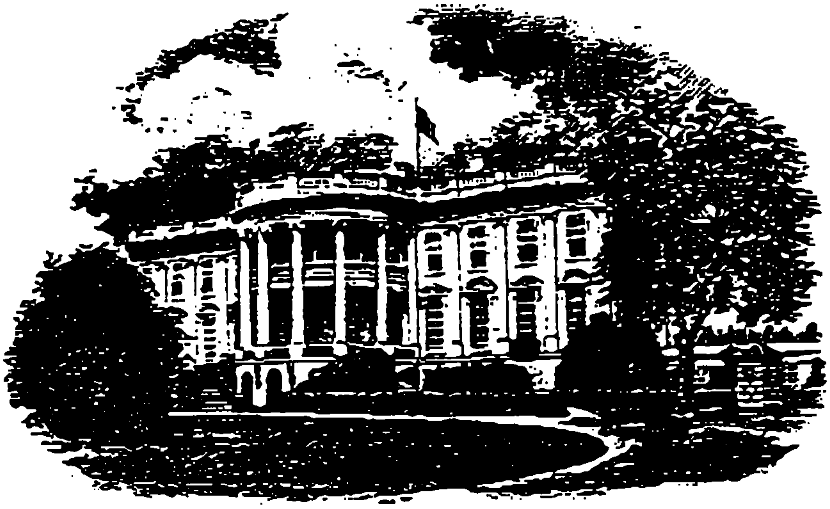
Office of Management and Budget

Tobacco farmers



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Compensating Farmers for the Tobacco Settlement

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Summary

Proposals to implement a tobacco settlement are likely to have negative economic consequences for tobacco growers and tobacco-dependent communities. This is because the settlement is designed to reduce cigarette consumption by Americans, particularly young Americans, and thereby decrease domestic demand for U.S.-grown leaf tobacco. This, in turn, likely will affect the value of tobacco marketing quotas held by farmers, and thereby the value of their land and holdings and their ability to obtain credit or contribute to local economies. For these reasons, there appears to be growing support for some kind of compensation to farmers as part of the settlement package legislation. On the other hand, a consistent downward trend in domestic cigarette consumption, which some contend is likely to continue even without the tobacco settlement, argues against compensation.

Compensation is not just an economic issue. Settlement proponents undoubtedly would like the support of Members of Congress from tobacco states and communities. Therefore, how much, if any, of the revenue derived from the tobacco settlement should go for compensation to growers is a political issue, as well. One obvious approach would be to estimate the likely losses to farmers under the various provisions and provide compensation on that basis. But, it is difficult to precisely estimate the potential economic consequences of the tobacco settlement for growers.

Higher Prices, Consumption, and Farm Impact

The tobacco settlement bills contain several measures designed to decrease consumption of tobacco products in the United States. Among the most prominent of these are proposals for substantial increases in the price of tobacco products (either through manufacturer payments or higher excise taxes), which are designed to finance other anti-smoking efforts and health care provisions in the proposal. Price increases have a direct impact on consumption, and consequently, can be used to estimate changes in the domestic demand for U.S.-grown tobacco, its production, and farm income. Other

provisions in the settlement designed to reduce and prevent consumption (e.g., age and advertising restrictions) are less easy to quantify.

Analysis of consumer price behavior has been done to determine a price-elasticity of demand for cigarettes in order to predict likely consumption declines over the short term. For a pack of cigarettes, analysts estimate each 1% increase in price causes a decline of four-tenths of 1 percent in purchases (or, an elasticity of demand of minus 0.4).[1] This consumption decrease must be adjusted to determine the effect on farmers because U.S. cigarette manufacturers use both domestic and imported tobacco, and because a sizable quantity (33%) of U.S.-manufactured cigarettes is exported, and the export market is a large outlet for unmanufactured leaf tobacco (35%). Foreign sales for cigarettes and leaf tobacco may not be affected at all by the settlement, except that export marketing efforts could intensify.

According to numerous observers, the original tobacco settlement proposal of June 20, 1997, specifying manufacturer payments amounting to $368.5 billion over the next 25 years, could cause cigarette prices to rise by about $0.60 per pack. Using $2.00 per pack as the average retail price, a $0.60 price hike amounts to a 30% increase. Some policy officials advocate a price hike of $1.50 in order to achieve a greater consumption decline among teenagers and children. If the price of cigarettes goes up by $1.50 per pack, because of higher excise taxes or some other mechanism, this would amount to a 75% price increase. Using the demand elasticity value of -0.4, a 30% price increase could reduce overall consumption by 12% (0.4*30%=12%), and a 75% price increase could reduce consumption by 30% (0.4*75%=30%).

If cigarette consumption declines by 12% or even 30%, what would be the impact on domestic tobacco production? In 1996, about 58% of the tobacco in U.S.-manufactured cigarettes was domestic leaf and 42% was foreign leaf. Furthermore, nearly 65% of the U.S.-manufactured cigarettes were consumed in the United States and the remainder exported. Since, there are no provisions in the settlement that directly impact on cigarette or leaf exports, and excise taxes are not applied to exports, the export market is held constant for purposes of this analysis.[2] Therefore, a 1% reduction in U.S. cigarette consumption translates into a 0.38% reduction in the use of domestic leaf (1%*58%*65%=0.38%). So, if consumption declined 12%, other things being equal, the use of domestic leaf tobacco could be expected to decline by about 4.5% (12%*0.38%). Likewise, if consumption declined 30%, the use of domestic tobacco could decline by about 11.4% (30%*0.38%).

According to data from the U.S. Department of Agriculture (USDA), tobacco production has averaged about 1.526 billion pounds over the five-year period between 1993 and 1997. A 4.5% decline in output from the 5-year average, due to a $0.60 price

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[1] For a more thorough examination of how the settlement might affect cigarette prices and how a price increase could impact consumption, see CRS Report 97-995 E, *The Proposed Tobacco Settlement: Effects on Prices, Smoking Behavior, and Income Distribution.*

[2] According to USDA data, cigarette exports have shown a strong upward trend, increasing from 100 billion pieces in 1988 to an estimated 240 billion pieces in 1997. Tobacco leaf exports have averaged 582 million pounds over the past 10 years, ranging 10% above and below this average, but showing a relatively flat trend.

increase, would amount to nearly 70 million pounds. A 11.4% decline, due to a $1.50 price increase, would amount to nearly 175 million pounds.

Production cutbacks of this magnitude, while sizable, are not outside the range of recent experiences. From 1981, a recent peak production year, to 1997, farm output of tobacco declined about 20%. For 1998, the basic marketing quotas stipulated under the federal tobacco support program have been reduced by 16.5% for flue-cured tobacco and 9% for burley tobacco. A tobacco marketing quota is the quantity of tobacco a farm is allowed to market each year. Through marketing quotas, U.S. production is constrained and prices are thereby held higher than would be the case if farmers were free to harvest and sell as much as they wanted.

