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Tobacco

Background for 1990 Farm Legislation

Verner N. Grise

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Tobacco: Background for 1990 Farm Legislation. By Verner N. Grise, Commodity Economics Division, Economic Research Service, U.S. Department of Agriculture. Staff Report No. AGES 89-48.

Abstract

Tobacco is grown in 21 States on about 137,000 farms. Several types and kinds are grown, but flue-cured and burley account for about 94 percent of total production. After steadily declining from 1975 to 1986, tobacco production has risen the last 3 years. Supply and demand are in balance because excess stocks have been used. After declining for several years, cigarette production rose in 1987 and 1988 because of growing exports. Legislation enacted in 1986 lowered support prices, moved loan stocks into the trade, and changed quota setting to a more market-oriented approach. Still, major problems exist. Domestic tobacco product consumption continues to decline and the United States continues to face stiff competition in world markets, even with lower prices.

Keywords: Tobacco, price supports, poundage quotas, exports, imports, costs, and returns

Foreword

Congress will soon consider new farm legislation to replace the expiring Agriculture and Food Act of 1985. Although the tobacco program is under continuing legislation, a number of problems face the tobacco industry, and amendments to modify the tobacco program may be considered in the next farm bill debate. In preparation for these deliberations, the Department of Agriculture and many groups throughout the Nation are studying preceding legislation to see what lessons can be learned that are applicable to the 1990's. This report updates Tobacco: Background For 1985 Farm Legislation (AIB-468) by Verner N. Grise and is one of a series of Economic Research Service background papers for farm legislation discussions. These reports summarize in a nontechnical form the experience with various farm programs and the key characteristics of the commodities and the farm industries which produce them. For more information, see the Additional Readings listed at the end of the text.

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Summary

Tobacco is the sixth leading field crop produced in the United States, accounting for about 3 percent of the total farm value of U.S. crops. It is grown on about 137,000 farms. During fiscal year 1988, the value of U.S. exports of unmanufactured and manufactured tobacco was \$4.1 billion, about 12 percent of the total value of agricultural exports.

The tobacco program is under continuing legislation and, unlike most commodities, it does not have to be rewritten every 4 or 5 years. But a number of legislative changes have been made since the basic marketing quota provisions of the Agricultural Adjustment Act of 1938. Legislation was enacted in 1986 that made substantial changes in the program. That law reduced flue-cured and burley price supports, changed setting of quotas to a more market-oriented approach, and provided for orderly movement of surplus stocks into trade channels.

Despite the changes that have been made in the tobacco program, several major concerns persist. Issues that affect the industry are:

- o The rationale for a tobacco program that has any government involvement.
- o If the current type of program is continued, the level of price support and the appropriateness of the current formula in determining support levels.
- o Continued high imports and sluggish export markets which dampen domestic tobacco production prospects.
- o The need for quotas at all and how to distribute quotas from nongrowers to actual growers.
- o Whether tobacco growers should be singled out from other crop growers to bear part of the costs of operating their program, whether all costs including administrative costs of program operation should be paid by growers and purchasers, and the distribution of program costs between growers and manufacturers.
- o The low-quality tobacco loan stocks and what to do about the high costs of holding these stocks and the potential for acquiring low-quality tobacco loan stocks in unfavorable growing seasons.

Worldwide tobacco consumption outside China is stagnant and new technologies are reducing the amount of tobacco needed per cigarette. Furthermore, a number of countries have increased tobacco production, many with production costs below U.S. levels. These factors are important in developing policies.

Key changes affecting the U.S. tobacco industry during the last 25 years have been:

- o The U.S. market share in world tobacco trade fell from 30 percent during 1960-64 to 14 percent by 1987. The drops for both flue-cured and burley during this period were even more pronounced: from 52 to 19 percent for flue-cured and from 57 to 24 percent for burley. With relatively high price supports keeping a floor under U.S. prices, other tobacco-producing countries sell tobacco at lower prices, in many cases less than half U.S. prices.
- o World production of tobacco rose by 61 percent between 1960-64 and 1988, while U.S. production fell 39 percent. U.S. flue-cured production was 39 percent lower. The 1988 burley crop was 26 percent lower, and the U.S. share of world production fell from four-fifths to one-third. The United States did not share in the growing cigarette consumption elsewhere in the world during the 1960's and 1970's. Much of the incentive to increase production in foreign countries was because of high U.S. support prices.
- o U.S. marketing quotas declined significantly from 1975 to 1987 (they rose in 1988 and 1989). Between 1975 and 1989 (even with increases in the 2 most recent years), the basic flue-cured quota dropped 40 percent. Burley quotas held up better because of increased exports and a slower decline in domestic use; 1989 basic quotas were only 12 percent lower than in 1975 following a 24-percent hike in quotas in 1989. The reductions occurred because of reduced cigarette consumption, lowered use of tobacco per cigarette, reduced flue-cured exports, and increases in imports of burley and flue-cured. Basic quotas for both flue-cured and burley rose in 1988 and 1989 because of used up excess supplies, increased cigarette production because of larger exports, and greater use of domestic tobacco.
- o Imports rose substantially from 1970 to 1987. U.S. cigarette manufacturers increased the share of imported flue-cured and burley tobacco in cigarettes because of lower priced imports, larger supplies of foreign-grown tobacco, new technologies that permit use of lower quality tobacco in cigarettes, and shortages of U.S. tobacco, especially burley in some years due to disease and drought. Flue-cured imports accounted for less than 1 percent of domestic disappearance of U.S. flue-cured tobacco in 1969 but rose to 28 percent in 1987. For burley, the increase was from 1 percent to 26 percent during the same period.
- o Lease and rental rates have declined because of the lowering of price supports. Still, in many cases, much of the difference between price and nonquota costs of producing tobacco is paid to the quota holder for the right to produce and sell the crop.

- o Tobacco is a high-value-per-acre crop. It is grown mostly on farms in the Southeastern United States with small total acreages of cropland. Few crops offer the same net return per acre and none offer the return above production costs, excluding land and quota, that tobacco has enjoyed during the last 50 years. U.S. tobacco production declines are forcing small farms to adjust their operations.

The tobacco program has assured a stable income to growers and generally kept supply and demand in relative balance, especially during the first three decades of its existence. However, beginning in the late 1960's and especially after the mid-1970's, many observers believed that the rate of increase in price supports needed to be slowed. Because of a concern by tobacco program supporters that legislative modifications could present opponents with an opportunity to eliminate the program altogether, no legislation was enacted until the 1981 farm act mandated that the tobacco program become essentially self-supporting. This resulted in passage of the No-Net-Cost Tobacco Act of 1982 and several other pieces of legislation over the next 4 years. However, domestic and export markets were already lost, mainly because of high U.S. prices and reduced quotas.

Economic prospects for tobacco for the remainder of the century have improved in the last 3 years. Reduced price supports, market-oriented setting of quotas and the orderly movement of surplus stocks into trade channels, and increased cigarette exports have improved prospects for U.S. tobacco. However, stagnant cigarette demand, strong foreign competition, and trade barriers continue to hold down U.S. export prospects. Furthermore, domestic U.S. cigarette consumption is likely to continue to decline. Production of U.S. tobacco is likely to decline in the 1990's following the increases of the late 1980's.

Tobacco

Background for 1990 Farm Legislation

Verner N. Grise

Introduction

This report provides an overview of the U.S. tobacco industry and reviews Federal tobacco programs and their effects. Tobacco is produced in 21 States, with North Carolina and Kentucky having nearly two-thirds of the acreage. Several different types and kinds of tobacco are grown, but flue-cured and burley--both cigarette tobaccos--account for more than 90 percent of total production.

Tobacco is usually the sixth largest cash crop, behind corn, soybeans, wheat, hay, and cotton. In 1988, farm sales of tobacco totaled \$2 billion, 1.3 percent of the value for all farm commodities and 2.8 percent of crop sales.

Consumer spending for tobacco products was estimated at \$37.8 billion in 1988. Nearly 95 percent was for cigarettes, with cigars, snuff, chewing, and smoking tobacco accounting for the remainder.

Federal, State, and local governments tax tobacco products. In 1988, an estimated \$9.3 billion in taxes was collected--\$4.4 billion by the Federal Government and \$4.9 billion by State and local governments. Thus, taxes collected amounted to more than 4-1/2 times farm sales of tobacco.

Tobacco and tobacco products added \$50.6 billion to the U.S. gross national product in 1983. Tobacco directly or indirectly generates over 700,000 jobs, \$31 billion in wages and earnings, and \$20.5 billion in capital investment per year.

Most U.S. tobacco production has been under a price support and supply control program since the 1930's. The program limits production, sets minimum grower prices, and provides for acquisition, storage, and eventual sale of surplus tobacco.

The tobacco program is under continuing legislation under the basic marketing quota provisions of the Agricultural Adjustment Act of 1938. Thus, it is not up for renewal in 1990. But a number of legislative changes have been made since the law was enacted. Five laws have been enacted already in the 1980's that

have dramatically changed the tobacco program. These laws require most tobacco program costs to be borne by growers and purchasers, reduced price support levels and slowed their rate of increase, and established a more market-oriented approach for setting quotas.

Tobacco is clearly a major crop and of special importance in some States. Although legislation thus far in the 1980's has made the tobacco program more acceptable to the general public and tobacco growers, there still are concerns about tobacco programs, price support levels, imports, exports, quota size, quota lease and/or rental rates, and who should pay for the operation of the program. These are among the factors that may be considered in finding appropriate policies. Program effects on the economic well-being of tobacco growers, taxpayers, and tobacco users will likely affect program changes.

This report discusses the economic and structural factors affecting grower costs and returns, and it examines how the program has affected taxpayer costs and consumer prices.

Structure of the Tobacco Industry

This section reviews the tobacco industry in terms of its production characteristics, trends in domestic tobacco use, the world tobacco market, loan programs and domestic stocks, and prices, costs, and returns.

Production Characteristics

According to preliminary 1987 Census of Agriculture estimates, about 137,000 U.S. farms produced tobacco that year (table 1). About 60 percent of the farms were located in North Carolina and Kentucky, the major tobacco-producing States.

The average U.S. farm grew less than 5 acres of tobacco. Tobacco acreage per farm varied geographically, ranging from 1.6 acres in West Virginia to 35.4 in Connecticut. Size also varied by type of tobacco grown. In States where flue-cured predominates, average size varied from 11 to 17 acres. In burley-producing States, average acreage ranged from 1-1/2 to 3. The high average in Connecticut stems from large vertically integrated cigar wrapper operations; cigar binder farms in this State are much smaller.

USDA surveys indicate that approximately 45,000 growers produced flue-cured tobacco in 1979 and approximately 150,000 producers grew burley tobacco in 1976. The number of flue-cured producers declined by 12,000 between 1972 and 1979, and the average tobacco acreage per farm rose from 9 to about 13 acres. Although precise estimates are not available, the number of flue-cured and burley growers continues to decline as farmers attempt to expand their operations to more efficiently use newer technology.

Most tobacco growers earn income off the farm. Based on the 1976 survey of burley growers, 68 percent of the farms reported one or more family members working off the farm. Off-farm income is very important to burley growers since farms averaged 86 acres of total land and only 40 acres of cropland. Off-farm work is important in the flue-cured region (about half of the families have off-farm income) but less so than in burley because of the larger tobacco operations. In 1979, about a fifth of flue-cured families had off-farm incomes of \$10,000 or more and in 1976 about one-fifth of burley households had off-farm income of \$10,000 or more. Income alternatives from other crop or livestock enterprises are limited on many tobacco farms because of the small cropland acreages.

Tenure Arrangements

Only 16 percent of the flue-cured farm operators owned the entire tobacco quota they produced in 1979, about 27 percent rented all their quota (the right to produce and sell a specified quantity of tobacco), and the remaining 57 percent used a combination of owning, leasing and transferring, and renting quota. Lease and transfer of quota refers to an arrangement whereby the quota is grown on a farm other than the one to which it is assigned (lease and transfer of flue-cured quotas was eliminated in 1987 to

Table 1--Number of farms, acres, and average acres of tobacco of farms growing tobacco, 1987

State	Farms	Tobacco acreage	Average tobacco acreage per farm
	<u>Number</u>	<u>Acres</u>	
Alabama	21	211	10.0
Arkansas	1	1/ 11	1/ 11.0
Connecticut	53	1,875	35.4
Florida	333	5,449	16.4
Georgia	2,061	30,853	15.0
Indiana	3,115	6,177	2.0
Kansas	13	30	2.3
Kentucky	61,962	175,957	2.8
Louisiana	4	21	5.3
Maryland	1,357	10,780	7.9
Massachusetts	21	458	21.8
Minnesota 1/	4	27	6.8
Missouri	522	1,907	3.7
North Carolina	22,260	239,343	10.8
Ohio	3,751	7,959	2.1
Pennsylvania	1,223	6,803	5.6
South Carolina	2,519	42,666	16.9
Tennessee	25,052	51,578	2.1
Virginia	9,750	45,121	4.6
West Virginia	1,095	1,716	1.6
Wisconsin	1,564	4,387	2.8
United States 2/	136,681	633,329	4.6

1/ 1982 figures. 1987 not available. 2/ Reflects 1982 numbers for some States.

encourage sales of quota). Renting refers to growing the quota on the farm to which the quota is assigned. Based on a survey of farms in 1987 that may not reflect flue-cured belt population averages, 24 percent of operators grew their entire tobacco crop on quota they owned, 18 percent rented all their quota and the remaining 58 percent used a combination of owning and renting. Nearly 40 percent of the burley farm operators owned the entire tobacco quota they produced in 1976. Another 30 percent rented all their quota, and about 25 percent leased some quota. Based on a survey of farms in 1984 that may not reflect burley belt population averages, 58 percent of operators grew their entire tobacco crop on quota allotments they owned. About 13 percent rented all their burley quota, and the remaining 29 percent produced tobacco on acreage combining owned, rented, or leased quota in 1984.

