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# THE COMPETITIVE POSITION OF THE U.S. IN THE WORLD MARKET FOR PEANUTS AND TREE NUTS

### Robert S. Glover and Bill R. Miller

Agricultural trade data classify U.S. exports as high value and low value products. Tree nuts are included in high value unprocessed products. Peanuts are more difficult to categorize. Peanut oil or meal and shelled peanuts are classified as semi-processed high value products file unshelled peanuts is considered (along with corn, wheat, and cotton) as a low value product.

#### **PEANUTS**

The primary market for peanuts in the U.S. is edible consumption. The production-marketing complex is so oriented, and contrasts with the rest of the world in that peanut oil, cake, and meal are the chief end products. World production of peanuts in 1984 was 18.5 million metric tons. Although U.S. production represents only a small fraction of the world peanut production (8% in 1983/84), the U.S. claims a large part of total edible trade.

The U.S. rise to dominance of the world edible peanut market was partially related to U.S. price support policy. The 1977 Food and Agriculture Act had an important impact on U.S. participation in the world peanut market. The Act provided for two price support levels. The poundage-quota part of the peanut allotment is supported at a higher price. The poundage quota was approximately 80% of acreage allotments and is equated to expected domestic consumption. The remaining allotments, designated as "additional peanuts," were supported at a much lower level. Additional peanuts are exported or diverted to crushing for oil and meal.

Following adoption of the lower price for export peanuts, the U.S. share and total volume of exports increased until 1980. Prior to the 1980 drought, the U.S. accounted for nearly 50% of the world export market for shelled peanuts. (table 1) Reclaiming the pre-1980 share in subsequent years was slow. However with the relatively large 1984 and 1985 crops, the U.S. market share is expected to increase. Although official statistics are not available, data summarized from trade sources indicate that the U.S. had regained its share of the market in major importing countries by 1984 (table 2).

Regaining market share that was lost following 1980 has been costly for U.S. peanut handlers and farmers. The export market has experienced extreme price fluctuations with accompanying risk to owners of peanuts not contracted for future delivery. In addition to price risk, the rising value of the U.S. dollar during 1980-84 exposed world peanut handlers to the worst of all trade situations. Prices were falling to the U.S. sellers and rising to foreign buyers. For example, the price of export edibles peanuts in London, September, 1980 was \$1188 per metric ton at the height of the 1980 drought induced scarcity. By September 1984, price had fallen to \$629 dollars per ton.

English traders, however, were paying in pound sterling an even higher price for peanuts from the bumper crop in 1984 than they paid for the short crop in 1980. This is attributed to the rising value of the dollar relative to pound sterling. The price in London rose from 513 in September 1980 to 610 pound sterling per metric ton in September, 1984 (table 3).

Georgia farm prices of "additional" peanuts followed London prices between 1980 and 1984. Limited data show that prices paid to farmers fell when the September price in London fell in 1982 and rose again with London prices in 1983. However, in 1984, new entry of firms into peanut shelling caused intensive bidding for farmer's stock peanuts. The result was a near catastrophe for orderly marketing. Average price of "additional" farmer's stock on a shelled basis (\$641 per metric ton) for the 1984 crop year was about the same as the third quarter delivered price in London (\$645 per metric ton, table 3).

Farmers, who had relatively good experience with "additional" peanuts from 1981 through 1984, were not prepared for the sharp drop in prices following the 1984 harvest. "Additional" peanuts were overly abundant relative to cash markets. Many contracts included a price later provision and some "additional" peanuts were sold by farmers as low as \$160 per ton (U.S. in-shell basis) which translates to \$234 per metric ton shelled. The weighted average price received by the sample of Georgia farmers was slightly higher, but disappointing.

Prospects are good that the U.S. and Georgia can continue to dominate the world market in edible peanut exports. There is, however, a serious lack of price and market information available to farmers and to the peanut industry. Adequate price and market

information is needed to stabilize supply at prices that cover cost of production and thus avoid wild swings in prices received by producers as occurred in the 1980s.