Calculating Farmer Compensation

Tobacco prices have been supported and stabilized by the federal government's commodity support program since the 1930s. The tobacco program operates through a combination of marketing quotas, which limit supplies, and no-net-cost tobacco loans, which help to balance marketings with demand.[3] The high stable prices created by the tobacco program raise farm incomes above what they would be otherwise. As it might be expected, the economic benefits of the tobacco price support program have been capitalized into land values and marketing quota rents. The holders of the 336,000 quotas likely will realize a loss in net worth under a tobacco settlement. A rough estimate is that 63% of the quotas are held by absentee landlords whose rental income could decline. Likewise, under the assumptions made here, all of the roughly 124,000 tobacco farm operators (owners and lessees) would be expected to suffer a decline in sales revenues.

How much of a decrease in net worth or rent would likely result from a $0.60 or $1.50 per pack cigarette price increase? In Kentucky, a sizable proportion of the tobacco quotas are leased and transferred to another farm for a production season. Survey data indicate an average lease-and-transfer price of $.42 per pound for burley marketing quota over the past 5 years.[4] One way to estimate the loss to farm owners from declining quota

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[3]A more complete explanation of the federal tobacco support program is available in CRS Report 95-129 ENR, *Tobacco Price Support: An Overview of the Program*. Tobacco marketing quotas are assigned to farms that have a history of tobacco production. The owners of these farms are characterized as holders of quota in this report.

[4]This average is calculated from survey data collected and published annually by William Snell, Department of Agricultural Economics, University of Kentucky. Data are not available on quota sales prices in North Carolina, but experts in North Carolina and the U.S. Department of Agriculture agree that $1.87 may not be far off. The holders of burley tobacco marketing quota are allowed to lease the quota to other tobacco growers, who then transfer the quota and produce on their own land. Consequently, there is an active lease-and-transfer market for burley quotas. Unlike burley, flue-cured marketing quotas cannot be leased and transferred. Rather, farms with flue-cured quota are leased and the program participation records reconstituted so that production can be located anywhere on the combined properties. While there is an active tobacco farm-lease market in North Carolina, lease rate data are not collected. However, experts believe that the $0.42 per pound average for burley in Kentucky is a reasonable estimate for average flue-cured lease rates in North Carolina. Two simultaneous but opposing circumstances are pushing sale prices

(continued...)

is to calculate the present value of foregone future quota rent. Because a dollar today is worth more than a dollar next year, future earnings must be discounted. The discount rate chosen for the analysis should adjust for inflation, account for risk, and consider whether the returns are pre- or post-tax. If it is assumed that interest rates will continue at current levels and tobacco quotas will earn annual rental income long into the future of $0.42 per pound, but because of a risk that tobacco support might be eliminated or quota levels might decline these expected earnings could be discounted by 10% or higher. Assuming a 10% discount rate over 25 years, the present value is $3.81 per pound. In contrast, if the future earning potential of tobacco quota is viewed as highly secure, comparable to a U.S. Treasury note or a bank certificate of deposit yielding 5%, then the present value is $5.92 per pound. However, it is not likely that any farm product would approach the T-bill rate — if only due to risks of weather and disease.

If tobacco quota is valued at $3.81 per pound, a decline of 70 million pounds due to a $0.60 per pack price increase means lost quota value of $266.7 million. Likewise if cigarette prices go up $1.50 per pack, the 175 million pound decline in demand means lost quota value of $666.75 million. If tobacco quota is valued at $5.92 per pound, then the losses could amount to $414.4 million or $1.036 billion for cigarette price increases of $0.60 or $1.50 respectively.

Another way to judge the value of tobacco quota is to examine the price at which quota is sold. Again, data from Kentucky indicate the average sale price for burley quota over the past 5 years was $1.87 per pound. It is arguable whether the sale price average of $1.87 per pound represents an accurate measure of quota values, since only about 1% of the burley tobacco quota is sold annually. Certainly, if a pound of burley quota brings in $0.42 in annual rent, it might be expected to sell for a higher price. A financial analyst could conclude that the combination of a sales price of $1.87 with a rental rate of $0.42 per year implies an expected 7-year life for the investment at a discount rate of 10%. In other words, the data imply that there are large short-term rewards from growing tobacco, but a high risk is perceived about the longevity of the income.

If all quota losses from the tobacco settlement are valued at $1.87 per pound, then a 4.5% reduction (70 million pounds) could eliminate about $130 million from the net worth of tobacco quota holders. If tobacco quota is reduced 11.4%, then the net worth of quota holders could be reduced by about $327 million.

The preceding calculations demonstrate a wide range in estimated tobacco quota values and the losses that might be incurred from a tobacco settlement. The result depends upon the discount rate used to determine the present value of future rental income and the anticipated life of the income stream. Furthermore, consumption decreases are based only upon a price elasticity of demand estimate, and do not include other factors that could affect the consumption of tobacco products.

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[4](...continued)
down and lease prices up. First, there is substantial uncertainty about the long-term survival of the tobacco price support program in the face of growing public pressures and regulations against smoking. As such, buyers of tobacco quota are discounting the expected life of this asset. Second, the quota itself has been declining, so farmers with investments in tobacco equipment and facilities have bid-up annual lease prices in an effort to maintain their economies of size.

Community Impacts

Certainly, tobacco farming is an important part of the agricultural economy of the regions where production is concentrated, as the following USDA data show. Flue-cured tobacco production is centered in North Carolina. Burley production is centered in Kentucky. These two states account for 65% of total tobacco production. The surrounding states of Tennessee, Virginia, South Carolina, and Georgia produce 26%. In 1997, some 124,000 tobacco farms harvested 795,000 acres, with a yield averaging 2,069 pounds per acre. This total crop of 1.65 billion pounds could have a farm value of about $3 billion once the seasons marketing receipts are tabulated. In North Carolina, tobacco cash receipts account for nearly 32% of total crop receipts and nearly 14% of total crop and livestock receipts. In Kentucky, tobacco receipts account for nearly 42% of crop receipts and nearly 22% of total crop and livestock receipts.

The significance of tobacco to local economies is summarized in a USDA report titled Tobacco Dollars and Jobs.[5] On the national level, if there were no domestic tobacco consumption, total employment would actually increase because the money now spent on tobacco products would be spent on more labor-dependent items. But direct employment in tobacco farming would decline by 79,000 jobs. The areas most adversely impacted by reduced tobacco production would be the isolated rural communities throughout Kentucky, the Virginia-Tennessee, and Virginia-North Carolina borders, the coastal plain of the Carolinas, Georgia, and northern Florida. In 1992, 311 counties had tobacco sales of more than $1 million. In 43 of these counties, tobacco receipts exceeded 10% of local earnings (with 8 counties in the 20-30% range, and 1 county reaching 55%).

Tobacco quota holders and farm lessees are obviously identifiable as economic losers if their rental incomes and sales revenues decline. But the impact may spread to the entire community if farm and personal consumption expenditures decline. Local property tax revenues might decline due to declining property values. This could then impact on community services. It is beyond the scope of this report to quantify the magnitude of potential community impacts because the outcome depends largely upon how dependent the local economy is on tobacco and what substitute economic activities are possible. Additionally, tobacco leaf and cigarette exports could increase in the future and offset some of the decline in domestic consumption.