The distribution of quota by occupation of quota owners is shown in table 2. Farmers, retired farmers, and farm widows represent over half of those quota owners who lease or rent out their production rights. Little information is available on current characteristics of quota owners. A 1980 survey of nonproducing flue-cured quota owners in two counties in the coastal plain of North Carolina found that over 90 percent lived in nearby rural counties.

The lease rate, rental rate, and sales price of the right to grow and sell tobacco depend on the price of the type and quality of the tobacco to which the quota applies and the expected cost of production (net of quota rental) for the grower. Even though much of the quota is not rented, sold, or leased and transferred, information on their rates allows estimation of total income attributable to quota ownership. Quota may generally be leased or sold only within county boundaries (flue-cured quotas generally cannot be leased but can be sold).

Table 2--Occupation of quota owners, 1981

Occupation	Flue-cured		Burley	
	Leased or rented	Total	Leased or rented	Total
				<u>Percent 1/</u>
Farmers	24	14	56	28
Retired farmers	14	16	10	15
Widows of farmers	16	17	10	14
Nonfarmer individuals:				
White collar	10	12	8	15
Blue collar	9	10	6	10
Retired	4	5	4	7
Other:				
Corporations	1	1	2	3
Estates	7	8	1	1
Unknown	16	18	4	8

1/ Percentages represent quotas, not percentage of pounds of quota.
Totals may not add to 100 percent due to rounding.

Tobacco prices are national and costs of production vary significantly among counties. Therefore, the market price to lease, sell, or rent quota varies by county. Quota rates within counties vary according to production costs, alternative uses for resources, and other factors. In 1984, when the market price for flue-cured tobacco averaged \$1.81 per pound, county average lease rates for flue-cured quota in North Carolina varied from a low of 25 cents per pound to 80 cents a pound with a weighted average of 55 cents a pound. In 1985, the average lease rate in North Carolina fell about 42 percent to an average of 32 cents a pound. The big drop was caused by an 18-cent-a-pound hike in the no-net-cost assessment, the realization by growers that large supplies could bring about lower prices (the effective price support level was lowered 5 cents a pound before the market opened and prices averaged 9 cents a pound lower in 1985), and likely the realization by many growers that lease costs had been bid too high in recent years. Since 1982 tobacco producers have been required to contribute to an account to assure that the loan program operates at no net cost to the government (except for administrative expenses).

Furthermore, there was uncertainty about the future of the tobacco program and greater credit restrictions were imposed on tobacco growers. Lease costs apparently fell further in 1986 because the price support level was reduced from \$1.699 per pound to \$1.438 a pound. However, the no-net-cost assessment was considerably lower and nonquota and land production costs were lower. These factors, combined with the 9-percent smaller effective quota, cushioned the 1986 decline in lease rates and costs of quota have been relatively stable the last 3 years as effective quotas rose in 1987, 1988, and 1989. The North Carolina figures are probably close to the national distribution for flue-cured quotas, given the range of conditions in North Carolina.

Less information is available about lease and rental rates for burley tobacco, but they appear to be similar to flue-cured. Based on data for 1984, lease rates averaged about 45 cents a pound in Kentucky and Tennessee. Rates in Kentucky and Tennessee have likely fallen to around 30-35 cents per pound.

Tobacco Classes and Types

Although most of the tobacco grown in the United States goes into cigarette production, U.S. tobacco is also used in snuff, chewing tobacco, cigars, and smoking tobacco. The different tobacco products require leaf with different characteristics; therefore, a standard system of classification exists. Six major classes of tobacco are grown in the United States: flue-cured, fire-cured, air-cured (burley is the major type), cigar filler, cigar binder, and cigar wrapper (table 3). The first three classes are named on the basis of the method used in curing; the last three, which are all cigar leaf classes, on the basis of traditional use in cigars. Each class is made up of two or more different types. The classes are largely grown in distinct regions, have different end uses, and are marketed separately.

Table 3--Tobacco production and chief uses by class, 1988

Class	1988 production		Where grown	Major uses
	Quantity	Share		
	Million pounds	Percent		
Flue-cured	813.2	59.3	N.C., S.C., Va., Ga., Fla., Ala.	Cigarettes
Fire-cured	30.7	2.2	Ky., Tenn., Va.	Snuff, chewing tobacco
Air-cured 1/	504.2	36.8	Ky., Tenn., Va., N.C., Ohio, Mo., W.Va., Ind., Md., Pa.	Cigarettes
Cigar filler	11.7	.9	Pa., Ohio, Puerto Rico	Cigars
Cigar binder	8.7	.6	Wisc., Conn., Mass.	Cigars, chewing tobacco
Cigar wrapper	2.1	.2	Conn., Mass.	Cigars
Total	1,370.6	100.0		

1/ Burley is the main type; also includes Maryland and dark air-cured types. The dark air-cured types are mainly used in chewing tobacco and snuff.

Tobacco is grown over a wide geographical area and under a variety of weather and soil conditions. Tobacco yields vary widely by class and type of tobacco. Yields and quality characteristics also change with weather variations.

In contrast to total tobacco, production by class is highly concentrated. So, even when total tobacco supplies are excessive, the supply of a particular type may be tight or vice versa. Because of the differences in culture and use, price supports and production controls generally differ by class and by types within classes.

Trends in Production

Although total production of tobacco did not change much from 1950 to 1964, yields of all U.S. tobacco increased rapidly from about 1,300 to 2,000 pounds per acre and acreage declined (table 4). Flue-cured rose from about 1,200 to 2,000 pounds per acre and burley from about 1,400 to about 2,000 pounds per acre in 1964. The large jump in yields resulted in a changeover from acreage allotments to poundage controls for flue-cured in 1965 and for burley in 1971.

Since the inception of tobacco price supports and production controls in the late 1930's, little change has occurred in the location of U.S. tobacco production. In 1988, North Carolina and Kentucky produced 66 percent of total U.S. production, compared with 62 percent 30 years earlier.

Table 4--U.S. tobacco acreage, yield, production, stocks, supply, disappearance, and price, 1950-88

Crop year 1/	Area planted	Yield per acre	Production	Stocks 1/	Supply	Disappearance 1/		
						Total	Domestic	Exports
	1,000 acres	Pounds	-----Million pounds-----					
1950	1,599	1,269	2,030	3,089	5,119	1,975	1,452	523
1951	1,780	1,310	2,332	3,144	5,476	2,072	1,488	584
1952	1,772	1,273	2,256	3,404	5,660	2,055	1,557	498
1953	1,633	1,261	2,059	3,605	5,664	1,995	1,480	515
1954	1,668	1,346	2,244	3,669	5,912	1,935	1,419	516
1955	1,495	1,466	2,193	3,977	6,170	2,058	1,410	648
1956	1,364	1,596	2,176	4,112	6,288	1,929	1,373	556
1957	1,122	1,486	1,668	4,359	6,027	1,921	1,393	528
1958	1,078	1,611	1,738	4,106	5,843	1,923	1,388	535
1959	1,153	1,558	1,796	3,920	5,716	1,928	1,425	503
1960	1,142	1,703	1,944	3,789	5,733	2,029	1,462	567
1961	1,174	1,755	2,061	3,704	5,765	2,051	1,461	590
1962	1,224	1,891	2,315	3,714	6,029	2,004	1,474	530
1963	1,176	1,994	2,344	4,025	6,369	2,046	1,437	609
1964	1,078	2,067	2,228	4,323	6,551	2,055	1,506	549
1965	977	1,898	1,855	4,496	6,351	2,000	1,462	538
1966	972	1,939	1,885	4,351	6,236	2,096	1,392	704
1967	960	2,050	1,968	4,140	6,108	2,020	1,372	648
1968	879	1,945	1,710	2/ 4,088	5,798	1,975	1,352	623
1969	918	1,964	1,803	3,823	5,626	1,948	1,308	640
1970	898	2,122	1,906	3,678	5,584	1,917	1,278	639
1971	839	2,034	1,705	2/ 3,667	5,372	1,883	1,312	571
1972	842	2,076	1,749	2/ 3,488	5,237	1,951	1,312	639
1973	889	1,963	1,746	2/ 3,289	5,035	2,080	1,348	732
1974	963	2,067	1,994	2/ 2,948	4,942	1,937	1,284	653
1975	1,083	2,015	2,182	2/ 3,003	5,185	1,941	1,286	655
1976	1,045	2,045	2,136	3,297	5,433	1,907	1,229	678
1977	958	1,997	1,913	2/ 3,540	5,452	1,895	1,202	693
1978	948	2,135	2,054	2/ 3,560	5,584	1,955	1,190	765
1979	827	1,845	1,527	2/ 3,601	5,128	1,869	1,175	694
1980	921	1,940	1,786	3,259	5,045	1,758	1,109	649
1981	976	2,114	2,064	2/ 3,286	5,350	1,762	1,065	697
1982	913	2,185	1,994	2/ 3,588	5,582	1,662	1,034	628
1983	789	1,811	1,429	3,920	5,349	1,532	936	596
1984	792	2,183	1,728	3,817	5,545	1,621	955	666
1985	688	2,196	1,511	2/ 3,924	5,436	1,620	1,000	620
1986	582	2,001	1,164	2/ 3,815	4,978	1,572	981	591
1987	587	2,028	1,191	2/ 3,406	4,598	1,689	1,117	572
1988 3/	634	2,160	1,370	2/ 2,908	4,278	4/ 1,606	4/ 1,049	4/ 557

1/ Year beginning July 1 for flue-cured and cigar wrapper, and October 1 for all other types. 2/ Includes tobacco carried over on farms. 3/ Preliminary. 4/ Estimated.

Trends in Domestic Tobacco Use

Most tobacco grown in the United States is used in cigarettes; however, cigars, snuff, chewing tobacco, and smoking tobacco (pipe and roll-your-own) are also produced. Except for snuff, total domestic consumption of tobacco products declined in 1985, 1986, 1987, and 1988. Snuff consumption fell in both 1986 and 1987 but rose in 1988.

Despite growing cigarette consumption, domestic disappearance of U.S. tobacco declined about 25 percent from 1950-54 to 1978-82. Domestic disappearance fell about 13 percent from 1978-82 to 1983-86 with reduced cigarette consumption. However, hiked cigarette exports boosted use of domestic leaf in 1987. The switch to filters, use of sheet tobacco and stems, reduced cigarette circumferences, and puffed tobacco (tobacco expanded to occupy a larger volume) reduced the amount of tobacco per 1,000 cigarettes from the 1950's to 1976 (table 5). However, tobacco use per 1,000 cigarettes has held at 1.7 to 1.8 pounds since 1976. Furthermore, beginning in the late 1960's, a larger proportion of the tobacco used in cigarettes was imported.

Table 5--Estimated leaf used for cigarettes, by kind of tobacco, 1950-88

Year	Flue-cured	Burley	Maryland	Imported	Total
<u>Pounds per 1,000 cigarettes 1/</u>					
1950	1.577	.913	.056	.163	2.709
1951	1.557	.878	.048	.172	2.655
1952	1.575	.884	.053	.175	2.687
1953	1.595	.915	.054	.182	2.746
1954	1.555	.906	.052	.192	2.705
1955	1.506	.888	.051	.194	2.639
1956	1.438	.874	.050	.200	2.562
1957	1.379	.832	.041	.199	2.451
1958	1.349	.796	.036	.212	2.393
1959	1.296	.768	.033	.222	2.319
1960	1.284	.767	.032	.229	2.312
1961	1.276	.763	.030	.237	2.306
1962	1.238	.768	.030	.235	2.271
1963	1.217	.756	.029	.231	2.233
1964	1.195	.750	.028	.224	2.197
1965	1.155	.778	.030	.237	2.200
1966	1.081	.767	.033	.238	2.119
1967	1.019	.750	.033	.267	2.069
1968	1.004	.742	.031	.295	2.072
1969	.979	.716	.055	.282	2.032
1970	.940	.686	.047	.279	1.952
1971	.923	.669	.042	.286	1.920
1972	.926	.686	.027	.322	1.961
1973	.913	.672	.022	.304	1.911
1974	.880	.658	.020	.335	1.893
1975	.842	.645	.038	.355	1.880
1976	.816	.607	.031	.342	1.796
1977	.789	.608	.024	.363	1.784
1978	.739	.589	.027	.408	1.763
1979	.701	.587	.031	.494	1.813
1980	.671	.570	.031	.490	1.762
1981	.606	.547	.027	.520	1.700
1982	.608	.559	.040	.519	1.726
1983	.603	.550	.040	.582	1.775
1984	.587	.492	.043	.585	1.707
1985	.610	.502	.042	.595	1.749
1986	.578	.495	.040	.635	1.748
1987	.578	.477	.035	.631	1.720
1988	.608	.530	.035	.564	1.738

1/ Unstemmed processing weight.

