315	0.300	0.325	0.320	3.2	6.7
Peaches, fresh 2/	0.292	--	0.278	--	-4.8	--
Pears, fresh 2/	0.232	0.207	0.237	0.229	2.4	10.9
Strawberries, fresh	0.781	0.895	0.584	0.690	-25.2	-22.9

1/ Equivalent on-tree price.

2/ Equivalent packinghouse-door returns for CA, NY (apples only), OR (pears only), and WA (apples, peaches, and pears). Prices as sold for other States.

Source: National Agricultural Statistics Service, USDA.

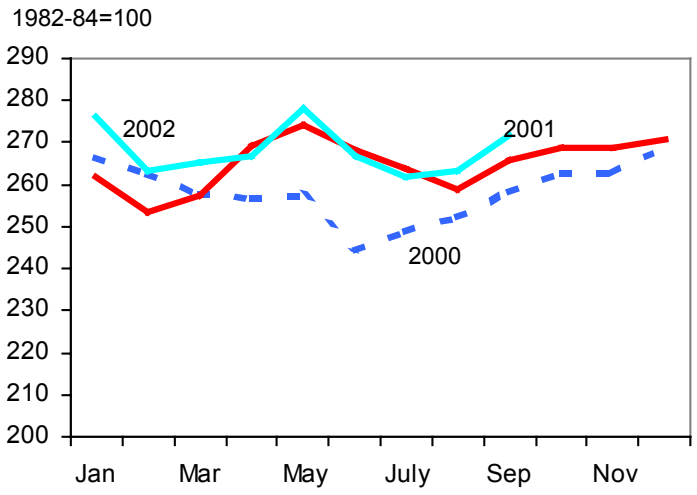
Retail Prices Averaging 2 Percent Higher in 2002

The Consumer Price index has been averaging 2 percent higher than a year ago through September 2002 (fig. 2). Americans have been paying higher prices at retail stores for the top fresh fruit, including apples, bananas, and oranges, as well as tangerines.

In September 2002, prices were up for fresh Valencia oranges, Red Delicious apples, lemons, peaches, and Thompson seedless grapes (table 2). The price for bananas, however, fell in September. The lower price is good news for consumers since bananas are the number one fresh fruit eaten in the United States. Retail prices were also lower in September for fresh strawberries and grapefruit. The lower prices reflect the decline in grower prices from a year ago.

Figure 2

Consumer Price Index for fresh fruit



Source: Bureau of Labor Statistics, U.S. Department of Labor.

Table 2--U.S. monthly retail prices, selected fruit, 2001-2002

Commodity	Unit	2001		2002		2001/2002 change	
		August	September	August	September	August	September
Fresh:							
Valencia oranges	Lb	0.516	0.522	0.561	0.572	8.7	9.6
Navel oranges	Lb	--	--	--	--	--	--
Grapefruit	Lb	0.753	0.759	0.709	0.754	-5.8	-0.7
Lemons	Lb	1.275	1.352	1.471	1.593	15.4	17.8
Red Delicious apples	Lb	0.583	0.874	0.977	1.011	67.6	15.7
Bananas	Lb	0.519	0.508	0.499	0.498	-3.9	-2.0
Peaches	Lb	1.204	1.349	1.431	1.427	18.9	5.8
Anjou pears	Lb	--	--	--	--	--	--
Straw berries 1/	12-oz pint	1.628	1.916	1.695	1.873	4.1	-2.2
Thompson seedless grapes	Lb	1.472	1.544	1.504	1.546	2.2	0.1
Processed:							
Orange juice, concentrate 2/	16-fl. oz	1.875	1.870	1.800	1.840	-4.0	-1.6
Wine	liter	6.390	6.068	6.007	6.552	-6.0	8.0

-- Insufficient marketing to establish price.

1/ Dry pint.

2/ Data converted from 12 fluid ounce containers.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Expected Smaller 2002/03 Citrus Crop May Improve Prices for Some Growers

The 2002/03 citrus crop is projected to total 15 million short tons, 9 percent less than last season, according to the U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS). As a result of the expected smaller crop, growers are likely to receive higher prices for their product. Higher prices could, in turn, improve revenues for some of the industries.

The oranges, grapefruit, tangerines, and Temples crops are expected to be smaller; the lemons and tangelos crops bigger. Data are no longer collected for some tangerine crops and for K-early citrus. Eliminating forecasts for Robinson and Dancy tangerines may alter the forecast slightly, but these crops have become so small, being replaced by the more popular varieties, that the overall effect is likely minimal.

An estimated 14-percent decline in Florida citrus crops is driving the overall decline for the 2002/03 season. With the Florida crop typically accounting for at least three-quarters of all citrus produced in the United States, any changes to its crop affects the overall industry. As a result of the sharp projected decline in Florida's production, its share of the total U.S. citrus crop is likely to be 74 percent, down from 78 percent last season. A projected 11-percent increase in California's crops is offsetting some of the overall decline. Since the two States market their citrus differently, California's crops have little effect on Florida's markets and vice-versa and the net effect on consumer supply and prices is minimal. For example, most of California's oranges are sold in the fresh market while most of Florida's oranges go into making juice. Because of the split markets, quality factors often have more effect on markets, with poor-quality California oranges increasing sales to processing and high-quality Florida oranges increasing its sales to the fresh market. The impact of any change in market, however, is generally very small. Similarly, Florida grapefruit dominate the winter fresh market with California's product taking over in the spring through early fall.