Legislative Proposals for Farmer Compensation and Community Assistance

Several bills have been introduced in the 105th Congress that propose to compensate tobacco quota holders, to make transition payments to farm operators who do not own, but are quota lessees, and to provide economic development assistance to tobacco dependent communities. As will be seen by examining the bills, the compensation rates vary but appear to be on the generous side.

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[5]Fred Gale, Tobacco Dollars and Jobs, *Tobacco Situation and Outlook Report*, Economic Research Service, U.S. Department of Agriculture, September 1997, pp37-43.

S. 1310 (Ford) would compensate quota holders at the rate of $4 per pound per year for reductions in quota, up to a lifetime limit of $8 per pound based on the 1994-96 average quota. Quota lessees would be paid $2 per pound per year up to a lifetime limit of $8 on half the average quota. The sponsor estimates these compensation provisions will cost $15.8 billion. Annual economic development grants of $300-350 million would cost $8.3 billion. Additional assistance for displaced industry workers and higher education grants for farm families would put the estimated total cost at $28.5 billion for the 25-year life of the bill. Elements of this proposal are included in S. 1414 (McCain), S. 1530 (Hatch). This bill does not propose to make any substantive changes in the marketing quota and no-net-cost loan provisions of the current support program.

S. 1313 (Lugar) would eliminate the quota program and phase out price support loans, but compensate quota holders at $8 per pound and lessees at $1.20. This is estimated by the sponsor to cost $14.7 billion. Another $300 million would be distributed as community economic development block grants. Total cost is set at $15 billion. In the absence of a tobacco support program, economists believe prices could decline by at least the level of rents created by the program, and then production could increase as U.S. tobacco becomes more price competitive in world markets. There would be adjustment costs associated with such a transition.

S. 1492 (Kennedy) / H.R. 3028 (DeLauro) would offer to buy quota at $4 per pound from holders and lessees. With the support program continuing to function, participants in the buyout would forgo production privileges. With full participation the buyout could cost about $9.2 billion. The bill includes another $3.8 billion for community economic block grants. Total cost of farmer and community transition assistance would be about $13 billion. If not all farmers participated in the buyout, the cost would diminish proportionally. However, there would be the possibility that all farmers would adopt the buyout and simultaneously vote to terminate the tobacco support program. This would enable any or all of the farmers to continue to produce tobacco, but without a quota or loan program.

S. 1582 (Robb) would transfer the administration of the current marketing quota and loan programs from the USDA to a private corporation. Marketing quotas would become annually renewable licenses to market tobacco without any rights of ownership or transferability. Current quota holders would be compensated at the rate of $8 per pound for lost equity and lessees would be given transition payments of $2 per pound. The proposal includes annual community economic development block grants of $250 million. The sponsor estimates the entire proposal will cost $22.8 billion. Eliminating the rental cost of quotas could allow domestic prices to decline to a more globally competitive level. Shifting the redesigned tobacco program to a private corporation might eliminate some of the political and management difficulties associated with the current program.

S. 1638 (Conrad) would set aside $10 billion for tobacco farmer compensation and community assistance over the first five years. However, details on how this money would be distributed are yet to be determined.

DRAFT

EFFECTS OF THE PROPOSED SETTLEMENT ON TOBACCO PRODUCERS

Background

Total U.S. cigarette output was a record 760 billion cigarettes in 1996 (figure 1). Cigarette output rose steadily throughout most of this century and reflected the steady increase in domestic cigarette consumption. Domestic cigarette disappearance peaked at 640 billion cigarettes in 1981 (figure 2). Between 1981 and 1996, domestic cigarette consumption fell by over 150 billion cigarettes. U.S. cigarette output initially reflected this decline, but by the early 1990s output had rebounded reflecting the increase in cigarette exports. In 1996, the United States exported a record 260 billion cigarettes, with the European Union and Japan accounting for over half of the U.S. export market.

Tobacco is produced in 21 states, with 65 percent of the acreage in Kentucky and North Carolina. Several different types and kinds of tobacco are grown, but flue-cured and burley--the primary cigarette tobaccos--account for about 94 percent of total production. Tobacco is usually the sixth largest cash crop, behind corn, soybeans, wheat, hay and cotton. There were an estimated 124,000 farms that ~~grew tobacco in 1992.~~ The average farm grew about 6.7 acres of tobacco.

Cigarettes account for about 90 percent of the tobacco used in the United States. U.S. cigarette manufacturers used an estimated 1.44 billion pounds of tobacco in cigarettes in 1995. Domestic burley accounted for about 27 percent of the tobacco used in cigarettes; domestic flue-cured, 37 percent; Maryland, 1 percent; and imported, the remaining 35 percent. Since the mid-1970s, the shares of both U.S. flue-cured and burley have declined. U.S. tobacco production and marketings have declined as a result (figures 3, 4, and 5).

The decline has been offset by a shift to an increasing share of imported tobacco in U.S. cigarettes (figure 6). U.S. leaf imports for consumption climbed from 413 million pounds in 1990 to more than 1 billion pounds in 1993. The main reason for this surge was the rising popularity in the United States and abroad for low and mid-priced brands. To meet this demand, manufactures imported an increasing amount of lower cost foreign tobacco. In response to surging tobacco imports, Congress enacted a provision in the Omnibus Budget Reconciliation Act of 1993 which required U.S.-manufactured cigarettes to contain 75 percent U.S.-grown tobacco. As part of the Uruguay Round implementing legislation, domestic content provisions were replaced by the establishment of a tariff rate quota for certain imported tobacco, primarily flue-cured and burley. Imports of cigarette leaf tobaccos (excluding Oriental) which exceed predetermined quota are now subject to an import duty of 350 percent ad valorem, although a draw-back provision allows most of the duty to be refunded if the imported leaf is re-exported in the form of manufactured tobacco or cigarettes.

Most U.S. tobacco production has been under a price support and supply control program since the 1930s. Producers are guaranteed higher than market equilibrium prices in exchange for limiting marketings through marketing quotas. Support prices for burly and flue-cured tobacco are set annually based on the previous year's level, adjusted by changes in the 5-year moving

average of prices and in the cost of production index (figure 7). Flue-cured and burley marketing quotas are based on 1) intended purchases by cigarette manufactures, 2) average annual exports for the 3 previous years, and 3) the amount of tobacco needed to attain a specified reserve level. Quota levels have generally trended downward since the mid-1970s, following the decline in marketings (figure 8). Quota levels are up for both flue-cured and burley tobacco in 1997, reflecting increased marketings and reduced stock levels in 1996.

The higher tobacco prices resulting from the program have created values for marketing quota rights. Because rules governing quota transfer are highly restrictive, these values have been capitalized into land values. Currently, quota rents are approximately 50 to 60 cents per pound. A 1991 survey of farms showed that only 7 percent of the flue-cured operators owned the entire tobacco quota they produced, about 21 percent rented all their quota, and the remaining 72 percent owned and rented quota. The percent of burley quota owners who produce all of their quota is typically higher reflecting the more restrictive rules governing burley transfer and leasing.

The "No-Net-Cost Tobacco Program Act of 1982" 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. Further changes in tobacco legislation in 1986 extended the no-net-cost provisions to tobacco purchasers.