The decline in domestic use from 1950-54 to 1983-87 varied by type of tobacco. Flue-cured use dropped by about 38 percent while burley domestic disappearance dropped only 17 percent because of cigarette blend changes that use relatively less flue-cured. Because of the large drop in cigar consumption, domestic use of most cigar types has declined more than 50 percent since 1965. Use of Wisconsin binder, a cigar type, has declined less because of its use in loose-leaf chewing tobacco, a product with expanding consumption until recently.

Cigarettes take 85 percent of the tobacco used in the United States. They also account for most of the sales of U.S. tobacco products, worth \$37.8 billion in 1988, and taxes amounting to

Table 6--Expenditures for tobacco products, 1950-88

Year	Total	Cigarettes	Cigars	Other 1/
<u>Million dollars</u>				
1950	4,392	3,586	514	292
1951	4,685	3,876	526	283
1952	5,073	4,246	545	282
1953	5,264	4,436	560	268
1954	5,104	4,292	552	260
1955	5,217	4,409	550	258
1956	5,481	4,681	556	244
1957	5,871	5,072	556	243
1958	6,182	5,341	584	257
1959	6,764	5,854	629	281
1960	7,187	6,244	649	294
1961	7,472	6,538	631	303
1962	7,608	6,675	634	299
1963	8,004	7,055	649	300
1964	8,113	7,024	765	324
1965	8,651	7,609	734	308
1966	9,140	8,113	718	309
1967	9,582	8,572	706	304
1968	10,112	9,094	703	315
1969	10,444	9,404	701	339
1970	11,544	10,448	707	389
1971	12,155	11,040	700	415
1972	12,910	11,765	720	425
1973	13,485	12,325	730	430
1974	14,475	13,270	705	500
1975	15,505	14,250	680	575
1976	16,400	15,100	675	625
1977	17,190	15,850	665	675
1978	18,030	16,600	680	750
1979	19,150	17,650	670	830
1980	21,000	19,400	670	930
1981	22,950	21,200	710	1,040
1982	25,310	23,525	685	1,100
1983	28,710	26,840	705	1,165
1984	30,705	28,750	745	1,210
1985	32,165	30,250	685	1,230
1986	33,700	31,800	680	1,220
1987	35,465	33,560	645	1,260
1988	37,825	35,850	620	1,355

1/ Includes large cigarettes.

Table 7--Government revenues from tobacco products, 1950-88

Year	Federal government				State and local governments		All government 4/
	Cigarettes 1/	Cigars 2/	Other 3/	Total	State	Local	
<u>Million pounds</u>							
1950	1,263	43	41	1,347	445	NA	1,792
1951	1,360	44	37	1,441	461	NA	1,902
1952	1,580	46	22	1,648	485	NA	2,133
1953	1,546	46	21	1,613	486	NA	2,099
1954	1,477	45	20	1,542	476	NA	2,018
1955	1,530	46	20	1,596	500	NA	2,096
1956	1,576	45	18	1,639	573	NA	2,212
1957	1,639	46	18	1,703	614	NA	2,317
1958	1,750	49	18	1,817	673	NA	2,490
1959	1,792	51	17	1,860	841	NA	2,701
1960	1,887	50	17	1,954	998	NA	2,952
1961	1,950	50	17	2,017	1,070	NA	3,087
1962	1,961	50	16	2,027	1,130	NA	3,157
1963	2,047	51	17	2,115	1,225	NA	3,340
1964	1,987	62	18	2,067	1,264	93	3,424
1965	2,014	58	16	2,088	1,482	103	3,673
1966	1,993	56	2	2,051	1,633	111	3,795
1967	2,111	56	2	2,169	1,760	109	4,038
1968	2,086	54	2	2,142	2,067	99	4,308
1969	2,020	56	1	2,077	2,186	113	4,376
1970	2,113	55	2	2,170	2,458	134	4,762
1971	2,098	54	2	2,154	2,637	154	4,945
1972	2,140	53	1	2,194	2,951	179	5,324
1973	2,404	53	3	2,460	3,126	145	5,731
1974	2,308	52	2	2,362	3,287	113	5,762
1975	2,249	50	3	2,302	3,369	119	5,790
1976	2,322	48	4	2,374	3,445	125	5,944
1977	2,343	35	4	2,382	3,580	131	6,093
1978	2,537	38	5	2,580	3,642	132	6,354
1979	2,409	35	4	2,448	3,700	132	6,280
1980	2,564	41	4	2,609	3,820	134	6,563
1981	2,535	40	4	2,579	3,895	150	6,624
1982	2,485	34	6	2,525	4,060	150	6,735
1983	4,609	31	9	4,649	4,092	164	8,905
1984	4,729	30	10	4,769	4,285	179	9,233
1985	4,540	23	11	4,574	4,432	193	9,199
1986	4,787	36	14	4,837	4,596	197	9,630
1987	4,675	32	28	4,735	4,755	198	9,688
1988 5/	4,346	30	27	4,403	4,733	195	9,331

NA = Not available.

1/ Includes large cigarettes. 2/ Includes small cigars and revenue on cigars from Puerto Rico placed into the Treasury of Puerto Rico. 3/ From 1950 through 1965, includes Federal excise tax on chewing, smoking, and snuff. This tax was repealed effective January 1, 1966, but reinstated for snuff and chewing tobacco effective July 1, 1986, and pipe tobacco effective January 1, 1989. From 1966 to 1988, includes cigarette paper and tubes, and imported cigarettes and cigars. 4/ From 1950 through 1963, excludes local government. 5/ Preliminary.

about \$9.3 billion (tables 6 and 7). U.S. consumers smoked an estimated 562.5 billion cigarettes in 1988. This was about 2 percent below the previous year and continued the decline of the last 7 years (table 8).

Table 8--Cigarettes: U.S. output, removals, and consumption, 1950-88

Year	Total output	Taxable removals 1/	Shipments to			Exports	Total U.S. consumption 4/
			Overseas forces and others 2/	Puerto Rico and others 3/			
<u>Billion cigarettes</u>							
1950	392.0	360.2	15.6	1.9	14.3	375.8	
1951	418.8	379.7	20.1	2.0	16.8	399.8	
1952	435.5	394.1	21.7	1.9	16.4	415.8	
1953	423.1	386.8	18.8	2.0	16.2	405.6	
1954	401.8	368.7	15.9	1.8	15.4	384.6	
1955	412.3	382.1	13.2	2.0	15.1	395.3	
1956	424.2	393.3	13.3	2.0	15.7	406.6	
1957	442.3	409.4	13.7	2.1	17.0	423.1	
1958	470.5	436.4	13.4	2.2	18.1	449.8	
1959	489.9	453.7	13.7	2.5	19.6	467.4	
1960	506.9	470.1	14.3	2.5	20.2	484.4	
1961	528.3	488.1	14.6	2.8	22.2	502.7	
1962	535.5	494.5	13.9	3.1	24.1	508.4	
1963	550.6	509.6	14.3	3.2	23.6	523.9	
1964	539.9	497.4	13.8	3.7	25.1	511.2	
1965	556.8	511.5	17.2	3.9	23.1	528.7	
1966	567.3	522.5	18.7	3.9	23.5	541.2	
1967	576.2	527.8	21.4	3.9	23.7	549.2	
1968	579.5	523.0	22.6	4.7	26.5	545.7	
1969	557.6	510.5	18.4	3.7	25.0	528.9	
1970	583.2	532.8	18.4	3.7	29.2	536.4	
1971	576.4	528.9	14.7	2.7	31.8	551.1	
1972	599.1	551.0	12.3	2.1	34.6	566.8	
1973	644.2	590.3	12.4	2.0	41.5	589.7	
1974	635.0	576.2	10.4	1.9	46.9	599.0	
1975	651.2	588.3	10.6	1.5	50.2	607.2	
1976	693.4	617.9	8.8	1.9	61.4	613.5	
1977	665.9	592.0	10.2	1.1	66.8	617.0	
1978	695.9	614.2	9.6	1.2	74.4	616.0	
1979	704.4	614.0	13.0	1.1	79.7	621.5	
1980	714.2	620.7	11.1	1.1	82.0	631.5	
1981	736.5	638.1	8.4	1.0	82.6	640.0	
1982	694.2	614.1	7.5	1.0	73.6	634.0	
1983	667.0	597.5	8.1	.9	60.7	600.0	
1984	668.8	597.8	9.8	.8	56.5	600.4	
1985	665.3	595.0	6.9	.7	58.9	594.0	
1986	658.0	583.1	9.6	.8	64.3	583.8	
1987	689.4	577.2	10.2	.8	100.2	575.0	
1988	694.4	543.3	13.7	.8	118.5	562.5	

1/ Taxable removals refer to the quantity on which Federal taxes are paid. 2/ Also includes ship stores and small tax-exempt categories. 3/ Includes Virgin Islands, Guam, American Samoa, Wake, Canton, and Enderburg Island. 4/ Allows for estimated inventory change for 1971 through 1988.

Consumption per person 18 years and older dropped to 3,096 cigarettes in 1988, a 3-percent decline from 1987, 29 percent below the 1963 peak, the lowest since 1944 (table 9).

Cigarette consumption in 1988 was 12 percent lower than in 1981. Cigarette prices rose more than 100 percent from 1980 to 1988, more than double the rise for all consumer items during the period, a major reversal from the price changes of the 1970's when the overall price index rose more rapidly than cigarette prices. Cigarette consumption is also dampened because of

concerns about smoking and its effects on health as well as an increasing number of State and local laws that prohibit smoking in certain places.

The total quantity of tobacco used in cigarettes remained relatively constant from 1950 to 1981, despite 88-percent higher cigarette output in 1981 (tables 5 and 8). For many years, manufacturers economized in leaf use as they shifted to filtertip brands and used the whole leaf. Later, manufacturers began using various leaf expansion processes and in recent years have used more imported tobacco to reduce costs.

U.S. manufacturers used an estimated 1.207 billion pounds of tobacco (unstemmed processing weight) in cigarettes in 1988. This was 2 percent more than the year before, mainly because of hiked cigarette exports. Cigarette output fell in 1989, so manufacturers likely used less tobacco this year, but the figures are not yet available.

Manufacturers used an estimated 1.74 pounds of tobacco (unstemmed processing weight) per 1,000 cigarettes produced in 1988. Domestic burley accounted for about 31 percent of the tobacco used in cigarettes; domestic flue-cured, 35 percent; Maryland, 2 percent; and imported, the remaining 32 percent. Since the mid-1970's, the shares of both U.S. flue-cured and burley have declined. However, burley declined less than flue-cured. The decline has been offset by a shift to an increasing share of imported tobacco in U.S. cigarettes.

Table 9--Cigarette consumption per capita by persons 18 years and older and pounds of tobacco used in cigarettes, United States (including overseas forces), 1950-88

Year	Cigarettes	Weight of tobacco 1/	Year	Cigarettes	Weight of tobacco 1/
	<u>Number</u>	<u>Pounds</u>		<u>Number</u>	<u>Pounds</u>
1950	3,522	9.54	1970	3,985	7.77
1951	3,744	9.94	1971	4,037	7.75
1952	3,886	10.44	1972	4,043	7.95
1953	3,778	10.37	1973	4,148	7.92
1954	3,546	9.59	1974	4,141	7.90
1955	3,597	9.49	1975	4,123	7.73
1956	3,650	9.35	1976	4,092	7.35
1957	3,755	9.21	1977	4,051	7.21
1958	3,953	9.46	1978	3,967	6.89
1959	4,073	9.44	1979	3,861	7.00
1960	4,171	9.64	1980	3,849	6.78
1961	4,266	9.84	1981	3,836	6.52
1962	4,265	9.69	1982	3,739	6.45
1963	4,345	9.70	1983	3,488	6.19
1964	4,195	9.22	1984	3,446	5.89
1965	4,259	9.37	1985	3,370	5.90
1966	4,287	9.08	1986	3,274	5.72
1967	4,280	8.86	1987	3,197	5.50
1968	4,186	8.69	1988	3,096	5.38
1969	3,993	8.11			

1/ Unstemmed processing weight.