More Fresh Oranges Expected in the Markets This Season

California and Arizona's orange crops are projected to reach 2.4 million short tons, 13 percent more than last season and potentially the largest since 1997/98 (table 3). The navel orange crop, which has already begun to be marketed, is expected to be 17 percent larger than last season and the Valencia crop, which will not be harvested until February or March will be

Table 3--Oranges: Utilized production, 1999/2000-2001/02 and indicated 2002/03 1/

Crop and State	Utilized			Forecast 2002/03	Utilized			Forecast 2002/03
	1999/2000	2000/01	2001/02	as of 10-2002	1999/2000	2000/01	2001/02	as of 10-2002
	--1,000 boxes 2/--				--1,000 short tons--			
Oranges:								
Early/mid season and navel 3/:								
Arizona	600	480	270	200	23	18	10	8
California	40,000	35,500	34,000	40,000	1,500	1,331	1,275	1,500
Florida	134,000	128,000	128,000	113,000	6,030	5,760	5,760	5,085
Texas	1,460	2,000	1,530	1,400	62	85	65	60
Total	176,060	165,980	163,800	154,600	7,615	7,194	7,110	6,653
Valencia:								
Arizona	500	420	250	250	19	16	9	9
California	24,000	19,000	22,000	23,000	900	713	825	863
Florida	99,000	95,300	102,000	84,000	4,455	4,288	4,590	3,780
Texas	200	235	210	180	9	10	9	8
Total	123,700	114,955	124,460	107,430	5,382	5,027	5,433	4,660
Total	299,760	280,935	288,260	262,030	12,997	12,221	12,543	11,313

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year.
2/ Net pounds per box: Arizona and California--75 lbs, Florida--90 lbs, and Texas--85 lbs.
3/ Navel and miscellaneous varieties in California and Arizona, and early- and mid-season (including Navel) varieties in Florida and Texas. Small quantity of tangerines also included in Texas.
Source: National Agricultural Statistics Service, USDA.

4 percent larger. The significantly larger navel crop is good news for growers since navels are popular among consumers both domestically and in international markets, bringing growers strong returns. The fruit, however, were reportedly on the small side, which decreases their market value. As the season progresses, and with some rain, the fruit will likely increase in size and improve the prices growers can demand for them.

Texas' orange crop is forecast to be 8 percent smaller than last season and 28 percent smaller than 2 seasons ago. While lower than the past 2 seasons, the 68,000 tons expected is higher than any other year since the mid-eighties. According to the industry, f.o.b. prices averaged higher than last season during the middle of November. Prices are likely to continue strong as fruit continue to mature.

Smaller Florida Orange Crop Could Drop Juice Supplies to 5-Year Low

The first projections for Florida's orange crop is 8.9 million short tons, 14 percent below a season ago. Both the early- to mid-season orange crop, expected to total 5.1 million tons, and the Valencia orange crop, at 3.8 million tons, are forecast down in 2002/03. The lower production this season was due to the drought during the winter in 2002, which reduced the number of blooms and therefore the number of fruit on the trees.

The citrus industry also is having to deal with several diseases that have resulted in a decline in the number of bearing acres and trees. Warm, rainy summer weather helped accelerate fruit maturity and size. The bigger fruit relative to recent years at the time of the October forecast, likely offset some of the loss in the number of boxes and tonnage.

A larger share of this season's crop had gone into processing by mid-November than either of the previous 2 seasons during the same time period. According to industry data, as of the middle of November, the packinghouse-equivalent price for early- to mid-season oranges sold for processing was slightly above the price prevailing at the same time last year. Fruit quality is an issue due to the rapid maturity of the fruit from summer rains. The anticipated tightness in this year's market and cooler weather in the near future should improve prices growers receive for their fruit after several years of low prices.

USDA's Economic Research Service (ERS) estimates that 1.2 billion single-strength equivalent (SSE) gallons of orange juice will be produced from this year's crop (table 4). If realized, production would be the lowest since 1993/94. Although beginning juice stocks are the third highest on record and imports are forecast to be significantly higher than last season, the overall supply available for marketing this season is projected to be 2.2 billion SSE gallons,

Table 4--United States: Orange juice supply and utilization, 1990/91-2002/03

Season 1/	Beginning stocks	Production	Imports	Supply	Exports	Domestic consumption	Ending stocks 2/	Per capita consumption
	----------Million SSE gallons3/----------							Gallons
1990/91	225	876	233	1,334	96	1,080	158	4.3
1991/92	158	930	203	1,291	107	1,014	170	4.0
1992/93	170	1,207	232	1,609	114	1,245	249	4.8
1993/94	249	1,133	287	1,669	107	1,202	360	4.6
1994/95	360	1,257	141	1,758	117	1,207	434	4.6
1995/96	434	1,271	261	1,966	130	1,420	417	5.3
1996/97	417	1,437	257	2,111	148	1,399	564	5.2
1997/98	564	1,555	305	2,423	148	1,596	679	5.8
1998/99	679	1,236	346	2,260	150	1,576	534	5.7
1999/00	534	1,507	339	2,380	146	1,589	645	5.7
2000/01	645	1,359	258	2,262	123	1,441	698	5.1
2001/02	698	1,407	190	2,295	169	1,459	668	5.1
2002/03 4/	668	1,209	280	2,157	125	1,507	525	5.2

1/ Season begins in December of the first year shown. As of 1998/99, season begins the first week of October.
2/ Data may not add due to rounding. Beginning with 1994/95, stock data include chilled as well as canned and frozen concentrate juice. 3/ SSE = single-strength equivalent. 4/ Preliminary estimate.
Source: Economic Research Service and Foreign Agricultural Service, USDA.

the lowest in 5 years. The smaller supply will likely drive down ending stocks as processors continue to compete for market share, especially in the not-from-concentrate (NFC) orange juice market. Consumers could benefit from this competition and see lower retail prices for NFC this season. The lower prices and an expected improvement in the U.S. economy should push consumption slightly higher than last season to an average 5.2 gallons per person for 2002/03.

