

Foreign Exporters

Tobacco production and cigarette output are controlled by government monopolies or large multinational firms in most foreign countries. Cigarette taxation is an element of government finance in every country.

Government support has helped boost foreign production and exports. Argentina subsidizes growers by returning to them part of the taxes on cigarettes. South Korea and some EC countries also provide subsidies to growers. Brazil, a major competitor of the United States, provides technical assistance to growers. Manufacturers and dealers purchase fertilizer and pesticides at discounts and pass the savings on to growers. Also, seed and transportation to market are furnished by the tobacco purchasers. Furthermore, some multinational tobacco companies assure Brazilian tobacco growers a market for portions of their production.

Some major exporters such as Zimbabwe do not offer significant export subsidies. However, like the United States, countries such as Zimbabwe and Canada have trade missions that travel throughout the world to promote tobacco produced in their country.

Because export growth spurred by competitive prices has been responsible for much of the foreign production increase, a number of foreign countries are concerned with U.S. tobacco price policy. Any prospect of lower loan stock tobacco prices is of major concern in countries such as Zimbabwe and Brazil. These countries compete heavily with the United States in world markets.

High U.S. support prices and a strong U.S. dollar during the early 1980's contributed to expanded foreign production and exports. The high U.S. prices also contributed to the U.S. expansion of imports during the last 15 years. Price supports were lowered in the mid-1980's and the dollar has been weaker in recent years. Still, reduced cigarette consumption in some countries, even lower leaf prices in countries such as Brazil and Zimbabwe, and trade barriers will limit U.S. tobacco trade.

Prices, Costs, and Returns

For about 96 percent of U.S. tobacco production, minimum prices are guaranteed based on a legal formula. With passage of the Reconciliation Act in 1986, flue-cured and burley price supports are the level for the current year adjusted by changes in the 5-year moving average of prices (two-thirds weight) and changes in the cost of production index (one-third weight). Costs include general variable expenditures but exclude costs of land, quota, risk, overhead, management, marketing contributions, and other costs not directly related to tobacco production. The Secretary of Agriculture can set the price support between 65 and 100 percent of the calculated increase or decrease.

Table 14--Average prices and support levels for tobacco, 1970-89

Crop year 1/	Flue-cured		Burley		Avg. price received, all tobacco
	Price received	Support rate	Price received	Support rate	
<u>Cents per pound</u>					
1970/71	72.0	66.6	72.2	68.6	72.9
1971/72	77.2	69.4	80.9	71.5	78.6
1972/73	85.3	72.7	79.2	74.9	83.0
1973/74	88.1	76.6	92.9	78.9	90.0
1974/75	105.0	83.3	113.7	85.9	108.6
1975/76	99.8	93.3	105.5	96.1	102.6
1976/77	110.4	106.0	114.2	109.3	112.5
1977/78	117.6	113.8	120.0	117.3	118.6
1978/79	135.0	121.0	131.2	124.7	132.4
1979/80	140.0	129.3	145.2	133.3	141.1
1980/81	144.5	141.5	165.9	145.9	152.3
1981/82	166.4	158.7	180.7	163.6	170.6
1982/83	178.5	169.9	181.0	175.1	176.4
1983/84	177.9	169.9	177.3	175.1	174.6
1984/85	181.1	169.9	187.6	175.1	180.6
1985/86	2/ 171.9	3/ 169.9	159.7	148.8	164.5
1986/87	152.7	143.8	156.5	148.8	152.2
1987/88	158.7	143.5	156.3	148.8	157.0
1988/89	161.3	144.2	161.0	150.0	164.6
1989/90	NA	146.8	NA	153.2	NA

NA= Not available.

1/ For flue-cured and cigar wrapper, year beginning July 1; for all other types October 1. 2/ Excludes 25-cent per pound rebate to buyers. 3/ The effective price support was administratively reduced to \$1.65 per pound by reducing the support for certain grades.

For other kinds, changes in support prices continue to be based on the average of the parity index (a measure of prices paid by farmers) during the 3 previous years compared with 1959. However, loan associations can request reduced support levels if market conditions warrant.

The CCC advances funds to grower cooperatives for acquisition of any lot of tobacco that does not receive a bid price equal to the price support for that grade of tobacco. These acquisitions (loan stocks) are processed and stored for later sale by the cooperatives. Before 1982, if net gains were realized, they went to the growers, but losses were assumed by CCC. Beginning with the 1982 crop, gains can be retained to offset losses.

Prices received by growers for all U.S.-grown tobacco rose 148 percent between 1970 and 1984 (table 14). Flue-cured prices jumped 152 percent and burley prices rose 160 percent during that 14-year period. Both flue-cured and burley support rates rose 155 percent during that time.