Estimated Effects of the Settlement on Cigarette Consumption

The settlement between cigarette manufacturers and the State Attorneys General will likely result in an increase in the retail price of cigarettes on the order of 25 to 50 cents per pack of 20 cigarettes. This price increase stems from the lump-sum and penalty payments which will be made by cigarette manufacturers as part of the agreement. The effects of the penalties will be lessened somewhat by rebates based on declining adult consumption. If the price increases result in lower adult consumption compared with 1996, a rebate is paid. The payment to be made is equal to the ratio of that year's adult consumption to 1996 adult consumption times the penalty. For example, a 100 million decline in cigarette consumption would result in a penalty of $6.7 billion instead of $8.5 billion for the first year.

The following analysis assume a one-time change in price and estimates the effect of the price change on cigarette consumption. The effects of the price change on cigarette consumption are additive with the long-term downward trend in domestic cigarette consumption. Demand effects are based on a short-run elasticity of domestic demand for cigarettes of -0.4.

The total per-pack-equivalent of the $18.5 billion penalty to be paid the first year (1997) is estimated to be about 75-80 cents per pack. It is unlikely, however, that the full penalty will be transmitted to domestic consumers in the form of a price increase. Cigarette manufacturers have

shown in the past they are capable of absorbing relatively large price decreases. For example, in November 1993, wholesale premium cigarette prices declined 30 percent as manufacturers moved to regain market share from discount brands. The penalty payments are tax-deductible expenses, so the cigarette manufacturers will not have to bear the full burden. In addition, manufacturers will receive a partial rebate of the penalty for any decline in adult consumption from the 1996 level (as described above). For the purposes of this analysis, 25 and 50 cent per pack price increases are evaluated.

A 25-cent increase in the price of a pack of cigarettes would raise the price from the current $1.91 per pack to $2.16 per pack, a 13.1 percent increase. A 50-cent increase in the price of cigarettes would raise the retail price to $2.41 cents per pack, an increase of 26.2 percent. The price increases are assumed to be a one-time event, even though it is likely that the increases would be gradually phased in.

Based on a short run elasticity of -0.4, a 13.1-percent gain (25 cents per pack) in the retail price of cigarettes would likely result in a 5.2 percent decline in volume consumed. Likewise, a 50 cent rise in the retail price would lead to a 10.5 percent decline in volume.

Cigarette exports are not restricted by the settlement and will likely continue their upward trend. Cigarette exports could increase above baseline levels, particularly if U.S. manufacturers seek to maintain near-current production levels to efficiently utilize manufacturing capacity. Assuming the agreement would enter into effect in 1997 and prices rose 25 cents per pack, total 1998 disappearance (domestic consumption plus exports) of U.S.-produced cigarettes would decline 2.5 percent--from 731 billion to 713 billion pieces. Under the 50-cent increase scenario, 1998 disappearance would fall 6 percent to 689 billion pieces. By 2006, disappearance of U.S. produced cigarettes would fall to about 600 billion cigarettes with a 25-cent increase, about 9 percent below expected disappearance of 660 billion pieces in the current baseline. With a 50-cent increase, consumption in 2006 is expected to be 580 billion cigarettes, 12 percent less than the level of cigarette disappearance expected in 2006 without the settlement.

Implications for Tobacco Producers

Decreases in cigarette disappearance will primarily affect domestic tobacco production. First, the duty draw-back provisions of the tariff rate quota will mean that any growth in cigarette exports will likely increase imports of lower-cost foreign tobacco. Second, U.S. tobacco leaf exports are not likely to be affected because prices for domestic tobacco will remain above the support price.

A 25-cent increase in cigarette prices is estimated to result in a decline in the use of flue-cured and burley tobacco for domestic cigarette consumption of 10 percent and 8.4 percent, respectively, by 2006. Some of the decline will be offset by the use of domestic tobacco for increased cigarette production for export. Total flue-cured and burley marketings will likely fall by 6.4 percent and

7.5 percent, respectively, by 2006 (figures 9 and 10). A 50-cent increase in cigarette prices is estimated to result in a decline in total flue-cured and burley marketings of 8.1 percent and 9.8 percent, respectively, by 2006.

Because of the relatively high tobacco loan rates, decreases in flue-cured and burley use will likely lead to a small decrease in market prices, at least in the short term. Over the long run, support prices will fall, reflecting the adjustment factors based on the 5-year moving average market price. By 2006, average prices paid to flue-cured and burley growers are expected to drop by about 1 percent assuming a 25 cent increase in cigarette price and by about 3 percent assuming a 50-cent increase (figures 11 and 12). Assuming no changes in the tobacco program, 2006 quota levels for flue-cured tobacco will likely fall below baseline levels by about 6 percent assuming a 25-cent increase in cigarette prices and by 8 percent assuming a 50-cent increase. Quota levels for burley are estimated to fall by 7.5 percent for a 25-cent per pack increase and almost 10 percent for a 50-cent per pack increase.