Total cigarette consumption has declined in 6 of the 7 years since 1981. Consumption is expected to continue to decline 2-3 percent a year for the next several years. The rate of cigarette price increase has risen since 1983, and the Federal tax on cigarettes may increase from the current 16 cents in the next few years. Total consumption is also being held down because of an increasing number of restrictions on where cigarettes can be smoked and heightened antismoking activities.

Further declines in use of most other products will likely continue to reduce the demand for fire-cured, dark air-cured, and cigar types. Cigar consumption declined 35 percent; smoking tobacco, 44 percent; and chewing tobacco about 17 percent from 1981 to 1988. Snuff consumption rose about 14 percent during this period but declined in both 1986 and 1987. The downtrend for cigars, smoking tobacco, and chewing tobacco is likely to continue but at a slower rate. After declines in 1986 and 1987, snuff consumption rose in 1988.

Consumption in some foreign countries that represent major export outlets for U.S. tobacco will grow little, if any, during the remainder of this century. This stagnating demand, coupled with continued reductions in leaf use per cigarette and other countries with tobacco production capabilities and lower selling prices than the United States, suggest a very competitive world market for tobacco.

Even with lower U.S. leaf prices in the last 4 years compared with the previous 3 years, the proportion of U.S.-produced leaf in U.S. cigarettes has not increased. The tobacco program continues to maintain relatively high prices, especially in relation to less expensive imported tobaccos. With more competitive U.S. prices in recent years, the proportion of U.S.-produced leaf in U.S. cigarettes should at least stabilize. However, the effect of tobacco leaf prices on retail prices is small, since only about 6 percent of the price of a pack of cigarettes reflects the leaf in the cigarette. Consequently, the drop of 25-30 cents a pound in cigarette leaf prices in recent years has had little effect on retail cigarette prices. The lower prices and weaker dollar of the last few years have likely increased exports of U.S.-grown leaf from what they would have been otherwise.

Some experiments with extracting protein from tobacco have occurred. However, the research is in its early stages and tobacco does not offer an economically feasible substitute for current protein sources. This possible new use is not likely to be a market factor in the near term.

Loan Programs and Tobacco Stocks

The current legislation authorizing tobacco marketing quota and price support programs is the Agricultural Adjustment Act of 1938, as amended, and the Agricultural Adjustment Act of 1949, as amended. After the Secretary of Agriculture proclaims a marketing quota for a kind of tobacco to be eligible for price

support, the quota must be approved by eligible producers in a referendum.

Referendums are held every 3 years to continue the program. Growers are assigned production or marketing quotas in exchange for price support. About 96 percent of the tobacco produced in the United States and Puerto Rico is under price support programs.

Price support for eligible producers is administered by producer-owned cooperative associations acting under loan agreements with the Commodity Credit Corporation (CCC). Under these agreements, the CCC provides loans to these associations in the amounts necessary to pay price supports to the producers and process and store the tobacco received until it can be sold. The tobacco received by the association becomes collateral for and the means of repaying the CCC loans. Loans are made on a crop-year basis, and it may take a number of years to dispose of the loan receipts of a particular crop.

Beginning with 1982, if the sales proceeds from the collateral securing the loans are insufficient to repay them, the unpaid balance must be made up by growers from their contributions to funds or accounts. This constitutes the no-net-cost account which assures that tobacco program costs, except administrative costs, are borne by growers and purchasers. Effective with the 1982 crop, when proceeds from the sales exceed the loan, the net proceeds are retained to be applied to future losses. For crops before 1982, the U.S. Treasury absorbed the losses and profits were returned to growers. Losses on sales of loan stocks from the 1976-81 crops still must be absorbed by the U.S. Treasury.

In addition, the 1983 burley crop was declared a disaster crop, with special provisions for its disposition. The CCC took title to about 212 million pounds of burley tobacco when the loan was called May 7, 1986. Under provisions of the Reconciliation Act of 1985, CCC offered the tobacco for sale and sold the inventory at an average of 60 cents per pound (\$126 million). The \$110 million owed in interest was recovered from the no-net-cost account. The net result was a CCC loss of approximately \$373 million or about five times the accumulated loss of \$66 million on tobacco support operations from 1933 through 1985. However, under legislation now in effect, net U.S. Treasury outlays for current tobacco crops can occur only for the administrative costs (\$10-\$15 million per year) of operating the program.

As of February 1, 1989, about 639 million pounds of tobacco were under loan, compared with 1.58 billion 4 years earlier. The big drop in loan stocks resulted from discount prices and buyer incentive programs offered by grower cooperatives, the loan stock buyout prescribed in the Consolidated Omnibus Reconciliation Act of 1985 (PL 99-272). The Reconciliation Act also called for reduced production and lower prices, which also helped to reduce excess supplies.

For the first time this decade, total supplies of tobacco held by manufacturers and loan cooperatives are now about in balance with demand. About 2-1/2 years supply of both burley and flue-cured is available, about the desired amount. More than 2 years use is required because tobacco usually requires 2-3 years of aging before it is ready for manufacture. During the aging process, the tobacco goes through a natural fermentation that gives it a sweeter, mellower flavor.

Trends in the World Tobacco Market

From 1960-64 to 1987, the volume of world tobacco trade increased by 77 percent, from an average 1.69 billion pounds to 3 billion (table 10). Several factors contributed to this growth. Importing nations, particularly developing countries, experienced rapid population growth, and some nations had large growth in income. This fostered increased demand for cigarettes during the last three decades. However, except for China, total world consumption has been steady in recent years.

Major Importers

During the past 13 years, the European Community (EC) has reduced total imports, while the United States--second only to the EC in size among importers--has increased its import share (table 11). EC price policies have encouraged production, while increased taxes on cigarettes have caused EC consumption to decline, thus lowering total use of tobacco.

Imports in Eastern Europe declined during the last decade. Production rose and stocks were relatively high.

Japan reduced its imports of tobacco from 1975 to 1986. However, Japanese imports started rising in 1987 because barriers to imports of cigarettes into Japan were relaxed in 1987. U.S. cigarette imports have jumped and demand for better quality leaf for domestic cigarettes is rising. Japan has historically imported high-quality leaf which is blended with less flavorful domestic leaf. Now, an even greater share is apparently of high-quality imported leaf.

U.S. Imports

The United States has imported Turkish or Oriental tobacco for many decades. However, imports of flue-cured and burley tobacco have been rising rapidly since the late 1960's.

Flue-cured imports rose steadily during 1970-79 (July-June import years). They fell in 1980-81 and 1981-82, increased in 1982-83, fell again in 1983-84, and rose for 4 consecutive years before declining in 1988-89. Prices of U.S.-grown flue-cured tobacco that exceeded those of foreign grown largely caused the growth in flue-cured imports.

On a farm-sales weight basis, estimated U.S. imports of burley tobacco grew steadily during 1970-80, rising from about 3 million pounds in 1970-71 (around 1 percent of U.S. domestic use) to

Table 10--United States and world production and exports of flue-cured, burley, and all unmanufactured tobacco, 1955-88

Period	Flue-cured			Burley			All tobacco		
	United States	World total	United States as percent of total	United States	World total	United States as percent of total	United States 1/ total	World total	United States as percent of total
	--Million pounds--		Percent	--Million pounds--		Percent	--Million pounds--		Percent
Production (farm-sales weight):									
Average--									
1955-59	1,208	2,914	41	486	595	82	1,941	8,519	23
1960-64	1,336	3,302	40	624	778	80	2,211	8,898	25
1965-69	1,093	3,666	30	574	824	70	1,856	9,856	19
1970	1,193	3,937	30	561	906	62	1,912	10,021	19
1971	1,078	3,918	28	473	868	55	1,714	9,865	17
1972	1,012	4,076	25	601	1,094	55	1,759	10,155	17
1973	1,157	4,404	27	450	944	48	1,752	10,670	16
1974	1,241	4,788	26	613	1,113	55	1,998	11,385	18
1975	1,415	5,100	28	639	1,240	52	2,186	11,837	18
1976	1,316	5,021	26	679	1,294	52	2,140	12,284	17
1977	1,130	5,816	19	617	1,276	48	1,915	12,499	15
1978	1,232	6,239	20	626	1,311	48	2,207	13,006	16
1979	946	5,448	17	446	1,239	36	1,529	11,876	13
1980	1,086	5,306	20	561	1,265	44	1,788	11,439	16
1981	1,169	6,557	18	730	1,430	51	2,064	13,093	16
1982	1,006	7,872	13	822	1,671	49	1,995	15,149	13
1983	821	6,279	13	481	1,477	33	1,429	13,311	11
1984	865	7,163	12	712	1,703	42	1,728	14,363	12
1985	800	8,222	10	573	1,518	38	1,512	15,173	10
1986	645	6,605	10	408	1,339	31	1,164	13,240	9
1987 2/	691	7,209	10	419	1,288	32	1,191	13,514	9
1988 3/	813	8,656	9	477	1,446	33	1,370	14,794	9

Continued

Table 10--United States and world production and exports of flue-cured, burley, and all unmanufactured tobacco, 1955-88--Continued

Period	Flue-cured			Burley			All tobacco		
	United States	World total	United States as percent of total	United States	World total	United States as percent of total	United States 1/	World total	United States as percent of total
	--Million pounds--		Percent	--Million pounds--		Percent	--Million pounds--		Percent
Exports (unmanufactured, export weight):									
Average--									
1955-59	413	683	60	28	47	60	500	4/ 1,434	30
1960-64	397	772	52	42	74	57	497	4/ 1,691	30
1965-69	415	790	53	46	106	44	553	4/ 1,787	31
1970	368	797	46	41	125	33	510	4/ 1,838	28
1971	342	831	41	36	128	28	473	4/ 1,890	25
1972	425	1,046	41	54	175	31	606	4/ 2,341	26
1973	418	1,088	38	59	210	28	613	4/ 2,288	27
1974	441	1,232	36	61	265	23	662	3,116	21
1975	391	1,176	33	62	231	27	571	2,854	20
1976	379	1,208	31	68	258	26	587	2,904	20
1977	412	1,238	33	79	291	27	640	2,801	23
1978	455	1,366	33	91	319	29	707	3,119	23
1979	371	1,236	30	82	313	26	567	3,034	19
1980	391	1,359	29	91	336	27	599	2,993	20
1981	386	1,398	28	74	311	24	587	3,271	18
1982	348	1,396	25	104	376	28	575	3,240	18
1983	311	1,358	23	91	426	21	524	3,031	17
1984	350	1,416	25	74	415	18	543	3,110	17
1985	334	1,425	23	102	390	26	549	3,083	18
1986	260	1,262	21	104	387	27	477	2,924	16
1987 2/	225	1,210	19	99	417	24	430	2,999	14

1/ Includes Puerto Rico. 2/ Subject to revision. 3/ Preliminary. 4/ Total excludes Sino-Soviet countries.
Foreign data supplied by the Tobacco, Cotton, and Seeds Division, Foreign Agricultural Service, U.S. Department of Agriculture.

Table 11--World tobacco imports, selected countries, 1980-84 average and 1985-87 1/

Country	1980-84 avg	1985	1986	1987 2/
<u>1,000 metric tons</u>				
United States	218.9	202.1	207.1	221.2
European Community	581.7	497.8	461.3	509.9
Eastern Europe	106.6	109.0	100.9	99.7
Other Europe	164.9	160.1	155.4	157.0
Japan	76.7	70.0	67.8	88.4
Others	262.2	234.4	258.0	254.4
Total	1,411.0	1,273.4	1,250.5	1,330.6

1/ General imports (actual arrivals). 2/ Subject to revision.

30-50 million pounds in the mid-1970's (5-8 percent of use). Imports surged in the late 1970's, reaching 137 million pounds by 1980-81. Imports fell in 1981-82, increased in 1982-83, fell a little in 1983-84, then reached a new high of 164 million pounds (29 percent of total burley use) in 1984-85, before falling to 138 million pounds (26 percent of total burley use) in 1985-86 and to 120 million pounds in 1986-87 before again rising to 162 million pounds in 1987-88. Then in 1988-89, burley imports fell to a 7-year low of 118 million pounds (table 12).