By the mid-1980's, it had become clear that U.S. tobacco price supports were too high for domestic tobacco to compete in world

markets. Tobacco imports continued to grow and the higher U.S. prices were having a negative impact on exports. Loan stocks were growing to alarmingly high levels and growers faced higher and higher assessments to assure that the program operated at no-net-cost to the government, except for administrative costs of operating the program. Under existing law, production quotas could not legally be adjusted enough to bring supply and demand into balance.

Price support levels were frozen at 1982 levels in both 1983 and 1984 and other changes had been made to attempt to make the tobacco program operate more effectively. However, it was evident by 1985 that major changes had to be made in the flue-cured and burley tobacco price support and production control programs if they were to survive. Legislation was consequently enacted in 1986 that reduced flue-cured and burley price supports about 26 cents a pound, changed setting of quotas to a more market-oriented approach, and provided for orderly movement of surplus stocks into trade channels.

Grower prices have averaged higher than price support levels. Over the last 10 years, flue-cured prices have averaged 9 cents a pound above support and burley 10 cents a pound above support. The above-support average reflects the fact that over 100 grades of both burley and flue-cured have individual support rates. Bidding for some grades is keener than for others in a given year, depending on domestic manufacturing and export needs for particular blends of cigarettes. The average difference between auction prices and the average support level generally reflects available supplies, demand, and quality of the tobacco being marketed.

For most U.S. tobacco, the grower price is determined by auction sales in tobacco warehouses. A farmer may reject the bid price offered for any lot of tobacco, then offer the lot for sale on the same warehouse floor at a later time or move it to another warehouse floor. The farmer is paid for the tobacco by the warehouse, less selling charges ranging from 2.5 to 6 percent of the gross value, depending on the type of tobacco.

Most burley and flue-cured is sold by the auction method. However, dark fire-cured and cigar filler and binder tobacco are commonly sold at the barn door. Farmers contract for the sale of their tobacco at the farm sometime during the growing or curing season. Although competitive bidding exists in the sense that various buyers inspect the tobacco and make offers, competition is not as apparent as in auction sales. Sales may be at a flat price per pound for the entire crop or at separate rates per pound for different groups of grades.

Cigar wrapper, which is not under the price support program, is grown under many kinds of arrangements. These range from cigar manufacturers growing tobacco on their own land to contracting with growers and paying on a grade basis.

Tobacco is a high-value per-acre crop. For the 1988 crop, gross receipts from tobacco totaled about \$2.25 billion or \$3,550 per acre. Total gross receipts declined about one-third from 1982 to 1988 because of sharply lower production and lower prices. Still, average gross receipts per acre exceeded \$3,500.

Even with the lower price supports of recent years, most tobacco growers are assured of prices above costs of production, excluding management, land, and quota lease or rental charges (table 15). The average margin between price and costs is smaller for burley than for flue-cured because much greater reductions in labor have been achieved for flue-cured than for burley. However, a greater proportion of flue-cured costs are actual cash costs than is the case for burley. The differences between prices and costs do not reflect returns to management. The spread between costs and prices has resulted in lease or rent charges (currently 30-40 cents per pound in the most concentrated areas) to growers leasing or renting quotas. Many growers now pay one-sixth to one-fifth of the price received for the right to produce the crop. However, rental and lease prices dropped around 25 cents a pound following 1986 legislation lowering price supports a similar amount.

Production costs differ widely due to variations in management and various other factors. Costs for some growers are much closer to prices than for others, especially in recent years. However, on average, the margin between costs and returns in average growing years is fairly wide, but it has become smaller during recent years.

Tobacco production continues to be labor-intensive despite major reductions in labor used to produce flue-cured. In 1987, about 150 hours of labor were used per acre to produce flue-cured tobacco, compared with about 425 hours in 1965. The reduction is attributed to a switch to untied leaf sales, a changeover to

Table 15--Tobacco prices and costs of production, 1979-88

Year	Flue-cured		Burley	
	Price	Cost 1/	Price	Cost 1/
<u>Dollars per pound</u>				
1979	1.40	0.78	1.45	NA
1980	1.45	.85	1.66	NA
1981	1.66	.87	1.81	NA
1982	1.79	.95	1.80	NA
1983	1.78	1.08	1.77	NA
1984	1.81	.99	1.88	1.25
1985	1.72	1.14	1.60	1.19
1986	1.53	.96	1.57	1.20
1987	1.59	1.05	1.56	1.21
1988	1.61	1.06	1.61	1.21

NA = Not available for current survey year base.

1/ Costs per pound excluding management, land, and quota.

labor-saving harvesting devices including bulk barns and mechanical harvesters, and more efficient preharvest operations. Also, improved management has paralleled mechanization and increased farm size.