Brazil's orange juice production, the largest in the world and the major source of U.S. imports is projected higher this season (table 5). The bigger supply should lower the world price and provide for sufficient juice available to U.S. processors and reconstituting plants, mostly located in the northeastern States. With more Brazilian orange juice in the world market, U.S. exports will probably drop, as domestic processors push more juice into the U.S. market.

Table 5--Brazilian FCOJ production and utilization, 1991-2002

Season 1/	Beginning stocks	Production	Domestic consumption	Exports	Ending stocks 2/
	--Million SSE gallons 3/--				
1991	177	1,334	25	1,390	96
1992	96	1,610	25	1,532	148
1993	148	1,572	25	1,546	148
1994	148	1,583	31	1,482	218
1995	218	1,525	25	1,476	242
1996	242	1,620	24	1,660	177
1997	177	1,954	22	1,778	331
1998	331	1,665	26	1,586	370
1999	418	1,912	22	1,821	486
2000	486	1,683	21	1,778	370
2001	370	1,375	21	1,596	128
2002	128	1,784	21	1,710	181

1/ Season begins in July. 2/ Data may not add due to rounding.
3/ SSE = single-strength equivalent. To convert to metric tons at 65 degrees brix, divide by 1.40588.
Source: Foreign Agricultural Service, USDA.

Is Production A Good Determinant of Orange Prices?

Each season when a new crop is forecast, ERS also forecasts price movement based on the size of the new crop. As the market structure has changed in recent years, with the retail, packing, and processing sectors consolidating, the role of production as the major factor to influence price could be questionable. A very simple analysis of the fresh and processing orange industries is used to calculate the effect of production on price over the past several years. The industries are examined separately because they have different factors affecting marketing and thus price.

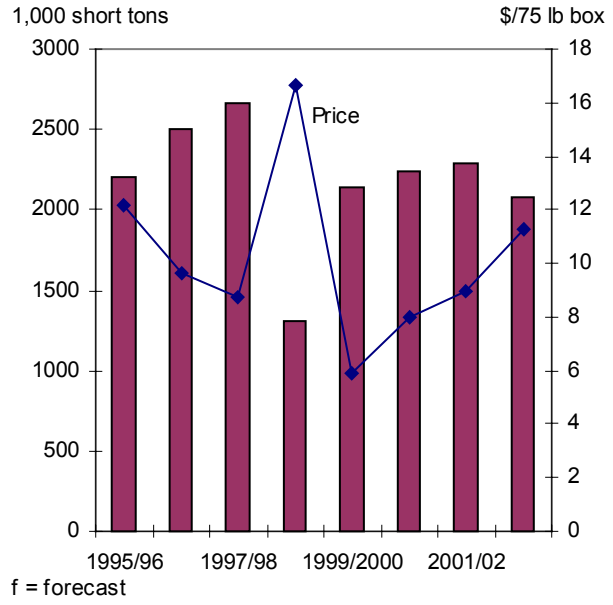
The fresh-market orange industry is in some ways a simpler industry to examine than the processing industry. Fresh oranges are perishable and are not stored from one season to another. Therefore, what is produced in a season is basically what is available. Because the U.S. industry produces such high-quality oranges and generally in sufficient quantities to meet domestic demand, imports play a minor role in supplies. Exports, however, play an important role in demand for oranges. The industry has shown that it can withstand economic crisis by how well it weathered the international recession in the nineties. Because of the high value of U.S. oranges in many international markets, in particular in Asia, U.S. exports recorded only minor declines in quantity during the Asian economic crisis. As a result, while changes in the economies of major markets can affect price, such changes are likely to have only a minor impact. Under these circumstances, U.S. production levels are likely to be important in determining seasonal prices.

As a fresh product, annual quality of the fruit is always an important factor determining price. Quality, which includes size, color, and sweetness of the fruit, can alter price separately from the quantity available.

Using a simple regression, production is determined to influence about 54 percent of the season's price, with the other factors accounting for the other 46 percent. As figure 3 shows, during years of drastic changes in crop size, production becomes the overruling factor, with its influence diminishing somewhat during normal, cyclical years.

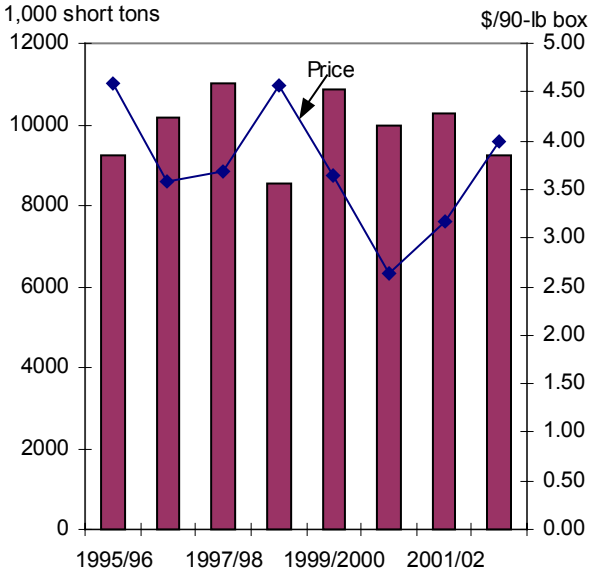
For the processing orange sector, other factors are likely to play equally important roles as does the level of production. The juice industry accounts for the majority of processing oranges. Factors such as stocks at the beginning of a new season, fruit quality, and most importantly, production and stocks in Brazil all affect the price U.S. processors are willing to pay Florida growers for their oranges. Consolidation may also be a growing factor in price setting. While there are still about 20 processors in Florida, there are a

Figure 3
Fresh orange production and price, 1995/96-2002/03 f/



f = forecast
Source: National Agricultural Statistics Service, USDA

Figure 4
Processed oranges and price, 1995/96-2002/03 f/



f = forecast
Source: National Agricultural Statistics Service, USDA

few very large juice producers who may be able to influence price.