Table 12--Estimated U.S. imports of flue-cured and burley tobacco and domestic use (farm sale weight), 1969-88

Year beginning July 1	Flue-cured				Burley			
	Imports 1/	Domestic disappearance	Total use	Imports' share of total	Imports 1/	Domestic disappearance 2/	Total use	Imports' share of total
	-----Million pounds-----			Percent	-----Million pounds-----			Percent
1969	5.7	645.9	651.6	.9	3.3	507.1	510.4	.6
1970	10.6	640.1	650.7	1.6	3.2	503.0	506.2	.6
1971	11.2	662.5	673.7	1.7	4.6	515.2	519.8	.9
1972	12.7	664.2	676.9	1.9	8.9	534.5	543.4	1.6
1973	20.4	703.4	723.8	2.8	30.7	533.1	563.8	5.4
1974	23.1	652.3	675.4	3.4	47.7	518.8	566.5	8.4
1975	24.4	670.6	695.0	3.5	46.7	510.1	556.8	8.4
1976	30.8	634.0	664.8	4.6	37.9	489.6	527.5	7.2
1977	55.0	608.2	663.2	8.3	85.4	494.8	580.2	14.7
1978	60.1	584.1	644.2	9.3	89.1	502.8	591.9	15.1
1979	84.8	563.1	647.9	13.1	113.6	498.5	612.1	18.6
1980	72.7	529.4	602.1	11.7	136.9	477.6	614.5	22.3
1981	63.3	488.8	552.1	11.5	109.7	463.9	573.6	19.1
1982	103.1	478.5	581.6	17.7	141.3	444.1	585.4	24.1
1983	3/ 94.4	441.6	536.0	17.6	3/ 135.0	388.7	523.7	25.8
1984	3/ 120.1	454.2	574.3	20.9	3/ 163.8	402.6	566.4	28.9
1985	4/ 151.0	476.5	627.5	24.1	4/ 137.8	424.9	562.7	24.5
1986	4/ 176.6	479.6	656.2	26.9	4/ 120.4	401.7	522.1	23.1
1987	4/ 209.7	537.3	747.0	28.1	4/ 162.4	478.2	640.5	25.4
1988	4/ 146.5	522.1	668.6	21.9	4/ 117.9	5/ 435.0	552.9	21.3

1/ Imports for consumption (duty paid) of leaf, scrap, and manufactured or unmanufactured (beginning 1980), prorated according to reported stocks of imported flue-cured and burley. 2/ Marketing year beginning October. 3/ General imports adjusted for stock change. 4/ Volume inspected by Agricultural Marketing Service, U.S. Department of Agriculture, adjusted for stock change. 5/ Estimated.

Burley imports have grown in steps, in part related to the decline in U.S. stocks held under loan and in part to the rise in the level of the U.S. support price. In 1982, 1983, and 1984, loan stocks built and stood near 600 million pounds of tobacco before discounted sales in 1986 of 1983 loans began to lower them.

Increased imports of burley and flue-cured tobacco create a dilemma for the tobacco industry. Import quotas do not apply to tobacco. Tariff rates vary, depending on the form of tobacco entering the United States.

The buyout of existing loan stocks and reduced support levels under the Reconciliation Act are moving loan stocks into the trade. More U.S. tobacco is expected to be used but imports of flue-cured and burley are expected to continue even with lower U.S. prices because some countries offer even lower priced flue-cured and burley than does the United States.

Import controls can be implemented under Section 22 of the Agricultural Adjustment Act of 1933, as amended, if "any article or articles are being or are practically certain to be imported into the United States under such conditions and in such quantities as to render or tend to render ineffective, or materially interfere with, any loan, purchase, or other program or operation undertaken by the Department of Agriculture..." USDA requested the International Trade Commission (ITC) to conduct a Section 22 review of tobacco in 1981 and again in 1984. Imports of flue-cured tobacco had increased substantially in the late 1970's, and USDA initiated Section 22 action for quotas on flue-cured tobacco in January 1981. But, as imports of flue-cured and several other kinds continued to rise, an investigation was initiated in 1984 on whether flue-, fire-, and dark air-cured and burley tobaccos are imported under such conditions that render ineffective or materially interfere with USDA programs. In both instances, the ITC found that tobacco imports did not materially interfere with the tobacco price support program and that a basis did not exist for imposing import restrictions under Section 22.

Major Exporters

The United States is the world's major tobacco exporting country. In 1988, U.S. exports of unmanufactured tobacco and tobacco products were valued at \$4.15 billion. Imports were valued at \$643 million, leaving a trade balance of \$3.5 billion.

U.S. exports fell during the last decade, while those of Brazil, Zimbabwe, and Malawi all rose (table 13). Relative prices heavily influenced the decline in U.S. exports. U.S. tobacco prices during the early 1980's were nearly double those of the major competing countries of India, Canada, Thailand, Malawi, Brazil, Zimbabwe, and Korea. U.S. prices during the early 1960's were about 60 percent higher than grower prices in these foreign countries. Currency devaluations by major competitors and a strong U.S. dollar during the early 1980's also contributed to

Table 13--World tobacco exports, selected countries, 1980-84 average and 1985-88

Country	Average 1980-84	1985	1986 1/	1987 2/	1988 2/
<u>1,000 metric tons</u>					
United States	257.2	249.0	216.6	195.0	218.5
Brazil	164.3	200.0	176.0	173.3	175.0
Bulgaria	63.4	62.0	61.6	55.6	55.5
Greece	82.3	86.5	88.6	112.5	114.5
Italy	78.7	83.5	90.5	102.6	100.0
Malawi	49.5	61.3	57.6	63.2	62.6
Zimbabwe	95.2	98.6	90.0	99.3	102.8
Korea, Rep. of	31.1	23.3	24.4	22.3	24.0
Turkey	91.8	102.7	82.0	106.2	80.0
India	88.0	64.4	61.8	53.1	57.8
Thailand	35.6	32.9	30.3	27.0	26.2
Other	358.0	334.2	346.9	350.4	361.7
Total	1,395.1	1,398.4	1,326.3	1,360.5	1,378.6

1/ Subject to revision. 2/ Preliminary.

greater differences in prices for domestic and foreign tobacco. However, U.S. prices have been lower and the dollar weaker in recent years and this is probably helping the U.S. competitive position. Still, U.S. prices are somewhat higher than those of major competitors and previous trade commitments are slow to change.

Brazil and Zimbabwe have expanded production of flue-cured tobacco and are boosting exports. Product quality is improving, and prices are lower than in the United States. Malawi and Italy have boosted production and exports of burley tobacco, which is also lower priced than U.S. burley.

Exports of U.S. tobacco rose 18 percent from 1950-54 to 1982-86 (see table 4). However, 1982-86 exports are 4 percent below those for 1970-74 and 11 percent below those of 1975-79. Still, exports have accounted for 45-55 percent of total flue-cured use and 15-25 percent of burley use during the last 10 years. Although these shares rose from the 1960's, total disappearance of both flue-cured and burley declined for several years before rebounding in 1987/88.

Despite lower U.S. tobacco prices and a weaker dollar, export competition remains keen. Only modest U.S. gains can be expected because of stagnant or declining cigarette consumption in major importing countries, reduced leaf use per cigarette, quotas and tariffs that discriminate against U.S. tobacco, and sufficient world supplies.

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.

Priming -- The process of removing ripened leaves from the plant by hand (also referred to as cropping). Flue-cured and cigar wrapper are harvested by the priming method.

Priming aid -- A machine that permits workers to ride as they manually break off tobacco leaves.

Prizing -- Packing of tobacco into hogsheads.

Quotas -- A production control device that sets limits on the pounds of tobacco growers can market and receive price support.

Redrying -- The process of preparing tobacco for storage in hogsheads. Redrying involves the removal from tobacco of moisture below a critical level, followed by an application of a uniform moisture content throughout all the leaf.

Referendum -- The referral of a question to voters to be resolved by balloting; for example, whether to continue the price support program for a specific type of tobacco.

Renting quota -- Payment for the right to grow and sell a specified quantity of tobacco. Generally, the tobacco is grown on the farm to which the quota is assigned.

Stalk cutting -- A harvest method in which the entire stalk or plant is cut. Light air-cured, dark air-cured, fire-cured, and cigar filler and binder are usually stalk cut.

Smoking tobacco -- Commonly refers to pipe tobacco, but also includes tobacco used for roll-your-own cigarettes. Smoking tobacco is manufactured in several forms such as granulated, plug cut, long cut, cube cut, and others. Burley and other types of tobacco are used in smoking tobacco.

Snuff -- Finely cut or pulverized tobacco. Users tuck a small quantity of snuff between the lower lip and gum, and then pack the finely ground or cut tobacco with the tongue. The United States produces three basic types of snuff: dry, moist, and semimoist. These products are: fine or coarse, flavored or toasted, and plain scented.

Stemming -- Removing the stem or midrib from the tobacco leaf at the stemmery. Also called threshing.

Tipping -- Removing the top one-third of the leaf that does not contain objectionable stem; the remaining two-thirds of the leaf is threshed.

Topping -- Removing blossoms and sometimes top leaves of tobacco plants; tends to increase size, thickness, body, and nicotine content of leaves.

Tying machine -- A device which stitches tobacco leaves to sticks for curing. Also called sewing machine.

Warehouse -- Large buildings with skylights used for displaying tobacco for auction sales.

Wrapper tobacco -- The class of tobacco grown for the outside cover of cigars. This is the most difficult and expensive of all tobacco to grow. Leaves must be elastic, uniform, free of injury, uniform in color, and have good burning qualities. To produce leaves of such quality, it is necessary to protect them from the sun and extremes of weather. Therefore, many fields of tobacco are covered with cheese cloth to filter the sun and create the artificial environment favorable to the specialized product desired.

Appendix table 1--Acreage, yield, and production of tobacco, 1950-1988

Year	Harvested area	Yield	Production
	<u>1,000 acres</u>	<u>Pounds per acre</u>	<u>Million pounds</u>
1950	1,599	1,269	2,030
1951	1,780	1,310	2,332
1952	1,772	1,273	2,256
1953	1,633	1,261	2,059
1954	1,668	1,346	2,244
1955	1,495	1,466	2,193
1956	1,364	1,596	2,176
1957	1,122	1,486	1,668
1958	1,078	1,611	1,736
1959	1,153	1,558	1,796
1960	1,142	1,703	1,944
1961	1,174	1,755	2,061
1962	1,224	1,891	2,315
1963	1,176	1,994	2,344
1964	1,078	2,067	2,228
1965	977	1,898	1,855
1966	972	1,939	1,885
1967	960	2,050	1,968
1968	879	1,945	1,710
1969	918	1,964	1,803
1970	898	2,122	1,906
1971	839	2,034	1,705
1972	842	2,076	1,749
1973	889	1,963	1,746
1974	963	2,067	1,994
1975	1,083	2,015	2,182
1976	1,045	2,045	2,136
1977	958	1,997	1,913
1978	948	2,135	2,054
1979	827	1,845	1,527
1980	921	1,940	1,786
1981	976	2,114	2,064
1982	913	2,185	1,994
1983	789	1,811	1,429
1984	792	2,183	1,728
1985	688	2,197	1,512
1986	582	2,001	1,164
1987	587	2,028	1,191
1988	634	2,160	1,370

Appendix table 2--Use and ending stocks for U.S. tobacco, types 11-62, 1950-88

Crop year 1/	Domestic	Exports	Total use	Beginning stocks	Stocks to-use ratio
<u>Million pounds</u>					
1950	1,452	523	1,975	3,089	1.59
1951	1,488	584	2,072	3,144	1.64
1952	1,557	498	2,055	3,404	1.75
1953	1,480	515	1,995	3,605	1.84
1954	1,419	516	1,935	3,669	2.06
1955	1,410	648	2,058	3,997	2.00
1956	1,373	556	1,929	4,112	2.26
1957	1,393	528	1,921	4,359	2.14
1958	1,388	535	1,923	4,106	2.04
1959	1,425	503	1,928	3,920	1.97
1960	1,462	567	2,029	3,789	1.83
1961	1,461	590	2,051	3,704	1.81
1962	1,474	530	2,004	3,714	2.00
1963	1,437	609	2,046	4,025	2.11
1964	1,506	543	2,055	4,323	2.19
1965	1,462	538	2,000	4,496	2.18
1966	1,392	704	2,098	4,351	1.97
1967	1,372	648	2,020	4,140	2.02
1968	1,352	623	1,975	4,088	1.94
1969	1,308	640	1,949	3,823	1.89
1970	1,278	639	1,919	3,678	1.91
1971	1,312	571	1,883	3,667	1.85
1972	1,312	639	1,951	3,488	1.69
1973	1,348	732	2,081	3,289	1.42
1974	1,284	653	1,937	2,948	1.55
1975	1,286	655	1,941	3,003	1.70
1976	1,229	678	1,907	3,297	1.86
1977	1,202	693	1,895	3,543	1.88
1978	1,190	765	1,955	3,560	1.84
1979	1,175	694	1,969	3,601	1.74
1980	1,109	649	1,759	3,259	1.87
1981	1,065	697	1,762	3,286	2.04
1982	1,034	628	1,662	3,588	2.36
1983	936	596	1,532	3,920	2.56
1984	955	666	1,621	3,817	2.49
1985	1,000	620	1,620	3,924	2.42
1986	981	591	1,572	3,815	2.35
1987	1,117	572	1,689	3,406	2.17
1988 2/	1,049	557	1,606	3,908	1.72

1/ Beginning July 1 for flue-cured and cigar wrapper; October 1 for other types. 2/ Preliminary.