Figure 1

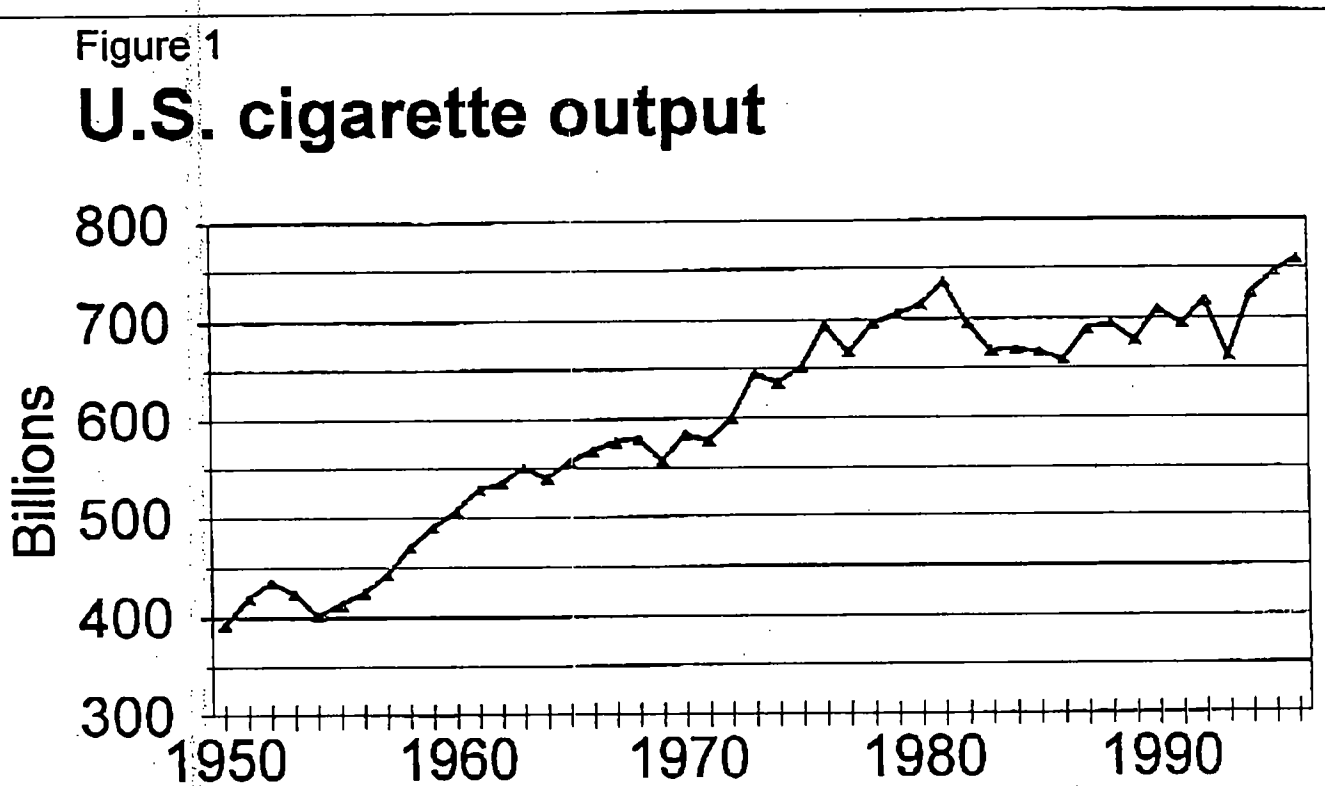

U.S. cigarette output
Billions
800
700
600
500
400
300
1950
1960
1970
1980
1990

Figure 2

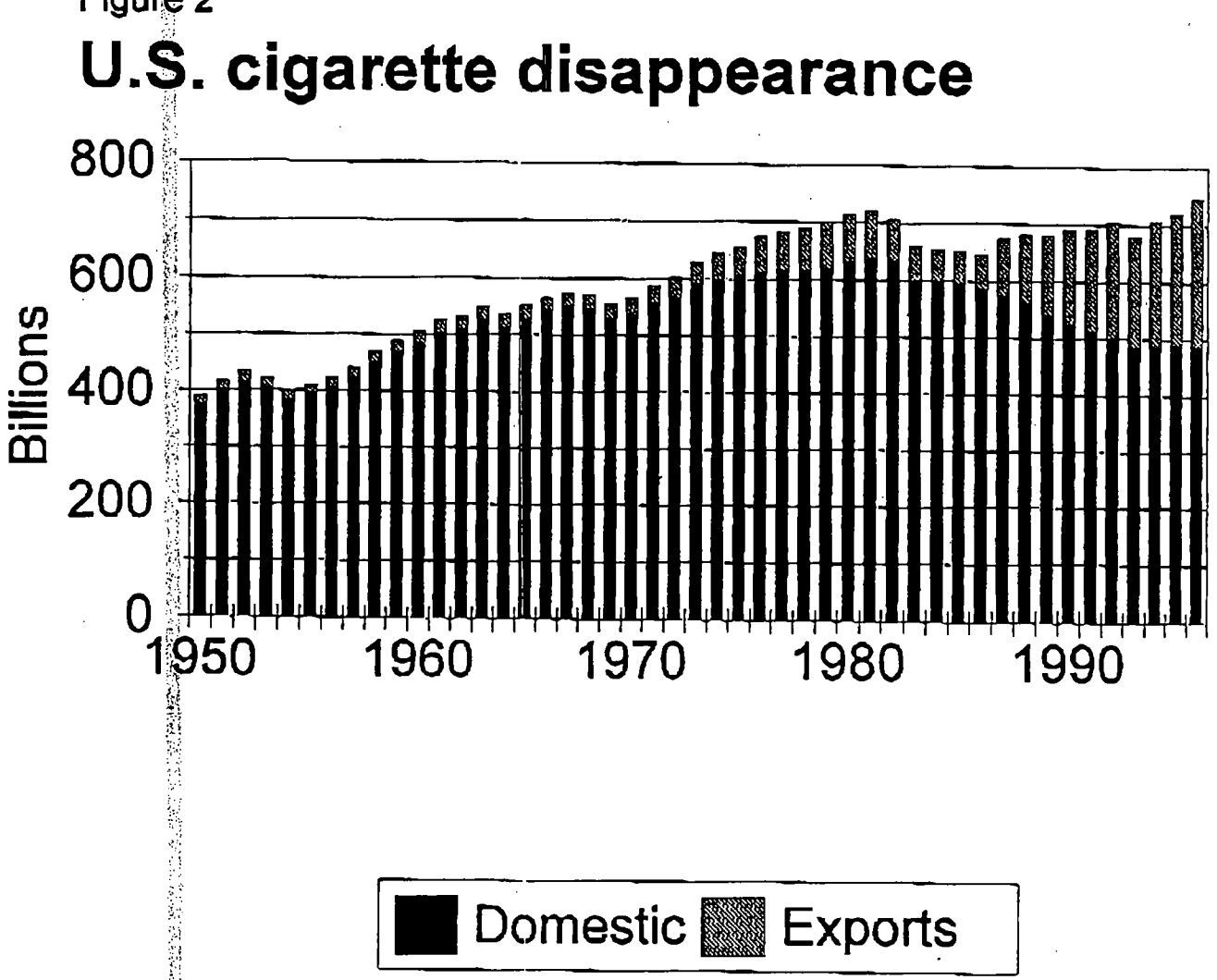

U.S. cigarette disappearance
800
600
400
200
0
Billions
1950
1960
1970
1980
1990
Domestic
Exports