Again, a simple regression is used to see how much influence production has on grower prices for processing oranges. In this case, production can account for only about 36 percent of the factors influencing seasonal price (fig. 4). Again, drastic changes in production due to freezes or other weather factors will dominate pricing in a given year. Other factors, however, play a much greater role each season, during modestly fluctuating production years, than they do for the fresh market.

Therefore, while production is still important in determining grower prices each season, other factors also need to be taken into account as overall price estimates are made.

Grapefruit Production on the Decline

According to the NASS October estimates, grapefruit production for 2002/03 will reach only about 2.2 million tons, the smallest crop since the freeze in 1989/90 (table 6). Crop size has been declining over the past three years as trees and bearing acreage were

Table 6--Grapefruit: Utilized production, 1999/2000-2001/02 and indicated 2002/03 1/

Crop and State	Utilized			Forecast for 2002/03 as of 10-2002	Utilized			Forecast for 2002/03 as of 10-2002
	1999/2000	2000/01	2001/02		1999/2000	2000/01	2001/02	
	--1,000 boxes 2/--				--1,000 short tons--			
Florida, all	53,400	46,000	46,700	42,000	2,270	1,955	1,985	1,786
Colored	31,900	27,300	27,800	25,000	1,356	1,160	1,182	1,063
White	21,500	18,700	18,900	17,000	914	795	803	723
Arizona	450	250	160	100	15	8	5	3
California	7,200	6,300	6,000	6,200	241	211	201	208
Texas	5,930	7,200	5,900	5,600	237	288	236	224
Total	66,980	59,750	58,760	53,900	2,763	2,462	2,427	2,221

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year.
2/ Net pounds per box: California and Arizona-67, Florida-85, and Texas-80.
Source: National Agricultural Statistics Service, USDA.

removed in Florida due to disease and low growerreturns. Both Florida's colored and white grapefruit crops are anticipated to be 10 percent lower than last season. Since Florida's expected 1.8-million-ton crop is less than the average utilization over the past 5 years, competition for the grapefruit from both the domestic and international markets should be strong, boosting grower prices. The large size of the fruit this season is likely to influence prices. While some markets like the large fruit, demand in other exports markets may actually decline because they prefer a somewhat smaller grapefruit.

The price the growers receive from this season's grapefruit crop may or may not be passed along to consumers at the retail level. While, in the past, prices received by growers appeared to drive the overall pricing trend, last season grower prices appeared to have little in common with consumer prices (fig. 5). While grower prices flattened out last season due to weak demand, f.o.b. prices and retail prices maintained their seasonal fluctuation. Last season the f.o.b. price, (the price shipper/packers received for furnishing the fruit, including loading it onto transportation, but excluding the cost of the transportation to the buyer) appeared to be much more important in determining retail price. Whether this trend will continue or whether the smaller crop will have a stronger impact on retail prices cannot be determined at this early time in the season.

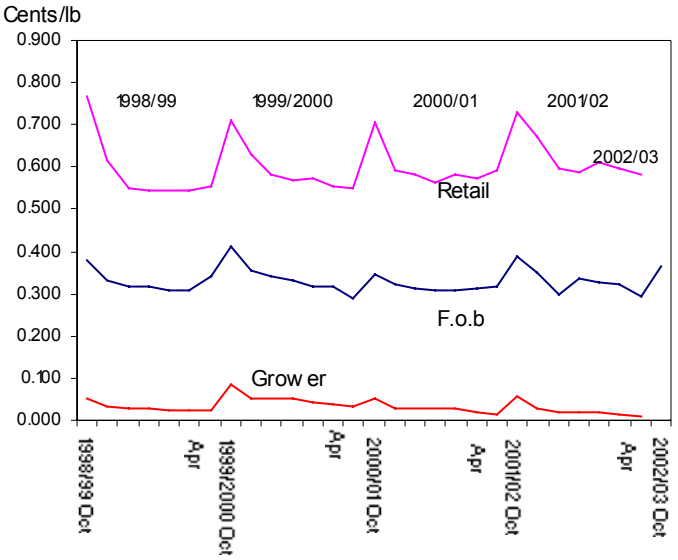
California Expects More Lemons This Season

The forecast for the 2002/03-lemon crop is 904,000 tons, 9 percent above last season (table 7). California's crop is expected to be 11 percent bigger than last season at 798,000 tons, 88 percent of the total. Arizona's lemon crop comprises the remaining 106,000 tons, the same as last season. California's lemons, like its oranges, are sizing smaller so far this season. Without some rain, the size of the fruit could put downward pressure on prices. Arizona's lemons are reported to be good size and quality. Without much import competition this season, with the ban still in effect for Argentine lemons, there should be sufficient demand throughout the year to keep prices firm for growers and at the retail level.

Smaller Tangerine Crop Forecast In Florida

Florida's tangerine crop accounts for 71 percent of total production this season. The crop is projected to decline 21 percent from last year's large crop, to 314,000 tons (table 8). A decline in the number of early variety tangerine trees and in the number of fruit per tree is responsible for the expected 29 percent drop in production of these tangerines. Beginning in 2002/03, the early varieties include only

Figure 5
Fresh grapefruit grower, f.o.b., and retail price, 1998/99 to 2002/03



Sources: Florida Citrus Administrative Committee, Bureau of Labor Statistics, U.S. Dept. of Labor, and National Agricultural Statistics Service USDA.