Appendix table 3--Ending stocks and prices for tobacco, 1950-88

Crop year 1/	Ending stocks 2/	Flue-cured		Burley		Average price received, all tobacco	
		Price received	Support rate	Price received	Support rate		
	Million pounds	-----Cents per pound-----					
1950	3,144	54.7	45.0	49.0	45.7	51.7	
1951	3,404	52.4	50.7	51.2	49.8	51.1	
1952	3,605	50.3	50.6	50.3	49.5	49.9	
1953	3,669	52.8	47.9	52.5	46.6	52.3	
1954	3,977	52.7	47.9	49.8	46.4	51.1	
1955	4,112	52.7	48.3	58.6	46.2	53.2	
1956	4,359	51.5	48.9	63.6	48.1	53.7	
1957	4,106	55.4	50.8	60.3	51.7	56.1	
1958	3,920	58.2	54.6	66.1	55.4	59.9	
1959	3,789	58.3	55.5	60.6	57.2	58.3	
1960	3,704	60.4	55.5	64.3	57.2	60.9	
1961	3,714	64.3	55.5	66.5	57.2	63.8	
1962	4,025	60.1	56.1	58.6	57.8	58.9	
1963	4,323	58.0	56.6	59.2	58.3	57.7	
1964	4,496	58.5	57.2	60.3	58.9	59.2	
1965	4,351	64.6	57.7	67.0	59.5	65.1	
1966	4,140	66.9	58.8	66.9	60.6	66.5	
1967	3/ 4,088	64.9	59.9	71.8	61.8	66.8	
1968	3,823	66.6	61.6	73.7	63.5	69.5	
1969	3/ 3,678	72.4	63.8	69.6	65.8	71.8	
1970	3/ 3,667	72.0	66.6	72.2	68.6	72.9	
1971	3/ 3,488	77.2	69.4	80.9	71.5	78.6	
1972	3/ 3,289	85.3	72.7	79.2	74.9	83.0	
1973	3/ 2,948	88.1	76.6	92.9	78.9	90.0	
1974	3/ 3,003	105.0	83.3	113.7	85.9	108.6	
1975	3/ 3,297	99.8	93.3	105.5	96.1	102.6	
1976	3/ 3,540	110.4	106.0	114.2	109.3	112.5	
1977	3/ 3,560	117.6	113.8	120.0	117.3	118.6	
1978	3/ 3,601	135.0	121.0	131.2	124.7	132.4	
1979	3,259	140.0	129.3	145.2	133.3	141.1	
1980	3,286	144.5	141.5	165.9	145.9	152.3	
1981	3/ 3,588	166.4	158.7	180.7	163.6	170.6	
1982	3/ 3,920	178.5	169.9	181.0	175.1	176.4	
1983	3,817	177.9	169.9	177.3	175.1	174.6	
1984	3/ 3,924	181.1	169.9	187.6	175.1	180.6	
1985	3/ 3,815	4/ 171.9	169.9	159.7	148.8	164.5	
1986	3/ 3,406	152.7	143.8	156.5	148.8	152.2	
1987	3/ 2,908	158.7	143.5	156.3	148.8	157.0	
1988 2/	NA	161.3	144.2	161.0	150.0	164.6	

NA = not available.

1/ For flue-cured and cigar wrapper; year beginning July 1; for all other types, October 1.

2/ Stocks of domestically produced tobacco. 3/ Includes tobacco carried over on farms.

4/ Excludes 25-cent per pound rebate.

Appendix table 4--Farm related program costs for tobacco, 1961-88

Fiscal year	Commodity export payments 1/	Loan operations		Net price support and related expenditures
		Outlays 2/	Repayments	
<u>Million dollars</u>				
1961	---	51.1	80.3	-29.2
1962	---	71.2	145.2	-74.0
1963	---	209.4	60.6	148.8
1964	---	305.4	64.4	241.0
1965	---	263.3	103.5	159.8
1966	---	97.6	163.4	-64.8
1967	33.1	111.3	186.0	-41.6
1968	28.4	246.1	167.2	107.3
1969	27.9	137.7	127.7	37.9
1970	29.5	217.9	132.7	114.7
1971	29.1	163.1	123.6	68.6
1972	26.7	59.7	272.6	-186.2
1973	27.8	51.4	242.1	-162.9
1974	13.7	37.6	269.1	-217.8
1975	3.1	30.2	162.5	-129.2
1976 3/	---	467.0	94.9	372.1
1977	---	285.3	124.4	160.9
1978	---	282.9	184.9	98.0
1979	---	228.7	71.4	157.3
1980	---	172.4	260.2	-87.8
1981	---	215.4	266.6	-51.2
1982 4/	---	433.0	330.0	103.0
1983 5/	---	1,027.8	148.0	879.8
1984 4/	---	794.6	448.2	346.4
1985 4/	---	814.7	359.3	455.4
1986 6/	---	359.8	63.1	253.4
1987 6/	---	200.3	465.9	-346.0
1988 6/	---	203.4	657.0	-453.3

--- = Less than \$50,000.

1/ Excludes PL 480 commodity costs. 2/ Includes loans and purchases and other outlays. 3/ Includes July-September 1976 to allow for shift from July/June to October/September fiscal year. 4/ Losses on loan outlays are paid by tobacco growers. 5/ Except for burley, losses on loans are paid by growers. 6/ Losses on flue-cured and burley outlays are shared by growers and manufacturers. Losses on outlays for other kinds continue to be paid solely by growers.

Appendix table 5--Value comparisons for tobacco, 1950-87

Year	Loan value per acre 1/		Market value per acre		Gross value of production 4/	
	Nominal 2/	Real 3/	Nominal 2/	Real 3/	Nominal 2/	Real 3/
	-----Dollars-----				--Million dollars--	
1950	571	2,389	656	2,744	1,049	4,389
1951	664	2,645	669	2,665	1,191	4,745
1952	644	2,525	635	2,490	1,125	4,412
1953	604	2,332	659	2,544	1,076	4,154
1954	645	2,452	688	2,616	1,147	4,361
1955	717	2,636	780	2,868	1,166	4,287
1956	780	2,776	857	3,050	1,169	4,160
1957	755	2,595	834	2,866	936	3,216
1958	880	2,963	965	3,249	1,040	3,502
1959	865	2,845	909	2,990	1,048	3,447
1960	945	3,058	1,037	3,356	1,184	3,832
1961	974	3,122	1,120	3,590	1,315	4,215
1962	1,061	3,326	1,114	3,492	1,364	4,276
1963	1,129	3,485	1,150	3,549	1,352	4,173
1964	1,182	3,593	1,224	3,720	1,319	4,009
1965	1,095	3,240	1,235	3,654	1,207	3,571
1966	1,140	3,257	1,289	3,683	1,252	3,577
1967	1,228	3,421	1,371	3,819	1,316	3,666
1968	1,198	3,178	1,352	3,586	1,189	3,154
1969	1,253	3,148	1,411	3,545	1,296	3,256
1970	1,413	3,364	1,547	3,683	1,389	3,307
1971	1,412	3,180	1,599	3,601	1,340	3,018
1972	1,509	3,245	1,723	3,705	1,451	3,120
1973	1,505	3,040	1,770	3,576	1,569	3,170
1974	1,722	3,189	2,244	4,155	2,160	4,000
1975	1,871	3,155	2,060	3,474	2,238	3,774
1976	2,163	3,427	2,297	3,640	2,404	3,810
1977	2,256	3,352	2,351	3,493	2,270	3,373
1978	2,542	3,521	2,781	3,852	2,680	3,712
1979	2,386	3,036	2,604	3,313	2,154	2,740
1980	2,745	3,214	2,956	3,449	2,721	3,175
1981	3,355	3,569	3,607	3,837	3,520	3,745
1982	3,712	3,712	3,854	3,854	3,517	3,517
1983	3,077	2,962	3,162	3,043	2,495	2,401
1984	3,709	3,443	3,942	3,660	3,121	2,898
1985	3,623	3,267	3,612	3,257	2,486	2,242
1986	2,877	2,526	3,046	2,674	1,772	1,556
1987	2,910	2,472	3,184	2,705	1,887	1,603

1/ Based on flue-cured support price. 2/ Loan rate or average farm price times U.S. average yield per harvested acre. 3/ GNP implicit price deflator (1982 = 1.0) was used. 4/ Production times average farm price.

Appendix table 6--World production, consumption, exports, and ending stocks for tobacco, dry-weight basis, 1960-87

Calendar year	Production	Consumption	Exports	Imports	Ending stocks	Stocks-to-use ratio
	-----1,000 metric tons-----					Percent
1960	3,393	3,410	833	814	5,277	1.55
1961	3,174	3,490	882	860	4,951	1.42
1962	3,536	3,572	893	864	4,912	1.38
1963	3,910	3,646	910	918	5,170	1.42
1964	4,197	3,623	1,031	1,010	5,721	1.58
1965	3,937	3,797	988	962	5,832	1.54
1966	3,922	3,913	924	958	5,866	1.50
1967	4,233	3,870	988	1,000	6,232	1.61
1968	4,026	3,976	1,026	1,006	6,256	1.57
1969	4,016	4,097	1,000	979	6,174	1.51
1970	4,062	4,155	992	1,005	6,081	1.46
1971	4,019	4,278	1,025	1,044	5,836	1.36
1972	4,203	4,359	1,236	1,167	5,609	1.29
1973	4,308	4,505	1,254	1,247	5,401	1.20
1974	4,639	4,573	1,411	1,369	5,428	1.19
1975	4,848	4,698	1,264	1,333	5,651	1.20
1976	4,988	4,833	1,317	1,285	5,777	1.20
1977	5,082	4,729	1,270	1,231	6,092	1.29
1978	5,289	4,789	1,413	1,369	6,547	1.37
1979	4,791	4,836	1,379	1,362	6,485	1.34
1980	4,620	5,036	1,358	1,424	6,136	1.22
1981	5,275	5,226	1,479	1,516	6,208	1.19
1982	6,098	5,536	1,458	1,461	7,150	1.17
1983	5,323	5,343	1,370	1,397	6,377	1.19
1984	5,780	5,761	1,409	1,364	6,436	1.12
1985	6,242	5,916	1,417	1,386	6,732	1.14
1986	5,342	6,053	1,356	1,354	6,020	.99
1987	5,613	5,968	1,372	1,397	5,689	.95

Appendix Table 7--Tobacco production, trade, and ending stocks: World and United States, dry-weight basis, 1960-87

Calendar year	Production			Exports			Ending stocks		
	World	United States	U.S. share	World	United States	U.S. share	World	United States	U.S. share
	--Million pounds--		Percent	--Million pounds--		Percent	--Million pounds--		Percent
1960	7,480	1,774	23.7	1,836	498	27.1	11,634	3,748	32.2
1961	6,997	1,883	26.9	1,945	503	25.9	10,915	3,767	34.5
1962	7,795	2,115	27.1	1,970	471	23.9	10,829	3,954	36.5
1963	8,620	2,138	24.8	2,006	509	25.4	11,398	4,086	35.8
1964	9,253	2,039	22.0	2,273	518	22.8	12,612	4,404	34.9
1965	8,680	1,684	19.4	2,178	472	21.7	12,857	4,321	33.6
1966	8,646	1,707	19.7	2,037	555	27.2	12,932	4,132	32.0
1967	9,332	1,781	19.1	2,178	575	26.4	13,739	4,267	31.1
1968	8,876	1,546	17.4	2,262	604	26.7	13,792	4,033	29.2
1969	8,854	1,629	18.4	2,204	584	26.5	13,611	3,846	28.3
1970	8,955	1,720	19.2	2,186	516	23.6	13,406	3,890	29.0
1971	8,860	1,543	17.4	2,259	479	21.2	12,865	3,694	28.7
1972	9,266	1,578	17.0	2,724	613	22.5	12,366	3,548	28.7
1973	9,497	1,574	16.6	2,764	625	22.6	11,907	3,277	27.5
1974	10,227	1,794	17.5	3,112	662	21.3	11,967	3,265	27.3
1975	10,688	1,968	18.4	2,787	571	20.5	12,457	3,447	27.7
1976	10,997	1,927	17.5	2,904	587	20.2	12,736	3,530	27.7
1977	11,204	1,726	15.4	2,801	640	22.8	13,430	3,573	26.6
1978	11,660	1,825	15.7	3,115	707	22.7	14,434	3,579	24.8
1979	10,562	1,376	13.0	3,040	572	18.8	14,297	3,445	24.1
1980	10,185	1,609	15.8	2,993	603	20.1	13,527	3,426	25.3
1981	11,629	1,858	16.0	3,260	587	18.0	13,686	3,586	26.2
1982	13,247	1,784	13.5	3,164	575	18.2	15,346	3,774	24.6
1983	11,735	1,286	11.0	3,021	528	17.5	14,060	3,758	26.7
1984	12,742	1,555	12.2	3,107	543	17.5	14,190	3,801	26.8
1985	13,760	1,361	9.9	3,124	549	17.6	14,841	3,714	25.0
1986	11,778	1,045	8.9	2,989	477	16.0	13,272	3,497	26.3
1987	12,373	1,072	8.7	3,025	430	14.2	12,542	3,274	26.1