Similar reductions in labor use have not occurred for burley and other types because of the lack of a feasible harvester that maintains the quality of air-cured tobacco and the small size of operating units. In 1984, approximately 250 hours of labor were used to produce an acre of burley, a reduction of about 90 hours from 1976. During that time, there was a nearly complete switch to loose-leaf sales in bales or sheets from tied hands. This, and other changes, such as improved management and the adoption of a few harvesting aids, resulted in reduced labor use. Most of the dark and cigar types also require 250-300 hours of labor per acre.

Many of the benefits of labor reductions are apparently being captured by quota holders at the expense of grower profits. When prices exceed an average return to management and production costs, excluding land and quota, the excess return gets capitalized into the value of land and quota. Because tobacco production is limited by quotas, increases in returns due to lower production costs or higher price supports get bid into the rent or lease value of the quota. This aids quota owners but does little for nonowning growers beyond providing price stability.

History of the Tobacco Price Support and Production Control Program

The Federal Government has operated programs to support and stabilize tobacco prices since the early 1930's. As a result, risks to growers from seasonal and cyclical price changes have been lessened in the face of weather, production, and use variations.

1930 to 1981

The Agricultural Adjustment Act of 1933 designated tobacco as a basic (storable) commodity and cash payments were made to tobacco growers who restricted production (1933-35). After the 1933 legislation was declared unconstitutional, substitute legislation authorized payments for carrying out soil conservation practices (1936-37).

The Agricultural Act of 1938 authorized marketing quotas, with a penalty for growers exceeding designated quotas. When two-thirds or more of tobacco growers voting approved marketing quotas for their kind of tobacco, growers received price support up to 75 percent of parity. For parity price calculations, August 1919-July 1929 was the designated base period for tobacco, rather than the 1910-14 base period for most other commodities.

Despite many legislative changes since 1938, the marketing quota authority to provide an adequate and balanced flow of tobacco

Despite many legislative changes since 1938, the marketing quota authority to provide an adequate and balanced flow of tobacco continues. The program is available for all kinds of tobacco except shade-grown wrapper and Perique. Except for the 1939 crops, marketing quotas have been approved and in effect since 1938 for each crop of flue-cured, burley, and dark tobacco. Cigar binder and Ohio filler crops first came under quotas in 1951. Price supports have never applied to Pennsylvania filler and were last applied to the Maryland crop in 1965 and the Connecticut-Massachusetts binder crop in 1983.

In October 1942, Congress raised the support level to 90 percent of parity, and that authority continued through 1948. The Agricultural Act of 1949 continued the 90-percent parity level and has been the authority for tobacco price support since 1950.

Because of sharply increasing price supports, an amendment to the 1949 Act set crop support prices for 1960 at the previous year's level. The amendment also provided for subsequent price support changes to be based on the average parity index for the 3 previous calendar years compared with the 1959 index. Price support levels and other information for the different types of tobacco are shown in appendix table 10.

Under the loan program, a support price (loan rate) is established for each grade of tobacco. If the buyers are not willing to bid the Government loan rate for any lot of tobacco, an eligible grower may receive the lot's designated loan rate less any overhead deduction to cover the loan association's administrative costs. The tobacco is then taken by a cooperative association. Under an agreement with the CCC, the association arranges for receiving, redrying, packing, storing, and eventually selling the tobacco under loan.

Grade loan rates are based on recent trends in market prices, loan holdings, and the shares of particular grades received under loan. The weighted average of various loan rates must equal the overall support level for each kind of tobacco.

Lease and transfer of flue-cured tobacco was permitted from 1962 to 1986. Leasing was discontinued in 1987, but reinstated only for natural disasters beginning in 1988. Acreage poundage quotas for flue-cured tobacco were implemented in 1965. Lease and transfer of quotas and poundage quotas became effective for burley in 1971. Producers of flue-cured and burley were allowed to sell an amount up to 110 percent of their quota without penalty (changed to 103 percent in 1986), with marketings the following year to be reduced by the amount of any overmarketings.

An administrative rule in 1974 provided relief at congested warehouses early in the marketing season by requiring each flue-cured producer, as a condition of eligibility for price support, to designate in advance the warehouse desired for selling. The warehouses had to be within 100 miles of the county seat where the farm was located.

1982 to 1985

Three laws were enacted in 1982 and 1983 that made substantial changes in the program. Their adoption was impelled by a number of pressing concerns. Voluntary health groups and some members of Congress were concerned that the U.S. Treasury makes outlays on a commodity statistically associated with various illnesses. Another concern among some growers and others was that many of the owners of tobacco quotas did not grow tobacco. Still another concern was that price supports were so high that U.S. tobacco was losing its competitiveness in world markets.

The first law was termed the "No-Net-Cost Tobacco Program Act of 1982." That law, mandated by the 1981 Agriculture and Food Act, required that to be eligible for price support producers of all kinds of tobacco, beginning with the 1982 crop, had to contribute to a fund or pay assessments to an account established by the cooperative association that makes Federal support loans available to producers. The funds are collected to cover potential losses in operating the price support program.