Table 7--Lemons: Utilized production, 1999/2000-2001/02 and forecast for 2002/03 1/

State	Utilized 1999/2000	Utilized 2000/01	Utilized 2001/02	Forecast for 2002/03 as of 10-2002	Utilized 1999/2000	Utilized 2000/01	Utilized 2001/02	Forecast for 2002/03 as of 10-2002
	--1,000 (76-lb) boxes--				--1,000 short tons--			
Arizona	3,100	3,600	2,800	2,800	118	137	106	106
California	19,000	22,600	19,000	21,000	722	859	722	798
Total	22,100	26,200	21,800	23,800	840	996	828	904

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year.
Source: National Agricultural Statistics Service, USDA.

Fallglo and Sunburst tangerines. The Sunburst variety is in the majority among the early varieties. The number of trees also declined for the late Honey tangerine, but the number of fruit per tree is higher this season than last. Therefore, Honey tangerines are expected to decline only 7 percent.

With fewer tangerines available in the market, prices may climb above last season. A price increase, however, would be tempered by the return of the Spanish clementines imports that will again be available this fall and winter. Under new regulations by USDA's Animal and Plant Health Inspection Service, clementines cannot be marketed in any citrus-production States. Since the strongest demand for the clementines is in the Northeast, the restrictions should have little effect on demand. They might, however, increase competition for domestic citrus. Consumers may benefit from such competition, should the industries decide to include price discounts in this season's promotional programs.

Table 8-Other citrus: Utilized production, 1999/2000-2001/02 and forecast for 2002/03 1/

Crop and State	Utilized			Forecast for 2002/03	Utilized			Forecast for 2002/03
	1999/2000	2000/01	2001/02	as of 10-2002	1999/2000	2000/01	2001/02	as of 10-2002
	--1,000 boxes 2/--				--1,000 short tons--			
Tangelos:								
Florida	2,200	2,100	2,150	2,400	99	95	97	108
Tangerines:								
Arizona	850	650	620	450	32	24	23	17
California	2,500	2,200	2,200	2,300	94	83	83	86
Florida	7,000	5,600	6,600	5,200	333	266	314	247
Total	10,350	8,450	9,420	7,950	458	373	420	350
Temples:								
Florida	1,950	1,250	1,550	1,400	88	56	70	63

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year.

2/ Net pound per box: tangerines--California and Arizona--75; Florida--95; tangelos--90; Temples--90.

Source: National Agricultural Statistics Service, USDA.

Fruit Exports Up Through August 2002

The export of U.S. fruit rose between January and August 2002 over the previous year. Exports were higher for both fresh and processed products. Shipments increased to Canada, South Korea, and the United Kingdom, but declined to some of the other major markets, such as Japan, Mexico, and Taiwan. Exports to Hong Kong remained at almost the same quantity as last year.

While almost two-thirds of fresh fruit exports are destined for Asia, Canada remains the most important individual market. Canada has shown a steadily increasing demand for U.S. fresh fruit over the last 10 years. While Japan continues to be the second leading market, its share of U.S. exports has been trending downward since peaking in 1995. While the importance of Japan as a market continues to drop, exports have been showing steady growth to Mexico and South Korea. Improved trade relations with the two nations in the nineties helped boost trade.

The weaker U.S. dollar during 2002 helped boost exports of grapefruit and strawberries, as well as some processed products, such as frozen strawberries, raisins, and canned peaches and pears (table 9).

The dollar as well as tight world supply helped drive U.S. frozen concentrated orange juice (FCOJ) exports up 128 percent for the 2001/02 marketing season through August. A smaller crop and low stocks in Brazil, the major world supplier of FCOJ, resulted in strong demand for U.S. product. A similar situation is not expected to reoccur in the new season that began in October, as Brazil's crop is projected to have returned to a more average size.

Citrus Imports Lower in 2001/02 to Date

Imports declined during the 2001/02 marketing season through August for most citrus products. Phytosanitary issues contributed to the reduced quantities of clementines available for import resulting in about a third less entering the United

Table 9--U.S. exports of selected fruit and tree nut products

Commodity	Marketing season	Season-to-date (through August) 2000/01	Season-to-date (through August) 2001/02	Year-to-date change
		--- 1,000 pounds ---		Percent
Fresh-market:				
Oranges	November-October	1,196,202	1,059,263	-11.4
Grapefruit	September-August	853,671	875,465	2.6
Lemons	August-July	10,594	8,314	-21.5
Apples	August-July	98,547	69,679	-29.3
Grapes	May-April	178,391	179,497	0.6
Pears	July-June	37,241	43,554	17.0
Peaches (including nectarines)	January-December	219,459	213,555	-2.7
Straw berries	January-December	103,168	122,585	18.8
Sw eet cherries	January-December	83,912	71,963	-14.2
		--- 1,000 gallons ---		
Processed:				
Orange juice, frozen concentrate	October-September	535,446	1,222,438	128.3
Orange juice, chilled	October-September	587,553	474,857	-19.2
Grapefruit juice	December-November	364,494	334,471	-8.2
Apple juice and cider	August-July	54,004	37,437	-30.7
Wine	January-December	521,633	458,122	-12.2
		--- 1,000 pounds ---		
Raisins	August-July	21,173	26,522	25.3
Canned pears	June-May	1,460	1,940	32.9
Canned peaches	June-May	4,957	7,980	61.0
Frozen straw berries	January-December	30,372	30,671	1.0
		--- 1,000 pounds ---		
Tree nuts:				
Almonds (shelled basis)	August-July	29,982	28,630	-4.5
Walnuts (shelled basis)	August-July	4,297	4,403	2.5
Pecans (shelled basis)	July-June	3,644	5,036	38.2
Pistachios (shelled basis)	September-August	24,792	24,457	-1.4

Source: Bureau of the Census, U.S. Department of Commerce.