Appendix table 8--Ratio of world tobacco trade and production, stocks and consumption, and U.S. exports and foreign consumption, 1960-87

Calendar year	World trade to world production	World stocks to world consumption	U.S. exports to foreign consumption
	<u>Percent</u>		
1960	25	155	8
1961	28	142	8
1962	25	138	8
1963	23	142	8
1964	25	158	8
1965	25	154	7
1966	24	150	8
1967	23	161	8
1968	26	157	8
1969	25	151	8
1970	24	146	7
1971	26	136	6
1972	29	129	8
1973	29	120	7
1974	30	119	8
1975	26	120	7
1976	26	120	6
1977	25	129	7
1978	27	137	8
1979	29	134	6
1980	29	122	6
1981	28	119	6
1982	24	129	6
1983	26	119	5
1984	24	112	5
1985	23	114	5
1986	25	99	4
1987	24	95	4

Appendix table 9--Tobacco production and exports, major foreign exporters and total foreign , 1960-87

Calendar year	Brazil		Zimbabwe		Malawi		South Korea		Total foreign	
	Production	Exports	Production	Exports	Production	Exports	Production	Exports	Production	Exports
<u>Million pounds (dry weight)</u>										
1960	293	70	177	154	29	29	59	1	5,706	1,337
1961	306	108	187	170	23	26	65	0	5,114	1,442
1962	276	92	184	176	31	27	73	0	5,681	1,498
1963	373	98	155	159	39	35	60	1	6,483	1,497
1964	274	133	258	224	23	29	102	1	7,213	1,756
1965	388	122	204	267	45	39	116	3	6,995	1,707
1966	271	103	213	64	37	46	149	22	6,939	1,483
1967	289	100	159	68	36	41	137	24	7,552	1,604
1968	303	85	102	89	29	41	144	34	7,330	1,658
1969	376	106	109	81	24	38	123	40	7,226	1,619
1970	384	120	103	104	44	44	117	41	7,235	1,670
1971	391	134	123	121	52	54	128	31	7,318	1,780
1972	381	142	124	154	61	60	234	28	7,686	2,111
1973	361	143	139	188	61	66	223	49	7,924	2,139
1974	450	205	142	174	54	68	187	91	8,433	2,450
1975	570	223	163	125	69	68	211	98	8,720	2,215
1976	551	235	211	168	73	75	229	93	9,071	2,317
1977	615	238	164	145	102	83	296	107	9,477	2,161
1978	655	241	164	167	101	92	275	109	9,835	2,405
1979	772	309	221	134	127	126	229	74	9,186	2,468
1980	683	316	240	218	110	141	190	74	8,577	2,390
1981	606	327	133	257	101	90	147	83	9,830	2,679
1982	708	366	180	178	117	100	173	69	11,649	2,639
1983	666	390	191	205	129	99	141	72	10,450	2,493
1984	716	412	245	191	130	127	139	43	11,188	2,564
1985	723	441	211	217	119	135	113	51	12,401	2,575
1986	690	388	204	198	113	127	123	54	10,732	2,511
1987	730	386	254	219	141	139	112	49	11,303	2,595

Appendix table 10--Provisions of tobacco programs, 1961-89

Tobacco type/ provision	1961	1962	1963	1964	1965	1966
Flue-cured:						
Parity (c/lb)	64.7	69.1	72.7	74.1	77.3	81.0
Loan rate (c/lb)	55.5	56.1	56.6	57.2	57.7	58.8
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (mil lbs) 1/	Yes	Yes	Yes	Yes	2/ 1,126.0	1,126.0
Effective marketing quota (mil lbs)	--	--	--	--	1,124.4	1,199.0
National allotment (acres)	714,203	745,238	708,489	638,240	606,648	606,665
Burley:						
Parity (c/lb)	68.7	73.4	77.0	78.8	82.8	86.3
Loan rate (c/lb)	57.2	57.8	58.3	58.9	59.5	60.6
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (mil lbs) 1/	536.0	571.8	599.4	579.2	Yes	Yes
Effective marketing quota (mil lbs)	--	--	--	--	--	--
National allotment (acres)	328,600	348,572	348,910	315,698	286,601	249,944
Virginia fire-cured (type 21):						
Parity (c/lb)	43.6	45.6	47.5	48.1	50.8	53.3
Loan rate (c/lb)	38.8	39.2	39.6	40.0	40.4	41.1
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	11,957.0	Yes	Yes	11,168.0	11,240.0	Yes
National allotment (acres)	9,131	9,126	9,037	9,145	9,244	9,354
Kentucky-Tennessee fire-cured (types 22-23):						
Parity (c/lb)	45.4	47.1	48.8	50.0	51.7	54.3
Loan rate (c/lb)	38.8	39.2	39.6	40.0	40.4	41.1
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	48,400.0	Yes	Yes	45,800.0	42,800.0	Yes
National allotment (acres)	32,719	32,931	32,843	29,494	26,489	26,445
Maryland (type 32):						
Parity (c/lb)	60.2	64.8	69.3	71.0	71.5	77.0
Loan rate (c/lb)	50.8	51.3	51.8	52.3	52.8	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	3/ No
National allotment (acres)	49,473	49,746	48,220	47,298	39,396	--
Kentucky-Tennessee dark air-cured (types 35-36):						
Parity (c/lb)	40.3	42.2	44.4	45.9	47.6	50.0
Loan rate (c/lb)	34.5	34.8	35.2	35.5	35.9	36.6
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	22,700.0	Yes	Yes	21,800.0	20,400.0	Yes
National allotment (acres)	15,783	15,842	15,761	14,132	12,687	12,694
Virginia sun-cured (type 37):						
Parity (c/lb)	39.7	42.2	44.4	44.7	47.5	50.6
Loan rate (c/lb)	34.5	34.8	35.2	35.5	35.9	36.6
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	4,684.0	Yes	Yes	3,437.0	3,150.0	Yes
National allotment (acres)	4,350	4,190	3,757	3,472	3,224	2,990
Cigar binder (types 51-52):						
Parity (c/lb)	46.3	49.0	51.9	53.4	57.0	60.0
Loan rate (c/lb)	39.6	40.0	40.4	40.8	41.2	42.0
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	20,000.0	Yes	14,800.0	12,600.0	11,100.0	9,000.0
National allotment (acres)	10,645	8,901	7,988	6,684	5,551	4,425
Cigar binder and filler (types 42-44 and 53-55):						
Parity (c/lb)	34.0	35.5	37.3	38.1	39.9	41.9
Loan rate (c/lb)	28.6	28.9	29.2	29.5	29.7	30.3
No-net-cost assessment--	--	--	--	--	--	--
Tobacco types 42-44 (c/lb)	--	--	--	--	--	--
Tobacco type 54 (c/lb)	--	--	--	--	--	--
Tobacco type 55 (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	41,300.0	Yes	32,300.0	32,300.0	33,500.0	34,600.0
National allotment (acres)	25,376	20,963	20,698	20,324	20,263	20,184
Puerto Rico filler (type 46):						
Parity (c/lb)	35.2	37.3	39.7	40.9	43.6	46.0
Loan rate (c/lb)	29.7	30.0	30.3	30.6	30.9	31.5
No-net-cost assessment (c/lb)	--	--	--	--	--	--

See footnotes at end of table.

Continued--

Appendix table 10--Provisions of tobacco programs, 1961-89--Continued

Tobacco type/ provision	1967	1968	1969	1970	1971	1972 6/
Flue-cured:						
Parity (c/lb)	84.2	87.0	92.0	94.5	100.7	106.0
Loan rate (c/lb)	59.9	61.6	63.8	66.6	69.4	72.7
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (mil lbs) 1/	1,126.3	1,127.5	1,127.4	1,071.5	1,071.6	1,071.2
Effective marketing quota (mil lbs)	1,202.4	1,067.9	1,187.0	1,190.8	1,069.9	1,056.7
National allotment (acres)	607,316	607,786	607,869	577,723	572,100	577,994
Burley:						
Parity (c/lb)	87.7	90.6	96.1	99.7	104.0	109.0
Loan rate (c/lb)	61.8	63.5	65.8	68.6	71.5	74.9
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (mil lbs) 1/	610.0	Yes	Yes	Yes	5/ 555.1	531.5
Effective marketing quota (mil lbs)	--	--	--	--	553.0	611.5
National allotment (acres)	249,926	249,966	249,761	230,947	--	--
Virginia fire-cured (type 21):						
Parity (c/lb)	54.4	55.5	59.4	63.5	66.7	71.7
Loan rate (c/lb)	41.9	43.1	44.6	46.6	48.5	50.8
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	9,381	9,392	10,302	11,672	12,612	12,203
Kentucky-Tennessee fire-cured (types 22-23):						
Parity (c/lb)	55.7	58.0	62.6	65.8	68.6	74.1
Loan rate (c/lb)	41.9	43.1	44.6	46.6	48.5	50.8
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	26,654	26,725	26,995	27,144	27,298	30,033
Maryland (type 32):						
Parity (c/lb)	79.8	80.6	86.7	90.0	94.6	99.9
Loan rate (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	3/ No	3/ No	3/ No	3/ No	3/ No	3/ No
National allotment (acres)	--	--	--	--	--	--
Kentucky-Tennessee dark air-cured (types 35-36):						
Parity (c/lb)	50.7	52.3	56.0	58.0	61.0	64.5
Loan rate (c/lb)	37.3	38.3	39.7	41.4	43.1	45.2
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	12,668	12,626	12,607	11,373	11,404	11,312
Virginia sun-cured (type 37):						
Parity (c/lb)	48.2	54.5	59.5	63.5	67.8	72.4
Loan rate (c/lb)	37.3	38.3	39.7	41.4	43.1	45.2
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	2,824	2,662	2,549	2,357	2,218	2,100
Cigar binder (types 51-52):						
Parity (c/lb)	62.2	65.9	72.0	75.8	80.7	87.3
Loan rate (c/lb)	42.8	44.0	45.5	47.5	49.5	51.9
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes 4/	Suspended 4/	Suspended 4/	Suspended
National allotment (acres)	4,320	4,202	5,954	6,467	5,987	6,663
Cigar binder and filler (types 42-44 and 53-55):						
Parity (c/lb)	43.0	44.1	46.1	48.5	53.2	59.0
Loan rate (c/lb)	30.9	31.7	32.9	34.3	35.8	37.5
No-net-cost assessment--	--	--	--	--	--	--
Tobacco types 42-44 (c/lb)	--	--	--	--	--	--
Tobacco type 54 (c/lb)	--	--	--	--	--	--
Tobacco type 55 (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	19,705	19,367	18,855	18,990	18,478	18,256
Puerto Rico filler (type 46):						
Parity (c/lb)	48.0	49.5	53.6	57.2	61.4	66.5
Loan rate (c/lb)	32.1	33.0	34.2	35.6	37.1	38.9
No-net-cost assessment (c/lb)	--	--	--	--	--	--

See footnotes at end of table.