The no-net-cost law was the first to authorize owners of flue-cured allotments and quotas to sell these rights separately from the farms to which the allotments were attached. The allotments and quotas had to be sold to active producers for use on other farms in the same county. The legislation also required corporations, utilities, educational and religious institutions, and other entities owning tobacco allotments, but not significantly involved in farming, to sell their allotments or forfeit them.

The second law froze 1983 tobacco supports at their 1982 levels and a third law made further changes in the tobacco program, as follows:

- o Flue-cured price supports for 1984 were again frozen at the 1982 level. In 1984, the support price for burley and other types was set so as not to narrow the normal price support differential between them and flue-cured. Procedures were established for calculating supports for each kind of tobacco in the future.
- o The lease and transfer of flue-cured tobacco quota was abolished beginning in 1987 (later reinstated for disaster conditions).
- o Imported tobacco, except for Oriental and cigar tobacco, must be inspected for grade and quality to the extent feasible.
- o Beginning in 1986, the law requires forfeiture of any flue-cured quotas assigned to a farm on which tobacco has not been planted (or considered planted) during at least 2 of the previous 3 years.
- o The last permitted announcement date for flue-cured tobacco quotas was changed from December 1 to December 15.

1986 to 1987

Although three significant pieces of legislation were enacted in 1982 and 1983, major problems still existed in the tobacco program. There was a sense of urgency in 1985 in much of the tobacco industry to further modify the price support program.

Legislation authorizing the Tobacco Price Support and Production Control Program has no expiration date and thus was not a part of the Agriculture and Food Act of 1981, which was designed to expire after the 1985 crop. Therefore, tobacco provisions were not included in the 1985 farm legislation, except for two sections of the Food Security Act of 1985. These referred to pesticide residues in both imported and domestically produced flue-cured and burley tobacco, and a certification requirement of end use of imported tobacco.

On April 7, 1986, the Consolidated Omnibus Budget Reconciliation Act of 1985 was signed into law. Provisions of the law affecting the tobacco control program are as follows:

Price Support

- o The price support level for 1986-crop burley tobacco remained at \$1.488 per pound. The price support level for 1986-crop flue-cured was lowered to \$1.438 per pound from \$1.65 in 1985 (before buyer rebates).
- o The price support for 1986 and subsequent crops of any kind of tobacco (other than flue-cured and burley) was to be set using the same formula as in the previous law. Also, for other types, loan associations have the authority to reduce support levels if market conditions warrant.
- o Beginning in 1987, the annual flue-cured and burley price support was the level for the preceding year adjusted by changes in the 5-year moving average of prices (two-thirds weight) and in the cost of production index (one-third weight). Costs include general variable costs, but exclude costs of land, quota, risk, overhead, management, marketing contributions or assessments, and other costs not directly related to tobacco production. The Secretary can set the price support between 65 and 100 percent of the calculated adjusted change from the previous year. However, provisions that authorized the Secretary to lower the price support on certain grades of flue-cured tobacco were repealed.

Determination of Marketing Quotas

- o Flue-cured and burley quotas are now based on (1) intended purchases by cigarette manufacturers, (2) average annual exports for the 3 preceding years, and (3) the amount of tobacco needed to attain a specified reserve stock level (15 percent of the basic quota or a minimum of 100 million pounds of flue-cured and 50 million pounds of burley).

Quota reductions for flue-cured and burley are limited to 6 percent for 1986-89 and 10 percent for 1990-93.

- o USDA's discretion for setting flue-cured and burley quotas is limited to not more than 103 percent or less than 97 percent of the amount determined by manufacturers' needs and exports, and the reserve stock level.
- o The amount of flue-cured and burley tobacco that can be marketed without penalty was reduced from 110 to 103 percent of the farm marketing quota.
- o The latest announcement date for marketing quotas for any kind of tobacco other than flue-cured and burley was changed from February 1 to March 1.

Flue-Cured and Burley Purchase Requirements' Penalty

- o Cigarette manufacturers are required to submit estimates to USDA of their flue-cured and burley purchases for the upcoming marketing year 15 days before the quota announcements are due. If manufacturers do not submit an estimate of purchases, the USDA is permitted to provide an estimate.
- o Any manufacturer that fails to purchase at least 90 percent of the tobacco it said it would purchase (whether estimated by the manufacturer or USDA) for purposes of quota determination is subject to a penalty of twice the per-pound assessment times the amount by which purchases are less than 90 percent of intended purchases. The purchase requirement for each manufacturer will be reduced proportionally if total marketings are less than the effective national marketing quota.
- o Penalties collected will be deposited in the no-net-cost flue-cured and burley accounts.