States (table 10). While tangerine imports from Mexico and Israel were also off from a year ago, Spanish clementines imports declined from 131.6 million pounds during the 2001 winter (January to March) to slight more than 76,000 pounds in 2002. Clementine imports from Morocco and Italy increased to help make up for some of the loss, but not in sufficient quantities to fully compensate for Spain's imports. Imports are also off so far for the 2001/02 season for fresh oranges and limes.

The new 2002/03 lemon season began in August with imports 35 percent lower than August last year. The loss of the Argentine lemons due to a phytosanitary ban attributed to most of the decline. As a result, August lemon imports are more in line with previous years and are actually running ahead of any other year since 1990, except for this past season and 1997. Argentine lemons have had access to the U.S. market only in 2000 and 2001.

Imports have been up during the 2001/02 season for most noncitrus products, both fresh and processed. Higher frozen strawberry imports reflected lower U.S. inventories entering the new season.

Chilean Fruit Imports Increase in 2002

U.S. fruit imports from Chile during the first 8 months of 2002 were up 16 percent from the same period in 2001, totaling a record 576,016 metric tons. The United States imports a wide variety of fruit from

Table 10--U.S. imports of selected fruit and tree nut products

Commodity	Marketing season	Season-to-date (through August) 2000/01	Season-to-date (through August) 2001/02	Year-to-date change
		--- 1,000 pounds ---		Percent
Fresh-market:				
Oranges	November-October	107,701	100,729	-6.5
Tangerines (including clementines)	October-September	203,261	137,836	-32.2
Lemons	August-July	26,970	17,517	-35.0
Limes	September-August	426,510	356,911	-16.3
Apples	August-July	15,657	18,175	16.1
Grapes	May-April	182,528	243,179	33.2
Pears	July-June	587	651	10.9
Peaches (including nectarines)	January-December	39,486	43,116	9.2
Bananas	January-December	5,662,619	5,745,946	1.5
Mangoes	January-December	423,281	466,611	10.2
		--- 1,000 gallons ---		
Processed:				
Orange juice, frozen concentrate	October-September	223,540	160,501	-28.2
Apple juice and cider	August-July	29,670	32,869	10.8
Wine	January-December	78,338	92,031	17.5
		--- 1,000 pounds ---		
Canned pears	June-May	5,679	7,604	33.9
Canned peaches	June-May	20,358	29,522	45.0
Canned pineapple	January-December	385,539	448,904	16.4
Frozen straw berries	January-December	61,356	98,937	61.3
		--- 1,000 pounds ---		
Tree nuts:				
Brazil nuts (shelled basis)	January-December	12,272	14,893	21.4
Cashew s (shelled basis)	January-December	116,417	135,377	16.3
Pine nuts (shelled basis)	January-December	4,557	5,366	17.7
Pecans (shelled basis)	July-June	115	2,590	2158.2

Source: Bureau of the Census, U.S. Department of Commerce.

Chile, the bulk of which are shipped into the U.S. market during the winter. Historically, imports from Chile during the winter months (January-March) account for approximately 60 percent of total imports for the year. For the year thus far, grapes accounted for 62 percent of U.S. Chilean fruit imports, followed by apples (11 percent), peaches (8 percent), plums (5 percent), avocados (4 percent), and pears (3 percent).

With a slightly larger crop, Chile's fresh grape exports are estimated up 9 percent during the marketing year 2001/02 (January-December 2002). The United States is its largest export market, accounting for more than half of all shipments. Thus far, U.S. fresh grape imports from Chile rose 22 percent from a year ago. Less than favorable weather conditions have put the crop forecast for the marketing year 2002/03 (January-December 2003) down slightly from a year ago. Because the export markets provide Chilean grape growers with the highest returns and are their largest outlet, total fresh grape exports are likely to hold steady while downward adjustments are likely to be made in the processing sector.

Poor spring and summer weather reduced many of Chile's fruit crops for the marketing year 2001/02 (January-December 2002). The apple crop was down 4 percent and consequently limited exports. Fresh apple shipments to the United States, however, were up 8 percent. Chile's shipments of fresh peaches (including nectarines) were up only fractionally while shipments of fresh pears and plums were down 28 percent and 5 percent, respectively.

Chile is the largest foreign supplier of avocados to the United States. U.S. avocado imports from Chile thus far this year are at a record high, at 44.5 million pounds, up sharply from a year ago and well above the average for the last several years. Avocado production continued to increase in Chile for the marketing year 2001/02 (January-December 2002) as a result of favorable weather during the flowering stage in most production areas along with new orchards entering into production and more of the already existing young orchards producing higher yields. Production will continue to expand in the years to come as new orchards become productive. However, falling export prices and increased competition, especially with Mexico which now can ship to 31 U.S. States, will likely slow the expansion in Chile's avocado acreage. More than half of Chile's production is destined for the export markets, with over 90 percent of the outgoing shipments entering the United States.

Trends in the U.S. Kiwifruit Market

Formerly called the Chinese gooseberry, the kiwifruit (*Actinidia deliciosa*), produced by a large, woody deciduous vine, is rich in both flavor and nutritional value. Indigenous to China, the fruit is grown commercially in about 16 countries around the world. The top three producers—Italy, New Zealand, and Chile—account for over three-quarters of world kiwifruit production. Other leaders include France, Greece, Japan, and the United States. As the seventh largest producer, the United States produced an average of 3 percent of the world kiwifruit output during the last 5 years.