#### TREE NUTS

The U.S. tree nut industry is concentrated in the Pacific Region with California accounting for virtually all of the almonds, english walnuts, and pistachio's. Oregon and Washington grow the filberts and Hawaii grows all the macadamia nuts. In contrast, pecans are produced in 11 Southern and Southwestern states with about 40% of the production in Georgia.

Almonds, walnuts, and pecans typically account for about 95% of total U.S. production, with almonds accounting for 45% of the total nut crop output during 1979-83. Walnuts accounted for about 30% of the total and pecans 17%. The share of production accounted for by almonds has been increasing. Almond production trended sharply upward during the 1965-1985 era. The almond crop in the 1979-1983 period was 2-1/2 times that of the 1968-1972 period. Comparison of these periods for walnuts, and pecans show production increases of 88% and 22%, respectively.

Tree nut production shows considerable year-to-year variations. Walnuts, pecans, and filberts have alternate year (biennial) production patterns. High yields have consistently followed low yields and visa versa.

Except for macadamia nuts, real prices to growers declined between the 1960s and 1980s. However, nominal prices to growers have trended upward since World War II. Due to biennial production patterns prices of tree nuts vary considerably year-to-year. Prices for almonds and filberts declined somewhat in the early 1980s. Walnut and macadamia nut prices remained strong into the 1980s and pecan prices continued at about late 1970s levels into the 1980s.

The United States was traditionally a net importer of tree nuts. Between 1929 and 1963 exports never exceeded 18% of imports and were less than 10% of imports in all but four years. During 19 years of that period, less than 5% of total U.S. tree nut production was exported. Exports exceeded 10% of production in only three of these years and was never higher than 15%.

The import/export balance changed in the mid 1960s and accelerated during the decade of the 1970s, (table 4). Between 1970 and 1985, U.S. production and exports more than doubled, and imports declined.

Beginning in 1970, the long established trade flows in tree nuts changed in that the U.S. became a net exporter. The change was strongly influenced by increasing almond exports. Growth in walnut exports also

contributed to reversing the U.S. trade position in tree nuts.

The increase in U.S. tree nut exports between 1970 and 1985 was consistent with what occurred with high value products in general. Import demand for high value products expanded rapidly during the 1970s, with most of this demand increase was in Western Europe.

The U.S. has traditionally been a net exporter of pecans. Although the pecan trade flow was generally positive for the U.S. in the early 1980s, exports of pecans constituted a small (usually about 2%) fraction of the nation's total tree nut exports. Export markets have never been a major outlets for U.S. pecans as annual export shipments rarely account for more than 5% of domestic production and usually less.

Pecan exports have not grown as rapidly as almond shipments, which may be partially related to prices. Almond real prices decreased more than pecan prices during 1970—1985. In addition to relative prices, the almond industry has apparently exerted more effort to developing international markets.

Pecan production is trending slightly upward — about equal to population growth — thus per capita consumption is about stable. Cultural practices to reduce the year-to-year variation in yields and production are being used. Nonetheless variation remains, but is much less extreme in the 1980s than it was in the 1960s when total production was 75.3, 376.4 and 178.6 million pounds for 1962, 1963, and 1964, respectively.

#### SUMMARY AND IMPLICATIONS

The demand for high value products is influenced by several factors. These include the desire to upgrade and diversify diets, the requirement of semi-processed inputs for final processing industries, and interest in reducing food preparation time and labor requirements. These factors build a high degree of income elasticity into the demand for these products. Income elasticities of demand for high value products worldwide may be in the range of 0.5 to 2 compared to a range of -0.1 to 0.5 for the lower value bulk products except for feed grains and oilseeds utilized in animal feeding. Economic recovery from the world recession of the first half of the 1980s should have a positive impact on the demand for U.S. peanuts and tree nuts.

The basis for high value trade often hinges on the exporter's comparative advantage in processing and marketing the product. The U.S. may well have the comparative advantage in producing and processing high quality peanuts and tree nuts.