Assessments to No-Net-Cost Accounts

- o Purchasers of flue-cured and burley tobacco pay the same amount to the associations as producers to the extent practicable.
- o Failure to remit the assessment fee will result in a marketing fee penalty equal to 75 percent of the average market price of the preceding year's crop for the kind of tobacco involved.
- o Future burley assessments are to be determined without regard to the 1983 burley crop, which was declared a disaster crop with special provisions for its disposition.

Purchase of Inventory Stock

- o The Flue-Cured Stabilization Cooperative is selling its stocks of 1976-84 crops at discount prices. The 1976-81 crops are discounted 90 percent and the 1982-84 crops 10 percent from established sales values. The sales values of the flue-cured inventory were determined by the base price plus carryin charges accrued from December 20, 1984, to the date of purchase. Purchasers pay carryin charges from date of purchase to removal from storage.
- o Burley associations are selling their stocks of 1982 and 1984 tobacco. The 1982 crop is being offered at the base price in effect on July 1, 1985, and the 1984 crop is being offered at a price sufficient to cover the association's costs as of April 7, 1986.
- o The CCC took title to the 1983 burley tobacco loan stocks when the loans were called on May 7, 1986. The entire crop had been sold by July 1987 after three offerings.
- o The 1976-84 loan stocks of flue-cured and the 1982 and 1984 loan stocks of burley are being sold to manufacturers on the basis of a pro rata share of each crop, type, and grade of the entire inventory. Each of the four participating manufacturers is purchasing an amount equivalent to its share of U.S. cigarette production. Purchases by manufacturers are to take place over a 5-year period for burley and an 8-year period for flue-cured.

1988 to 1989

The Agricultural Reconciliation Act of 1987 made further changes in the tobacco program. The changes are as follows:

- o The price support level for the 1988 and 1989 tobacco crops must be reduced by 1.4 percent from the level it would be under existing legislation. Otherwise, producers and purchasers will be assessed an amount sufficient to cover a reduction in outlays, equivalent to a 1.4-percent cut in price supports. If the price support is reduced, the reduction must be disregarded for determining support levels for subsequent tobacco crops.
- o Limited lease and transfer of flue-cured tobacco quotas was authorized for disaster conditions. The Secretary of Agriculture may permit lease and transfer of flue-cured tobacco quota to a farm after June 30 of any crop year if the Secretary determines that (1) the planted acreage of flue-cured tobacco on the farm to which the quota is assigned is equal to or greater than 90 percent of the farm's acreage allotment, or that (2) the planted acreage is sufficient to produce the farm's marketing quota under average conditions, and that (3) the farm's expected flue-cured production is less than 80 percent of the farm's

effective marketing quota as a result of a natural disaster. Transfer can occur within States under conditions specified by the Secretary:

- o Adjustments of yields and allotments at 5-year intervals (due to changes in county average yields) were eliminated under the flue-cured tobacco acreage-poundage program.
- o The USDA was required to review compliance procedures for acreage and poundage quotas for cigar, dark air-cured, and fire-cured tobaccos to determine if procedures can be improved. USDA has taken several actions. Beginning with the 1988 crop, acreage measurements will be conducted on all farms producing those three classes of tobacco. In determining whether or not a producer has planted tobacco in excess of the farm's acreage allotment, the acreage tolerance has been reduced. Also, marketing quota regulations have been amended to apply more strictly to farms producing two or more kinds of tobacco.

Effects of the Tobacco Program

The major aims of the tobacco program are to stabilize prices and to assure a balanced flow of tobacco. Tobacco product processors are assured adequate supplies of the types and qualities of leaf needed for their products. Program benefits accrue to growers through prices that are higher than they would have been without a tobacco price support and production control program. Consumers, taxpayers, and resource use are also affected by the program.

Farmers and Quota Owners

About 137,000 growers and an additional 300,000 quota holders benefit from the tobacco price support program. Growers are assured a minimum price and a more stable income than they would obtain without a program. Many small growers who have quotas are able to continue farming because of the support program. Quota holders receive income by growing the crop, renting out (with quota), or leasing and transferring the quota to others. In fact, much of the difference (around 25-35 cents a pound) between support prices and costs, excluding land and quota, has been bid into quota values. However, reduced support prices have lowered quota lease and rental values.

The capitalized value of quota has also fallen. Starting in 1982, sales of flue-cured quota have been permitted. In North Carolina, the value of quota steadily declined from 1982 to 1985 as leaf surpluses accumulated, quotas were reduced, and no-net-cost assessments rose. Then, price supports were lowered and the value of quota has apparently stabilized at between \$1.25 and \$1.50 per pound. The current value is sharply lower than that of a decade ago. A study by Seagraves and Williams (1981) found that the value of flue-cured quota was \$3.50 per pound in 1975, rose to \$4.61 in 1977, and then fell to \$3.24 in 1980. In

constant dollars, adjusting for inflation, they concluded the value fell by 40 percent from 1975 to 1980. The expectation, apparently, was that the life of the program was in question. Even greater concerns about the life of the program were apparent from 1980 to the mid-1980's. With new legislation, greater certainty now exists but lower quota values prevail because of reduced support levels.

