

# **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/ World 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.