Figure 3

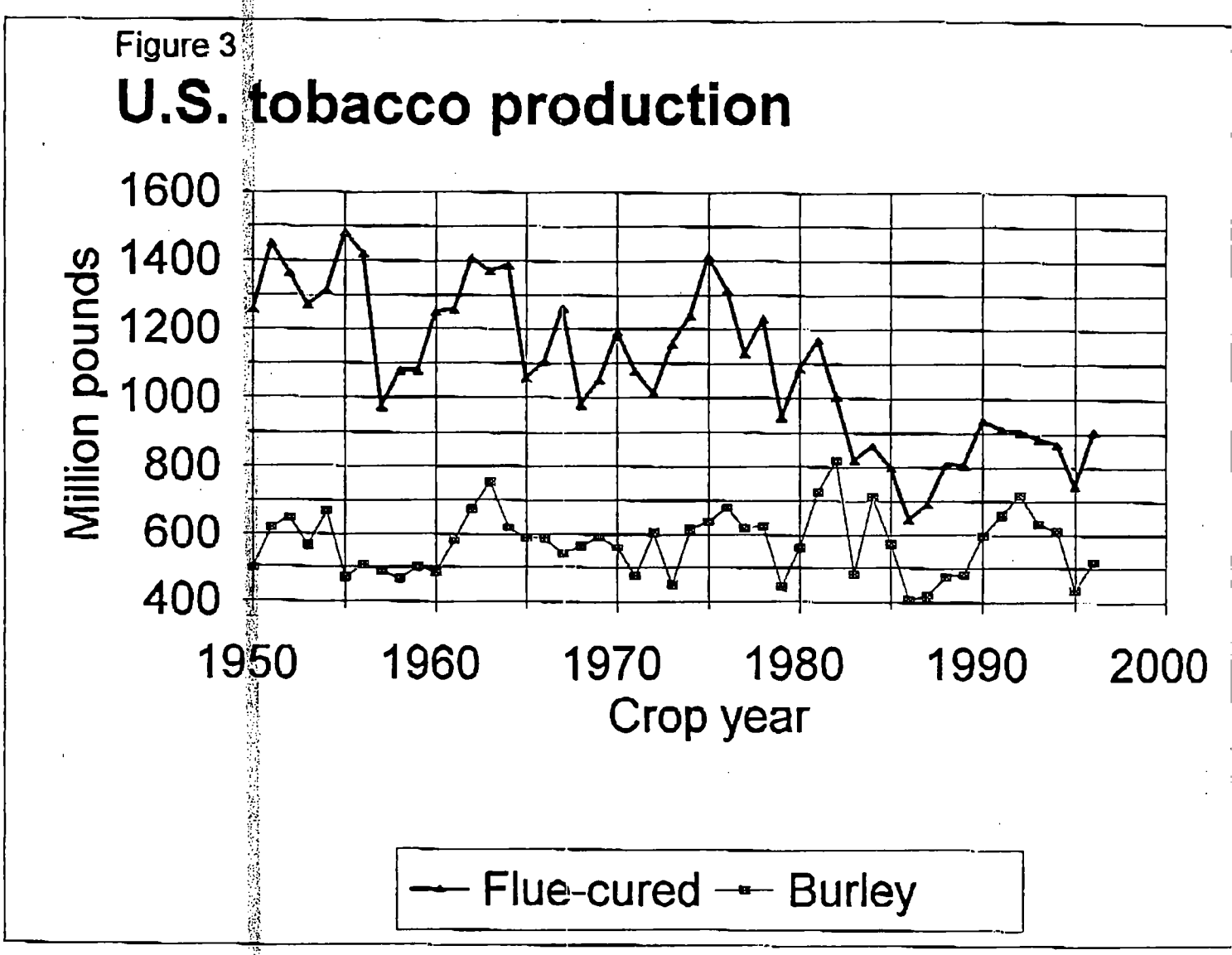

U.S. tobacco production
Million pounds
1600
1400
1200
1000
800
600
400
1950
1960
1970
1980
1990
2000
Crop year
Flue-cured
Burley

Figure 4

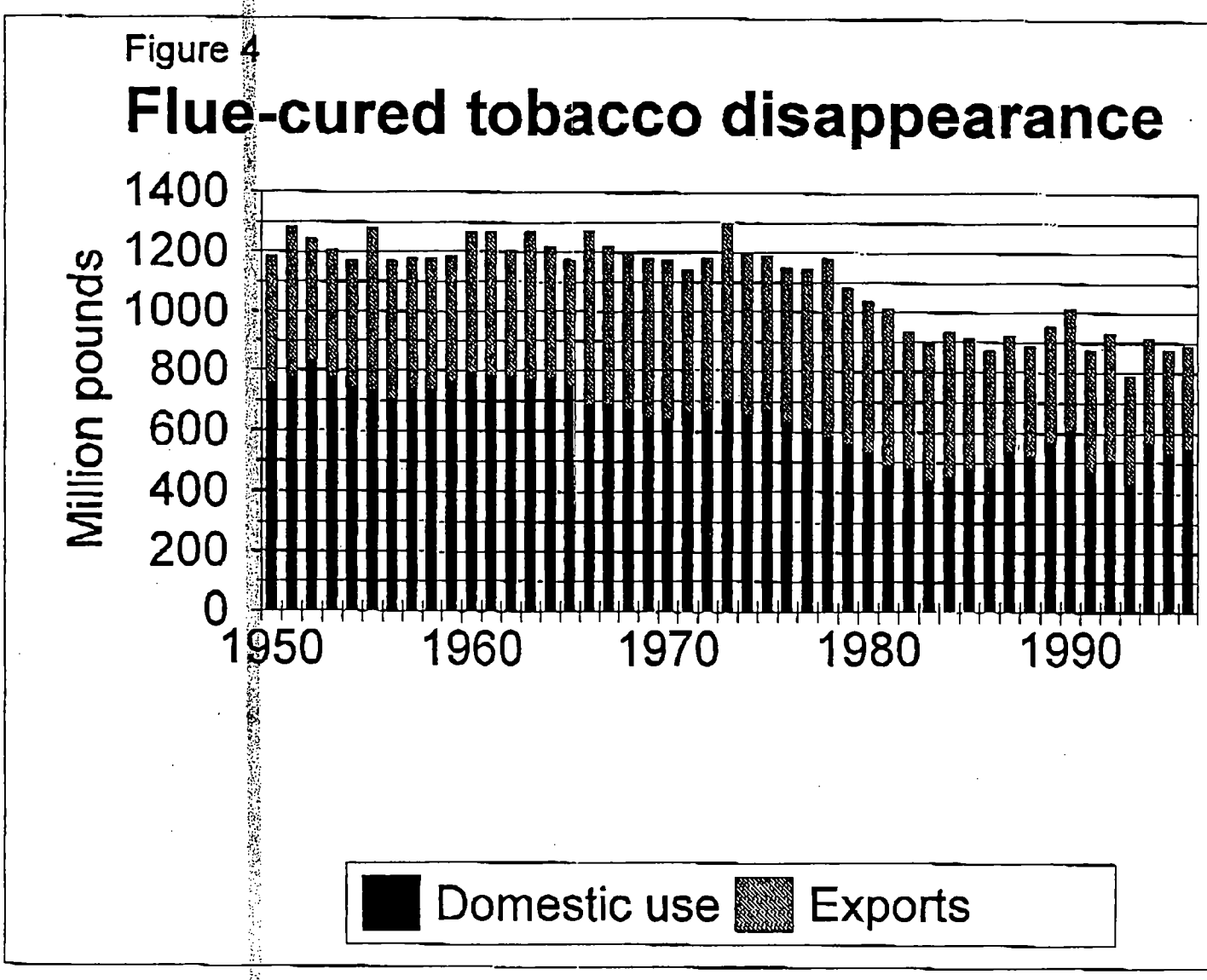

Flue-cured tobacco disappearance
Million pounds
1400
1200
1000
800
600
400
200
0
1950
1960
1970
1980
1990
Domestic use
Exports