Taxpayers

Realized losses on the sale of tobacco loan stocks have been about \$500 million on principal since the beginning of the program in the 1930's. Also, an estimated \$300 million in interest cost has been written off. However, unlike other farm commodity programs, beginning in 1982, the tobacco program was required to operate at no net cost to U.S. taxpayers. Since April 1982, loans have been made at prevailing U.S. Treasury borrowing costs (before April 1982, CCC charged below-market interest rates to producer associations for nonrecourse loans). Also, beginning in January 1984, loan repayments have been applied to both outstanding principal and interest (before January 1984, payments were first applied to principal and then to interest). Administrative costs of the tobacco program amounting to \$10-15 million a year are borne by taxpayers. Annual costs of the tobacco price support program are detailed in appendix table 4.

Outstanding loans to producer cooperatives to operate the tobacco price support program totaled about \$1.3 billion as of July 1, 1989. These loans represent \$0.3 billion outstanding on 1975-81 crops and \$1 billion on 1982-88 crops. For the pre-1982 crops, the Federal Government must absorb any losses, but for the 1982-88 crops, any losses will have to be made up from grower assessments (all 1983 burley loan stocks have been sold). So, for all remaining 1982-88 crops, there is no Government liability as long as the current program remains in place.

Even though the No-Net-Cost Tobacco Act of 1982 prohibited any net expenditures of taxpayer funds to operate the tobacco price support and loan program for crops beginning in 1982, most of the costs of operating the program have been incurred since 1982. Only around \$60 million in losses on principal had been incurred at the end of fiscal year 1982. But, nearly \$450 million in losses on principal were incurred in fiscal years 1983-87. About 80 percent of the losses were from heavily discounted sales of poor quality 1983 burley tobacco loan stocks. The Budget Reconciliation Act of 1986 required the CCC to take title to 1983 burley loan stocks and offer it for sale at market-established prices. Heavy losses were incurred on the loan principal but growers paid interest charges through their assessments to no-net-cost accounts. Under the 1986 legislation, the shortfall (about \$373 million) was exempted from no-net-cost assessments.

Losses on sales of loan stocks from the 1976-81 crops also are being absorbed by the U.S. Treasury. However, under legislation now in effect, net U.S. Treasury outlays for current tobacco

crops or any crop produced after 1983 can occur only for the administrative costs (\$10-15 million per year) of operating the program.

Consumers

The tobacco farm program has probably caused cigarette and other tobacco product prices to be a little higher than they would be otherwise. It is estimated that the price support program has boosted leaf prices 20-30 cents a pound. However, only about 6 percent of the price of a pack of cigarettes reflects the domestic leaf in the cigarette. The program probably increases the price of a pack of cigarettes only 1-2 cents a pack or 1-2 percent.

Supply and Use

Since 1938, the Federal Government has attempted to control tobacco production through acreage allotments and marketing quotas. Rapid yield increases made acreage controls ineffective in controlling supply because producers attempted to maximize returns from their allotments. The program was consequently changed to poundage quotas for flue-cured in 1965 and burley in 1971 to more effectively control supply.

The program has generally been effective in keeping supply and demand in balance. However, between 1982 and 1985, excess supplies accumulated because domestic and export use fell more rapidly than anticipated. Furthermore, carryover provisions for unused quota and limitations on the amount the quota could be cut in a given year that were then in effect hindered adjusting quotas to balance supply and demand.

The farm program for tobacco has probably reduced domestic use because of the higher leaf prices. The program has reduced exports and increased imports.

The United States is the world's major tobacco exporting country. However, U.S. exports fell during the last decade, while those of Brazil, Zimbabwe, Turkey, and Malawi rose. A major factor in the U.S. decline is relative prices. The U.S. price support program helped push U.S. tobacco prices to nearly double those of the major competing countries of India, Canada, Thailand, Malawi, Brazil, Zimbabwe, and Korea in the mid-1980's. In contrast, U.S. prices in the early 1960's were about 60 percent more than the grower prices in foreign countries. While quality of U.S. leaf is higher, the price differential helped boost overseas production and has caused U.S. exports to decline and imports to increase. Over the last 25 years, the U.S. share of world exports dropped from 30 percent to 14 percent. Also, during the last 15 years, imports of burley and flue-cured have risen substantially. Even though U.S. prices have been reduced, declining cigarette consumption in major importing countries, ample tobacco supplies in competitor countries, and quotas and tariffs that discriminate against U.S. tobacco will hold exports down.