Over the period 1997-2001, U.S. kiwifruit production ranged from 25,800 to 36,600 short tons. Farm cash receipts from the sale of kiwifruit averaged $17.1 million during this time. According to the 1997 Census of Agriculture, kiwifruit is grown on 559 farms—down 29 percent from 1992 and 45 percent below the number in 1987.

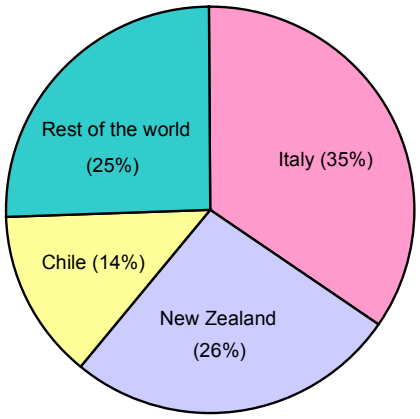
California Dominates Production

While nearly all of the U.S. kiwifruit is produced in California, small commercial plantings are also reported in other areas, particularly Oregon, South Carolina, and Virginia. The adaptability of the crop to climatic conditions in California, particularly in the Central Valley, has influenced production concentration in that region. According to the California Agricultural Statistics Service, Tulare and Butte Counties in Central California accounted for over 60 percent of the State's kiwifruit harvested acreage and production during 2001. Fresno, Yuba, and Kern Counties each produced more than 1,000 short tons that year, and their combined production accounted for 33 percent of the State's crop.

Kiwifruit Sold Mostly Fresh

Kiwifruit is sold primarily in the fresh market. Only a very small proportion of production goes to the processing sector, for products such as jam, juice or wine, and frozen. Kiwifruit contains many important nutrients that help promote good health, including vitamins C and E, folate, magnesium, and potassium. It is low in fat, an excellent source of fiber, and also rich in phytochemicals that have been found to help fight against many chronic diseases. Hayward is the primary variety grown commercially because of its large fruit, superior keeping quality, and great flavor.

Figure 6
World's top three producers of kiwifruit*



*Average share of 1997-2001 world production.

Source: Food and Agriculture Organization of the United Nations.

Domestic Production Declined During the 1990s

The kiwifruit was a relatively new crop to California two decades ago. The first significant commercial production of 1,050 short tons was packed in 1977. Strong demand for the fruit here and abroad along with high grower prices fueled the rapid expansion of the U.S. kiwifruit industry during the 1980s.

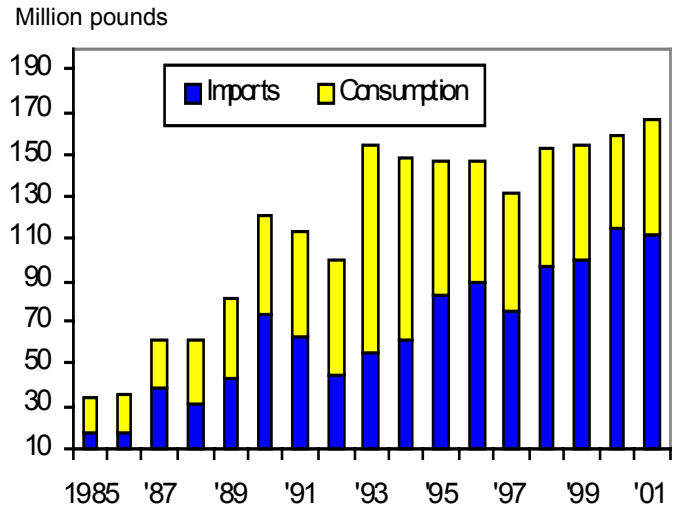
Bearing acreage increased significantly in the early to mid-1980s leading to continuing growth in production through the end of the decade. Bearing acreage was largest during 1990-92 at 7,300 acres. It has declined since then and has remained steady over the last 4 years at 5,300 acres. The U.S. kiwifruit crop peaked in 1992 at 52,300 short tons but has since remained erratic with a generally declining trend. Meanwhile, world production continued to grow from 26,687 metric tons in 1980 to a record 1.0 million metric tons in 2001. Because of fluctuations in production over the last decade, the U.S. share of world production has declined from an average of 17 percent over the period 1980-85 to 3.0 percent during 1997-2001.

Imports Continue To Grow in Importance in the U.S. Kiwifruit Market

An increasing proportion of competitively priced foreign kiwifruit supplies has penetrated the U.S. market during the 1990s, maintaining an abundance of domestic supplies and lowering U.S. grower prices. U.S. kiwifruit imports as a share of domestic supplies rose from an average of 39 percent over the period 1985-89 to an average of 60 percent during 1997-2001, with volumes ranging from 75.9 million pounds to 114.3 million pounds during this period. U.S. grower prices declined from an average of $1,407 per ton in the early- to mid-1980s to $604 per ton over the last 5 years.

Countries such as Greece, France, and the Republic of South Africa had began to make inroads to this market by the mid-1990s. A majority of the imports, however, continue to be shipped from Chile, New Zealand, and Italy—the world leaders. Besides their large production base, the counter-seasonal production schedules between Southern and Northern Hemisphere countries have influenced the wide presence of Chilean and New Zealand kiwifruit in the U.S. market.

Figure 7
U.S. imports and consumption of kiwifruit



Source: Bureau of the Census, U.S. Department of Commerce and Economic Research Service, U.S. Department of Agriculture.