Continued--

Appendix table 10--Provisions of tobacco programs, 1961-89--Continued

Tobacco type/ provision	1973 6/	1974 6/	1975 7/	1976 7/	1977 7/	1978 7/
Flue-cured:						
Parity (c/lb)	122.0	138.0	150.0	154.0	161.0	175.0
Loan rate (c/lb)	76.6	83.3	93.2	106.0	113.8	121.0
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (mil lbs) 1/	1,178.7	1,296.6	1,491.4	1,268.1	1,116.5	1,117.2
Effective marketing quota (mil lbs)	1,205.6	1,337.1	1,572.3	1,409.1	1,197.3	1,181.5
National allotment (acres)	635,922	699,514	804,746	683,783	601,687	641,000
Burley:						
Parity (c/lb)	125.0	142.0	155.0	160.0	167.0	180.0
Loan rate (c/lb)	78.9	85.8	96.1	109.3	117.3	124.7
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (mil lbs) 1/	559.7	606.5	669.5	634.8	636.2	614.2
Effective marketing quota (mil lbs)	573.6	706.8	750.4	726.4	683.4	667.8
National allotment (acres)	--	--	--	--	--	--
Virginia fire-cured (type 21):						
Parity (c/lb)	84.0	98.4	107.8	116.5	129.5	144.2
Loan rate (c/lb)	53.5	58.2	65.2	74.1	79.5	84.6
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	11,302	10,385	11,409	11,230	11,174	11,080
Kentucky-Tennessee fire-cured (types 22-23):						
Parity (c/lb)	85.8	99.6	112.0	122.0	139.0	162.0
Loan rate (c/lb)	53.5	58.2	65.2	74.1	79.5	84.6
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	29,875	29,609	33,072	32,731	32,733	32,643
Maryland (type 32):						
Parity (c/lb)	114.0	129.0	141.0	146.0	153.0	170.0
Loan rate (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	3/ No	3/ No	3/ No	3/ No	3/ No	3/ No
National allotment (acres)	--	--	--	--	--	--
Kentucky-Tennessee dark air-cured (types 35-36):						
Parity (c/lb)	75.0	85.8	95.2	104.0	117.0	135.0
Loan rate (c/lb)	47.6	51.8	58.0	65.9	70.7	75.2
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	11,147	11,093	12,025	11,970	13,218	13,267
Virginia sun-cured (type 37):						
Parity (c/lb)	83.7	97.9	108.0	116.0	125.0	140.0
Loan rate (c/lb)	47.6	51.8	58.0	65.9	70.7	75.2
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	1,860	1,630	1,700	1,626	1,576	1,493
Cigar binder (types 51-52):						
Parity (c/lb)	100.9	114.0	122.0	130.0	137.0	151.0
Loan rate (c/lb)	54.6	59.4	66.5	75.6	81.2	86.3
No-net-cost assessment (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	4/ Suspended	4/ Suspended	4/ Suspended	4/ Suspended	4/ Suspended	4/ Suspended
National allotment (acres)	5,851	5,159	4,790	4,799	4,833	4,813
Cigar binder and filler (types 42-44 and 53-55):						
Parity (c/lb)	70.2	81.3	89.4	96.3	102.3	117.3
Loan rate (c/lb)	39.5	42.9	48.0	54.6	58.6	62.3
No-net-cost assessment--						
Tobacco types 42-44 (c/lb)	--	--	--	--	--	--
Tobacco type 54 (c/lb)	--	--	--	--	--	--
Tobacco type 55 (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	18,055	17,985	19,620	19,491	19,518	19,376
Puerto Rico filler (type 46):						
Parity (c/lb)	77.2	87.8	92.7	97.2	102.1	111.0
Loan rate (c/lb)	41.0	44.6	49.9	56.7	60.9	64.7
No-net-cost assessment (c/lb)	--	--	--	--	--	--

See footnotes at end of table.

Continued--

Appendix table 10--Provisions of tobacco programs, 1961-89--Continued

Tobacco type/ provision	1979 7/	1980 7/	1981 7/	1982 7/ 8/	1983 7/	1984 9/
Flue-cured:						
Parity (c/lb)	201.0	224.0	242.0	253.0	266.0	283.0
Loan rate (c/lb)	129.3	141.5	158.7	169.9	169.9	169.9
No-net-cost assessment (c/lb)	--	--	--	3.0	7.0	7.0
National marketing quota (mil lbs) 1/	1,094.9	1,094.4	1,012.9	1,013.0	910.5	804.3
Effective marketing quota (mil lbs)	1,068.5	1,186.5	1,111.4	976.8	886.7	831.7
National allotment (acres)	590,614	546,386	546,386	546,386	457,516	404,726
Burley:						
Parity (c/lb)	205.0	229.0	252.0	266.0	278.0	298.0
Loan rate (c/lb)	133.3	145.9	163.6	175.1	175.1	175.1
No-net-cost assessment (c/lb)	--	--	--	1.0	5.0	9.0
National marketing quota (mil lbs) 1/	614.2	614.4	660.1	680.3	646.6	581.8
Effective marketing quota (mil lbs)	647.8	768.9	841.9	777.8	641.0	697.0
National allotment (acres)	--	--	--	--	--	--
Virginia fire-cured (type 21):						
Parity (c/lb)	164.1	182.3	200.5	209.3	215.5	227.3
Loan rate (c/lb)	90.3	98.9	111.0	118.8	118.8	118.8
No-net-cost assessment (c/lb)	--	--	--	2	2	2
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	9,819	9,729	9,576	9,430	9,342	8,751
Kentucky-Tennessee fire-cured (types 22-23):						
Parity (c/lb)	187.0	209.0	224.0	237.0	250.0	263.0
Loan rate (c/lb)	90.3	98.9	111.0	123.0	123.0	123.0
No-net-cost assessment (c/lb)	--	--	--	1	2	2
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	27,771	27,910	26,345	26,353	22,466	24,737
Maryland (type 32):						
Parity (c/lb)	193.0	208.0	226.0	241.0	245.0	258.0
Loan rate (c/lb)	--	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	3/ No	3/ No	3/ No	3/ No	3/ No	3/ No
National allotment (acres)	--	--	--	--	--	--
Kentucky-Tennessee dark air-cured (types 35-36):						
Parity (c/lb)	157.0	177.0	197.0	208.0	219.0	238.0
Loan rate (c/lb)	80.4	88.0	98.7	105.7	105.7	105.7
No-net-cost assessment (c/lb)	--	--	--	1	3	3
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	13,345	13,363	13,371	11,986	9,679	9,637
Virginia sun-cured (type 37):						
Parity (c/lb)	157.0	170.0	189.0	199.0	204.0	217.0
Loan rate (c/lb)	80.4	88.0	98.7	109.4	109.4	109.4
No-net-cost assessment (c/lb)	--	--	--	1	2	2
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	1,436	1,377	1,335	1,320	1,263	1,227
Cigar binder (types 51-52):						
Parity (c/lb)	179.0	204.0	234.0	255.0	271.0	288.0
Loan rate (c/lb)	92.3	101.0	113.3	121.2	121.2	--
No-net-cost assessment (c/lb)	--	--	--	3	3	--
National marketing quota (1,000 lbs) 1/	4/ Suspended	Yes	--	--	--	No
National allotment (acres)	--	3,679	3,675	3,223	2,405	1,974
Cigar binder and filler (types 42-44 and 53-55):						
Parity (c/lb)	137.5	159.8	172.0	180.9	186.4	193.3
Loan rate (c/lb)	66.6	72.9	81.8	90.7	90.7	90.7
No-net-cost assessment--						
Tobacco types 42-44 (c/lb)	--	--	--	2	4	8
Tobacco type 54 (c/lb)	--	--	--	2	2	2
Tobacco type 55 (c/lb)	--	--	--	2	4	5
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	19,341	19,291	19,048	15,194	12,879	11,593
Puerto Rico filler (type 46):						
Parity (c/lb)	130.0	144.0	153.0	158.0	165.0	175.0
Loan rate (c/lb)	69.2	75.7	84.9	90.9	90.9	74.0
No-net-cost assessment (c/lb)	--	--	--	13	52	52

See footnotes at end of table.

Continued--

Appendix table 10--Provisions of tobacco programs, 1961-89--Continued

Tobacco type/ provision	1985 9/	1986 9/	1987 9/	1988 9/	1989 9/
Flue-cured:					
Parity (c/lb)	288.0	289.0	295.0	308.0	--
Loan rate (c/lb)	169.9	143.8	143.5	144.2	146.8
No-net-cost assessment (c/lb)	25.0	11/ 2.5	13/ 2.0	13/ 1.0	13/ 1.0
National marketing quota (mil lbs) 1/	775.0	10/ 728.5	10/ 707.0	10/ 755.0	10/ 890.5
Effective marketing quota (mil lbs)	758.0	699.4	740.0	810.2	903.6
National allotment (acres)	389,643	366,264	355,455	379,588	426,485
Burley:					
Parity (c/lb)	299.0	297.0	302.0	314.0	--
Loan rate (c/lb)	148.8	148.8	148.8	150.0	153.2
No-net-cost assessment (c/lb)	4.0	12/ 2.75	13/ 2.0	13/ 0.8	13/ 0.83
National marketing quota (mil lbs) 1/	524.4	10/ 493.2	10/ 463.9	10/ 473.4	10/ 587.6
Effective marketing quota (mil lbs)	541.7	488.2	524.8	559.4	660.7
National allotment (acres)	--	--	--	--	--
Virginia fire-cured (type 21):					
Parity (c/lb)	223.9	221.2	221.2	231.0	--
Loan rate (c/lb)	118.8	120.0	119.6	117.1	119.1
No-net-cost assessment (c/lb)	5	1	1	1	2
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	7,782	7,621	6,546	5,588	4,838
Kentucky-Tennessee fire-cured (types 22-23):					
Parity (c/lb)	276.0	278.0	273.0	282.0	--
Loan rate (c/lb)	123.0	124.2	123.8	121.3	122.6
No-net-cost assessment (c/lb)	2	0	2	3	2
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	22,328	19,678	11,874	11,890	14,319
Maryland (type 32):					
Parity (c/lb)	247.0	248.0	248.0	255.0	--
Loan rate (c/lb)	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	3/ No	3/ No	3/ No	3/ No	3/ No
National allotment (acres)	--	--	--	--	--
Kentucky-Tennessee dark air-cured (types 35-36):					
Parity (c/lb)	237.0	235.0	233.0	238.0	--
Loan rate (c/lb)	104.7	105.8	105.4	103.2	104.4
No-net-cost assessment (c/lb)	5	0	7	8	6
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	8,195	6,166	4,035	4,006	4,392
Virginia sun-cured (type 37):					
Parity (c/lb)	212.0	206.0	207.0	210.0	--
Loan rate (c/lb)	109.4	106.0	105.6	103.4	105.2
No-net-cost assessment (c/lb)	3	1	1	1	2
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	1,076	1,030	935	595	401
Cigar binder (types 51-52):					
Parity (c/lb)	293.0	297.0	311.0	326.0	--
Loan rate (c/lb)	90.7	--	--	--	--
No-net-cost assessment (c/lb)	--	--	--	--	--
National marketing quota (1,000 lbs) 1/	No	No	No	No	No
National allotment (acres)	2,028	--	--	--	--
Cigar binder and filler (types 42-44 and 53-55):					
Parity (c/lb)	195.8	194.4	197.0	201.0	--
Loan rate (c/lb)	90.7	91.6	91.4	89.5	90.9
No-net-cost assessment--					
Tobacco types 42-44 (c/lb)	10	18	35	44	44
Tobacco type 54 (c/lb)	2	0	0	0	0
Tobacco type 55 (c/lb)	3	15	15	0	0
National marketing quota (1,000 lbs) 1/	Yes	Yes	Yes	Yes	Yes
National allotment (acres)	11,554	9,185	8,526	8,296	11,095
Puerto Rico filler (type 46):					
Parity (c/lb)	178.0	184.0	192.0	200.0	--
Loan rate (c/lb)	74.0	75.0	74.7	73.1	--
No-net-cost assessment (c/lb)	52	52	53	60	--

See footnotes following.

Footnotes for appendix table 10--Provisions of tobacco programs, 1961-89

--- = Not applicable.

1/ A national marketing quota program for any kind of tobacco operates through acreage allotments and/or poundage quotas to individual farms. By complying with farm acreage allotments and quotas, farmers may market prescribed amounts of their tobacco free of penalty and the crop is eligible for price support. If the growers exceed their acreage allotment or marketing quota, their crops, when marketed, are subject to a marketing quota penalty of 75 percent of the average market price of the previous year and are not eligible for price support. 2/ Acreage and poundage marketing quota program is in effect for flue-cured tobacco starting in 1965. 3/ Quotas were disapproved by growers of Maryland tobacco; therefore, price support is not available for that type of tobacco. 4/ Legislation authorizes the Secretary to increase or terminate farm marketing quotas whenever the Secretary finds that the operation of quotas in effect will cause the amount of any kind of tobacco which is free of marketing restrictions to be less than the normal supply. All production is eligible for price support. 5/ As of 1971, poundage quotas for burley tobacco are used in lieu of acreage allotments. 6/ To be eligible, producers are required to certify that they have not used restricted pesticides (DDT and TDE) on their crop. 7/ To be eligible, producers are required to certify that they have not used restricted pesticides (DDT, TDE, toxaphene, and endrin) on their crop. 8/ The intent of the No-Net-Cost Act of 1982 was to ensure the operation of the tobacco price support program at no net cost to taxpayers, except for administrative costs. As a condition of price support eligibility, tobacco farmers must agree to contribute to a no-net-cost tobacco fund or account set up by the association. 9/ Producers are required to certify that pesticides used on price support tobacco have been approved by the Environmental Protection Agency and that these products have been used in accordance with the label directions. 10/ Beginning with the 1986 crop, marketings in excess of 103 percent of the quota are subject to penalty and are ineligible for loan. 11/ In addition, 1.5 cents applies for buyers. 12/ In addition, 1.25 cents applies for buyers. 13/ For both producers and buyers, divided equally.

Source: Green, Robert C. A Database for Support Programs of Program Crops, 1960-90. Staff report (forthcoming), U.S. Dept. of Agr., Econ. Res. Serv.

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