Indirect

Areas with quotas have a higher tax base because the value of quotas and allotments are capitalized into land values. Also, since quotas freeze production to historical regional patterns, local input suppliers and tobacco warehouses are assured business as long as the program is in effect. The program may have impeded mechanization to some extent, but lease and transfer and flue-cured quota sales have permitted substantial mechanization of flue-cured tobacco harvest. Little burley harvest mechanization has occurred, but this is probably related more to the unavailability of a feasible harvester that maintains the essential air-cured qualities of burley than to the tobacco program.

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Glossary

Acreage allotment -- The individual farm's share based on its production history of the national acreage; considered desirable as a means of adjusting supplies of a particular crop to national needs. Production of some kinds of tobacco are controlled by acreage allotments only. However, for the major kind--flue-cured--allotments are used in conjunction with marketing quotas and for burley, marketing quotas are in effect, but acreage allotments are not.

Aging -- A process applied to cigarette tobaccos whereby the leaf is compressed in hogsheads or other containers at a moisture content of 10-13 percent to mildly ferment the tobacco.

Agricultural Marketing Service (AMS) -- The USDA agency that carries out several programs related to marketing of tobacco including inspection and grading, marketing news, stocks reports, and others.

Agricultural Stabilization and Conservation Service (ASCS) -- The USDA agency that carries out several principal farm commodity programs from appropriated funds, including the Commodity Credit Corporation (CCC) program activities.

Air-cured tobacco -- A class of tobacco that is cured under natural atmospheric conditions, usually without the use of supplementary heat. The air-cured class includes light air-cured burley and Maryland tobacco used mainly in cigarettes and dark air-cured leaf used mainly in snuff and chewing tobacco.

Auction -- A warehouse sale where tobacco farmers sell their leaf to the highest bidder. The bidders are buyers for manufacturers, dealers, and exporters, as well as independent dealers or speculators.

Basic commodities -- Agricultural commodities including corn, wheat, tobacco, cotton, rice, and peanuts that are designated by legislation as price-supported commodities.

Binder tobacco -- A class of cigar tobacco that was originally used for binding bunched filler tobacco into the form and shape of the cigar. However, most cigars now use reconstituted sheet for the inner binder. As a result, loose leaf chewing tobacco is now the principal use of binder tobacco.

Bulk curing -- A curing process used for flue-cured tobacco. Leaf is suspended in the curing atmosphere in bulk (loose armfuls are held in place by racks). Humidity and temperature control are made precise through the use of a forced draft which passes the heated air in a vertical plane through the tightly packed leaves in a completely closed system.

Burley tobacco -- The major type of air-cured tobacco. Burley is light in body and neutral in flavor, with a low sugar content and high alkaloid content. It is used chiefly in cigarettes.

Carryover stocks -- The quantity of a commodity which is on hand at the beginning of a marketing year or crop year. "Beginning stocks" of tobacco are frequently reported for the marketing year beginning July 1 for flue-cured and October 1 for most other kinds of tobacco. Ending stocks reflect supply (beginning stocks plus production/or marketings) minus disappearance for the year ending June 30 or September 30.

Chewing tobacco -- One of several products made from tobacco leaf. Three types of chewing tobacco are produced in the United States. These include: (1) plug--the leaf is pressed into flat cakes after the stems have been removed, (2) twist--the leaf is stemmed and twisted into small rolls, and (3) loose leaf--made almost entirely from cigar-leaf tobacco. Practically all the stems and some of the coarser fibers are removed before processing. The product consists of irregular fragments or flakes of tobacco leaf, about 1/4 to 1 inch in diameter, and sold in small packages.

Cigarettes -- The primary product made from tobacco. U.S. cigarettes are a blend of flue-cured, burley, Maryland, and Oriental tobaccos. Great care is used in blending these tobaccos to keep the product consistent in smoking quality and taste.

Cigars -- There are three components of a cigar: filler, binder, and wrapper. "Reconstituted sheet" is now used as a substitute for natural binders for most cigars, and an increasing percentage also have reconstituted wrappers. Those with reconstituted wrappers often do not have the inner binder.

Cigar classes of tobacco -- These include filler, binder, and wrapper classified according to their traditional use in cigars.

Commodity Credit Corporation -- The USDA agency responsible for directing and financing major USDA "action programs," including price support, production stabilization, commodity distribution, and related programs. CCC also directs and finances certain agricultural export activities. CCC activities are implemented by the ASCS.

Curing -- The process of drying newly harvested tobacco. Three basic methods of curing include: air-curing, flue-curing, and fire-curing.

Dark air-cured tobacco -- A medium to heavy-bodied tobacco that is used mostly for manufacturing chewing tobacco and snuff.

Disappearance -- U.S. domestic manufacturers use of U.S. grown leaf plus leaf exports. Disappearance and use are often used interchangeably. Disappearance is a little broader concept in that it accounts for use in products as well as any lost leaf resulting from fire, floods, and other problems.