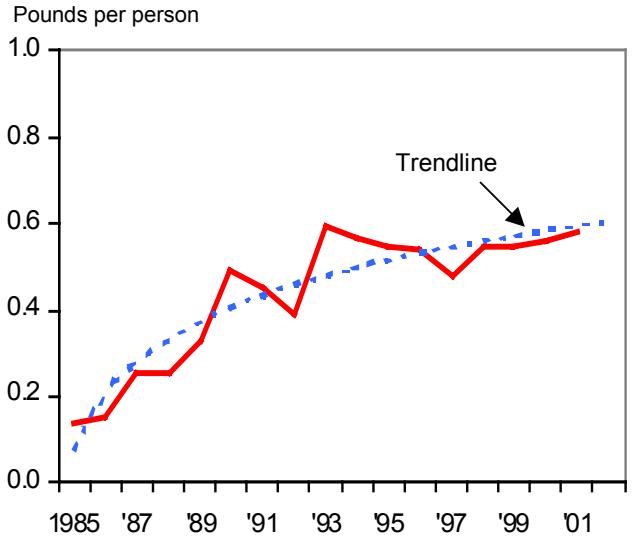
The California kiwifruit crop typically blooms in early May and the fruit is ready for harvest in late October. Because the fruit can be kept firm under proper cold storage conditions for 3 to 6 months, or sometimes longer, the marketing season extends from November through April. Imports, particularly those

Table 11--Kiwifruit: Acreage, production, season-average grower price, and value, California, 1980 to date 1/

Year	Bearing acreage	Total production	Price	Value
	Acres	Short tons	Dollars/ton	1,000 dollars
1980	1,600	5,300	2,400.00	10,080
1981	3,000	6,900	2,000.00	11,000
1982	3,400	15,500	920.00	10,580
1983	3,100	13,500	1,240.00	14,260
1984	3,800	18,000	1,070.00	17,762
1985	4,800	22,000	813.00	16,667
1986	5,600	24,300	1,030.00	24,102
1987	6,800	29,000	710.00	18,886
1988	7,100	32,700	760.00	22,420
1989	7,200	40,000	400.00	14,800
1990	7,300	39,000	415.00	14,110
1991	7,300	29,600	820.00	21,976
1992	7,300	52,300	290.00	13,833
1993	6,900	49,200	370.00	16,502
1994	6,500	39,400	491.00	18,413
1995	6,100	37,800	459.00	15,434
1996	5,700	31,500	470.00	13,157
1997	5,300	35,000	518.00	16,483
1998	5,300	36,600	744.00	24,544
1999	5,300	27,000	634.00	15,215
2000	5,300	34,000	455.00	13,888
2001	5,300	25,800	667.00	15,340

1/ First estimates were in 1980.
Source: National Agricultural Statistics Service, USDA.

Figure 8
U.S. per capita kiwifruit consumption



Source: Economic Research Service, USDA.

from Southern Hemisphere sources, have filled the gap in domestic production resulting in almost year-round supplies of kiwifruit for U.S. consumers. This has aided in boosting domestic consumption levels for the fruit, particularly during the 1980s—the industry's introductory phase.

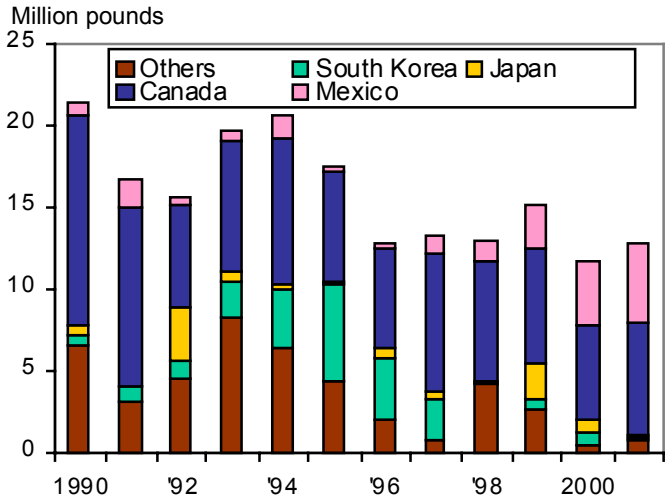
More than half of the kiwifruit consumed domestically during the 1980s was from imports, and this share has grown over the years, averaging 65 percent in the last 5 years. Although much above the levels during the mid-1980s, domestic consumption leveled off during the 1990s, partly reflecting relatively steady supplies and the increased presence of a wider selection of winter fruit all competing for retail shelf space. Up from an average of 0.22 pounds per person over the period 1985-89, U.S. kiwifruit consumption remained relatively steady at an average of 0.55 pounds per person during 1997-2001.

Increased Competition Reduced Role of Exports in U.S. Kiwifruit Industry

The balance of trade for kiwifruit in the United States continues to tilt more heavily toward imports but exports still serve as an important marketing outlet to U.S. growers. Exports during the period 1997-2001 averaged 13 million pounds and generated $8.0 million in sales. Exports now account for an average of 20 percent of production, down nearly 50 percent relative to the mid- to late-1980s. Growing world supplies, improvements in storage facilities (allowing for overlapping marketing seasons), and contractions in the domestic industry have diminished the role of the United States in the world kiwifruit market.

Influenced mainly by proximity, Canada is by far the largest export market for U.S. kiwifruit, accounting for over half of all the shipments over the last 5 years. Significant increases in shipments to Mexico in recent years have made it the second largest export market, with volumes far exceeding shipments to South Korea and Japan—previously larger markets for the United States. U.S. shipments are also reaching smaller markets in Latin America in recent years. While volumes are far below those shipped to Canada and Mexico, shipments to Colombia, Guatemala, Venezuela, Ecuador, El Salvador, and the Dominican Republic rose sharply during 2001.

Figure 9
U.S. kiwifruit exports to top markets



Source: Bureau of the Census, U.S. Department of Commerce.

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The *Fruit and Tree Nuts Situation and Outlook Yearbook* has over 130 tables of annual or monthly time-series data on specific fruit commodities. Data include bearing acreage, production, prices, trade, per capita use, and more.