Figure 5

Burley tobacco disappearance

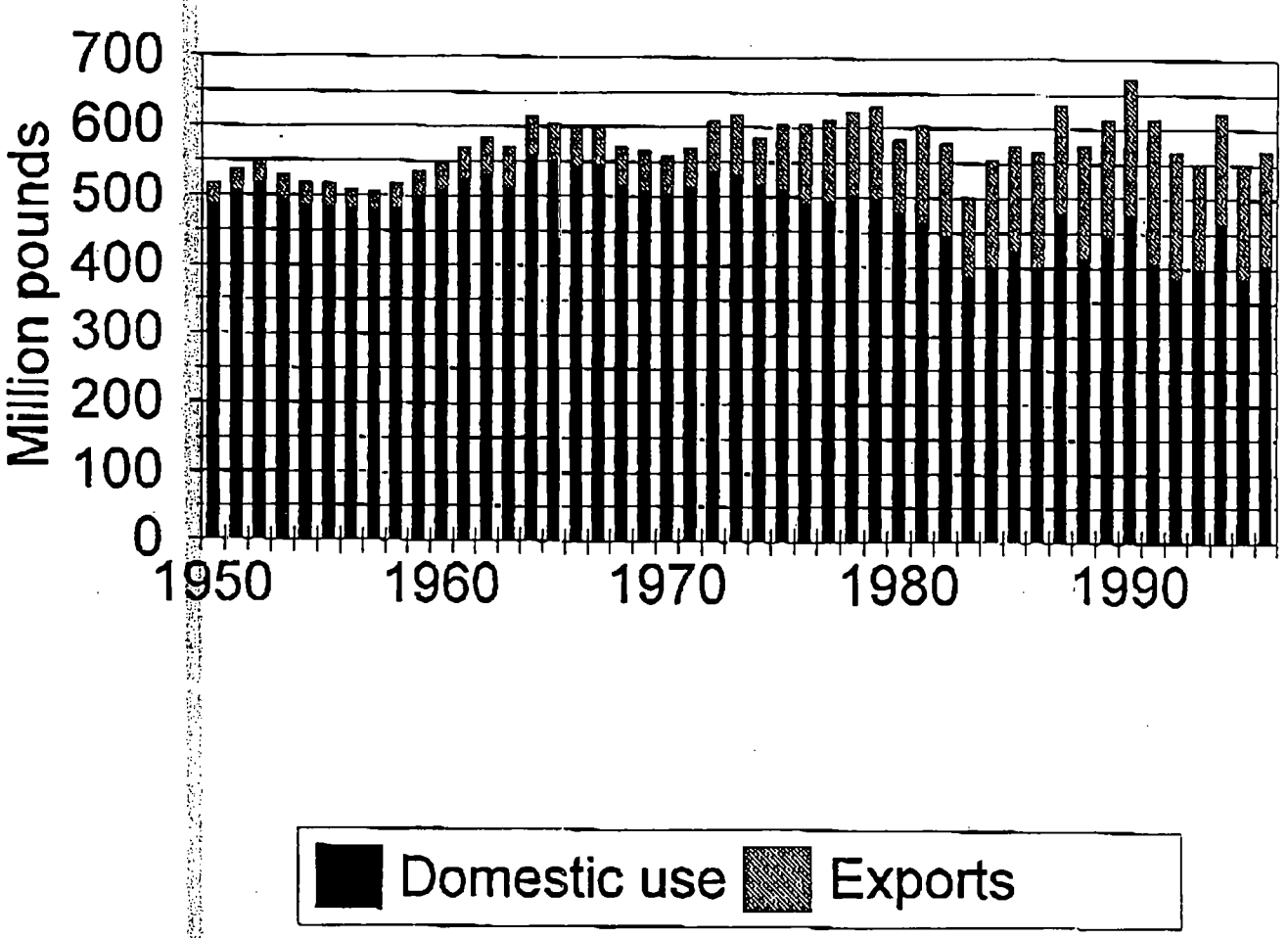


Figure 6

U.S. tobacco imports

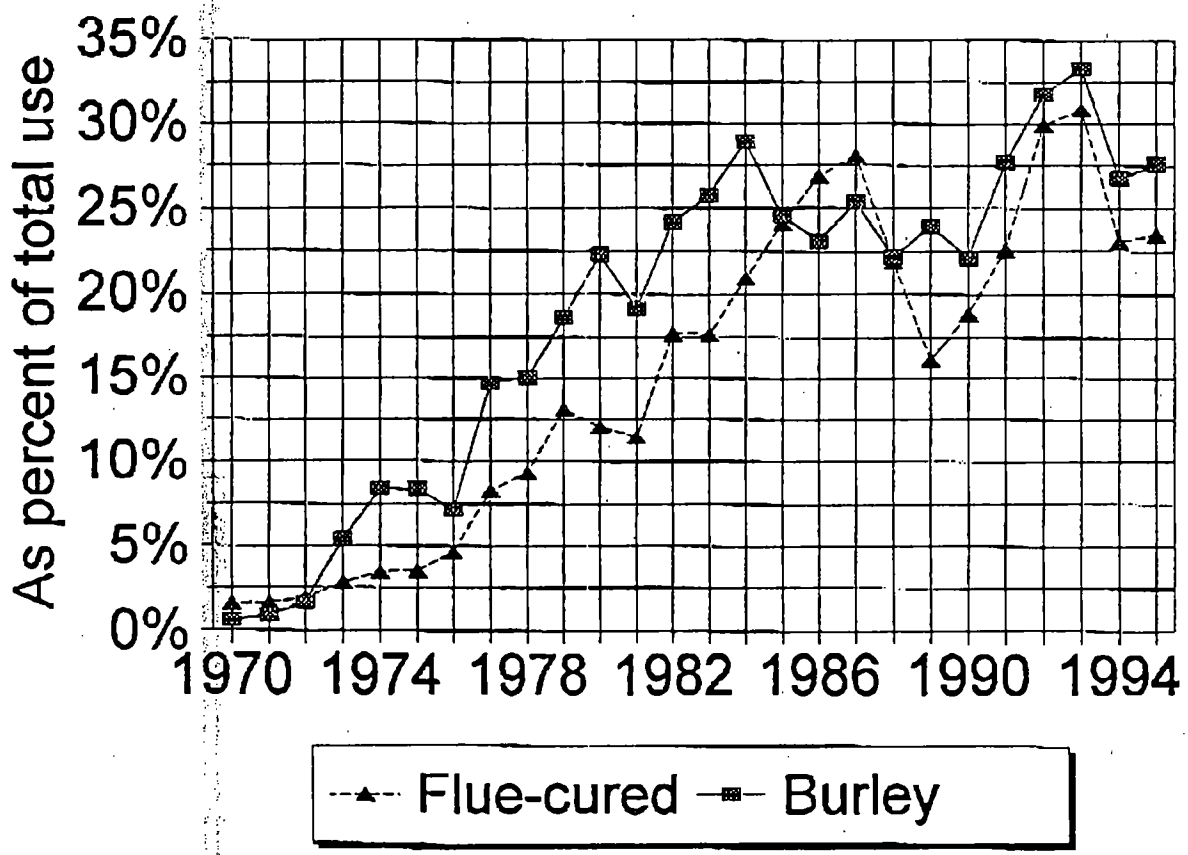


Figure 7