Domestic disappearance -- Total quantity of U.S. grown leaf used or lost during a marketing year.

Exports -- Shipments of a product from the United States to another country. The United States is a major exporter of both leaf tobacco and manufactured cigarettes.

Filler tobacco -- A class of cigar tobacco used mainly in the core or body of a cigar. Filler tobaccos are medium to heavy in body.

Fire-cured tobacco -- A medium to heavy bodied tobacco, light to brown in color, and strong in flavor. It acquired the name because of the smoky flavor and aroma acquired from "firing" over open fires in the curing barns. It is used for making snuff, roll and plug chewing tobacco, strong cigars, and heavy smoking tobacco.

Flue-cured tobacco -- The principal class of tobacco grown in the United States. Its name comes from the metal flues of the heating apparatus originally used in curing barns. It is yellow to reddish-orange in color, thin to medium in body, and mild in flavor. It is used mainly in cigarettes.

Hogshead -- A large round wooden cask used for storing and aging tobacco. About 1,000 pounds of leaf can be stored in each hogshead.

Imports (arrivals of tobacco) -- Quantities of tobacco that enter the United States from another country. Arrivals may be used soon after entering or stored for later use.

Imports (tobacco for consumption) -- Quantities of tobacco that enter the United States from another country and are immediately used in the manufacture of tobacco products.

Leasing of quota -- Payment for the right to grow and sell a specified quantity of tobacco. Quota can be grown on farms other than the farm to which it is assigned if the farms are in the same county. Leasing is permitted for burley and some other types, but is generally no longer permitted for flue-cured.

Light air-cured tobacco -- A thin medium bodied tobacco that is light tan shaded toward red to reddish brown in color, mild in flavor, and is used chiefly in making cigarettes. Burley and Maryland are the two types of light air-cured tobacco grown in the United States.

Maryland tobacco -- A light air-cured tobacco that is usually considered to have ideal burning qualities for use in cigarette blends. Maryland tobacco is similar to burley but is somewhat milder and lighter in taste.

Mechanical harvester -- A machine that automatically strips the leaves from the tobacco stalk by rotating spiraled rubber wipers attached to a movable head. These machines are used primarily for harvesting flue-cured tobacco.

No-Net-Cost Act of 1982 -- A law requiring that to be eligible for price support, producers of all kinds of tobacco, beginning

with the 1982 crop of tobacco, must pay assessments to an account established by the cooperative association that makes Federal support loans available to producers. The funds are collected to cover potential losses in operating the price support program.

Once-over-harvester -- A harvesting method that allows harvesting of the entire crop with only one trip through the field. All the leaves are removed at one time and then cured together. This method has been used for flue-cured tobacco but little is currently harvested in this manner.

Operator (farm) -- The person who is in general control of the farming operation on the farm during the marketing year.

Price supports -- Government price support programs for tobacco and other farm commodities are administered by USDA's Agricultural Stabilization and Conservation Service. Tobacco growers are assured a minimum price through loans from the Commodity Credit Corporation (CCC) to farmer-owned cooperatives. The price support program for tobacco is operated through 11 producer associations under contracts with the CCC. Under these contracts, producers who are unable to sell their tobacco for at least as much as the price support rate, may deliver it to their association. The association pledges the tobacco as collateral and borrows funds from the CCC to pay the producers the support price and to cover the costs of processing, storing, and selling the tobacco. The entire amount loaned to an association on all the tobacco produced in a single crop year becomes a single CCC loan. The loans are nonrecourse; however, beginning in 1982 with passage of the No-Net-Cost Act (except for the 1983 burley crop) all principal, interest, and other costs must be covered by proceeds from CCC sales of tobacco, with any outstanding cost made up by assessments from growers and purchasers. Several years are usually required to completely dispose of a year's tobacco crop. The loan remains outstanding as long as any of the crop remains unsold but is reduced as each sale is made.

Each year the average loan rate for each kind of tobacco is set by USDA's ASCS. For flue-cured and burley, the price support is the level for the previous year adjusted by changes in a 5-year moving average of market prices (two-thirds weight) and changes in the tobacco cost of production index (one-third weight). For other kinds, price supports are set by adjusting the 1959 price support by the ratio of the average prices paid by farmers during the most recent 3 calendar years to the 1959 average of prices paid. The loan rate for each grade, necessary to provide the required support for all grades collectively, is specified by the CCC in its contracts with the 11 producer associations. Most tobacco is marketed by auction and the loan rate on each of many grades becomes a preestablished bid by the association on each pile of tobacco offered. If commercial bids on any lot of tobacco are not higher, the association becomes the buyer at the loan rate. When the tobacco received from any year's crop is sold for more than enough to repay the CCC loan with interest, net gains are applied to losses from other years.