Inadequate international marketing initiatives for these products may be the primary weakness of the U.S. nut industry -- especially peanuts and pecans. More effort on foreign

market development would benefit the growers and processors of these products. Georgia Agriculture and Agribusiness in particular would benefit from expanded exports of these products.

Given the investment in the peanut and pecan industry, expansion of exports through public (e.g. Foreign Agriculture Service) and private efforts is an obvious desirable strategy for Georgia and Southeast agriculture. High quality peanuts and pecans can be produced, processed, stored and distributed to all major world markets. The market infrastructure, controlled atmospheric storage, machinery for harvesting and shelling, and the transportation system are already in place.

#### REFERENCES

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Table 1. World peanut exports by country, 1971-82.

	United				China		Other	
Year**	States	Nigeria	Senega 1	Sudan	P.R.	India	countries	World
1			(1,000	metric tons,	in-shell	basis*)		
1971	132	196	47	167	33	40	604	1,219
1972	250	151	20	156	63	36	609	1,285
1973	236	284	4	194	42	44	516	1,320
1974	322	43	14	183	51	126	476	1,215
1975	336	3	24	290	38	100	477	1,268
1976	197	3	190	404	41	237	380	1,452
1977	355	1	101	204	21	73	391	1,146
1978	465	0	24	134	26	4	353	1,006
1979	518	3	13	61	50	33	416	1,094
1980	479	0	3	51	108	24	420	1,085
1981	228	0	4	107	341	83	429	1,192
1982	261	0	3	140	163	57	404	1.028

\*Trade for shelled peanuts converted to in-shell basis using the following conversion factors: For the United States, shelled/0.75 = in-shell; for all other countries, shelled/0.70 = in-shell.

\*\*Year represents second year of U.S. marketing year (i.e., 1971 = August-July 1971/72; all other countries are on a calendar year.

Source: U.S.: U.S. Department of Agriculture China: Official China Government Statistics Other Countries: FAO Trade Yearbooks.

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Table 2. Major importers of edible peanuts in 1984 and U.S. share of market.

Cauntini	Total purchased 1984	Purchased from U.S.		U.S. share
Country		1984		1979
	(shelled i	metric tons)	%	
Netherlands United	79,874	37,337	47	55
Kingdom	79,002	53,051	67	64
Canada	64,579	57,641	89	99
West German	y 49,161	17,520	36	33
Japan	62,877	30,661	48	48
Total	365,493	196,210		1
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Table 3. Third quarter prices of export edible peanuts in London and season average price on Georgia farms, 1980-1984.

	London	(CIF)a	Georgia farms <sup>b</sup>		
	Shell metric	ed/	Shelled/ metric ton	Unshelled/ U.S. ton	
	- \$ -	- £ -		\$	
1980	1,188	513	*	*	
1981	1,059	678	546	373	
1982	759	477	455	311	
1983	1,301	649	550	376	
1984	629	610	641	438	

\*Not Available

a. .Source: Gill and Duffus. 1985. Edible Nut Market. Report No. 120 (October). b. Source: Farm Economics Information Center, University of Georgia.

Table 4. Tree nut production, imports and exports.

Year	Total production	Imports	Exports	Production exported	Exports Imports
		1,000 lbs		<b>x</b>	WT 336
1970	295,940	148,900	96,370	33	65
1971	363,610	151,700	125,420	34	83
1972	310,260	178,770	108,750	35	61
1973	398,490	152,410	119,120	30	78
1974	392,530	116,215	151,440	39	130
1975	425,360	166,100	196,680	46	118
1976	449,950	161,810	223,500	50	138
1977	546,650	106,360	240,160	44	226
1978	395,660	130,350	178,990	45	137
1979	610,280	117,980	295,480	48	250
1980	550,130	100,310	264,720	48	264
1981	709.880	92,390	283,150	40	306
1982	624,910	121,970	234,850	38	193

Source: Agricultural Statistics 1983, p. 238.