Tobacco support rates

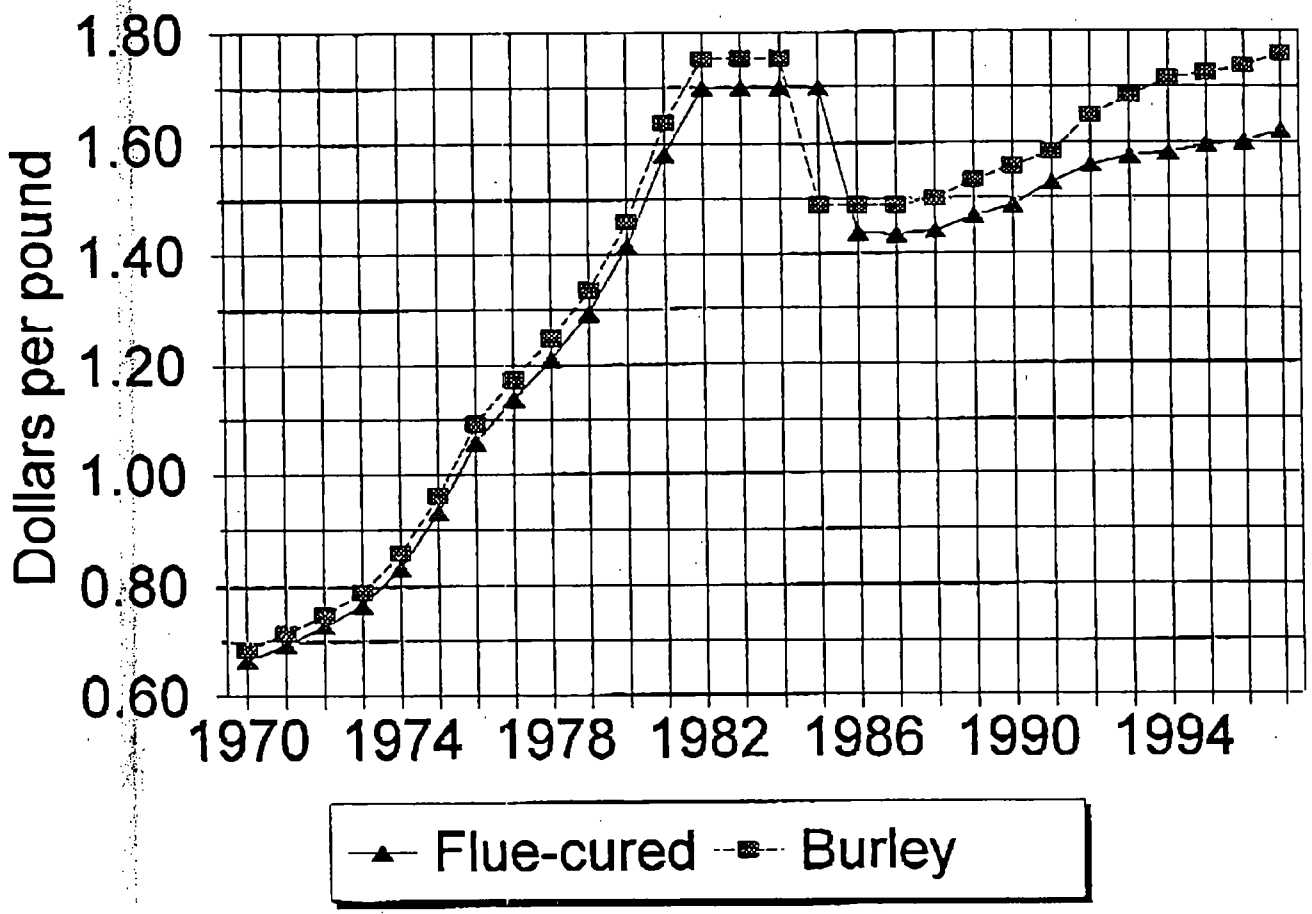


Figure 8

Tobacco marketing quotas

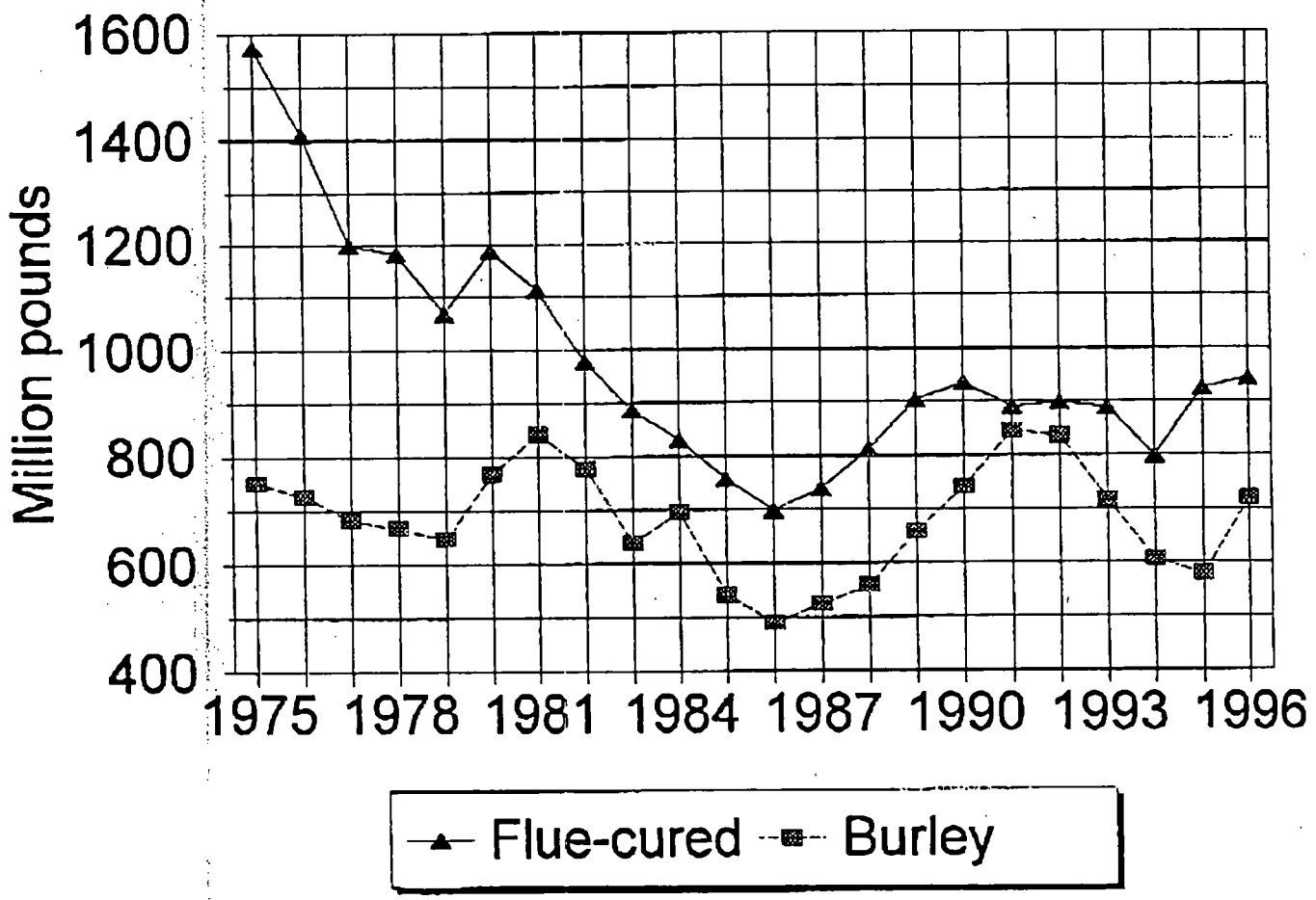


Figure 9

Effects on flue-cured marketings

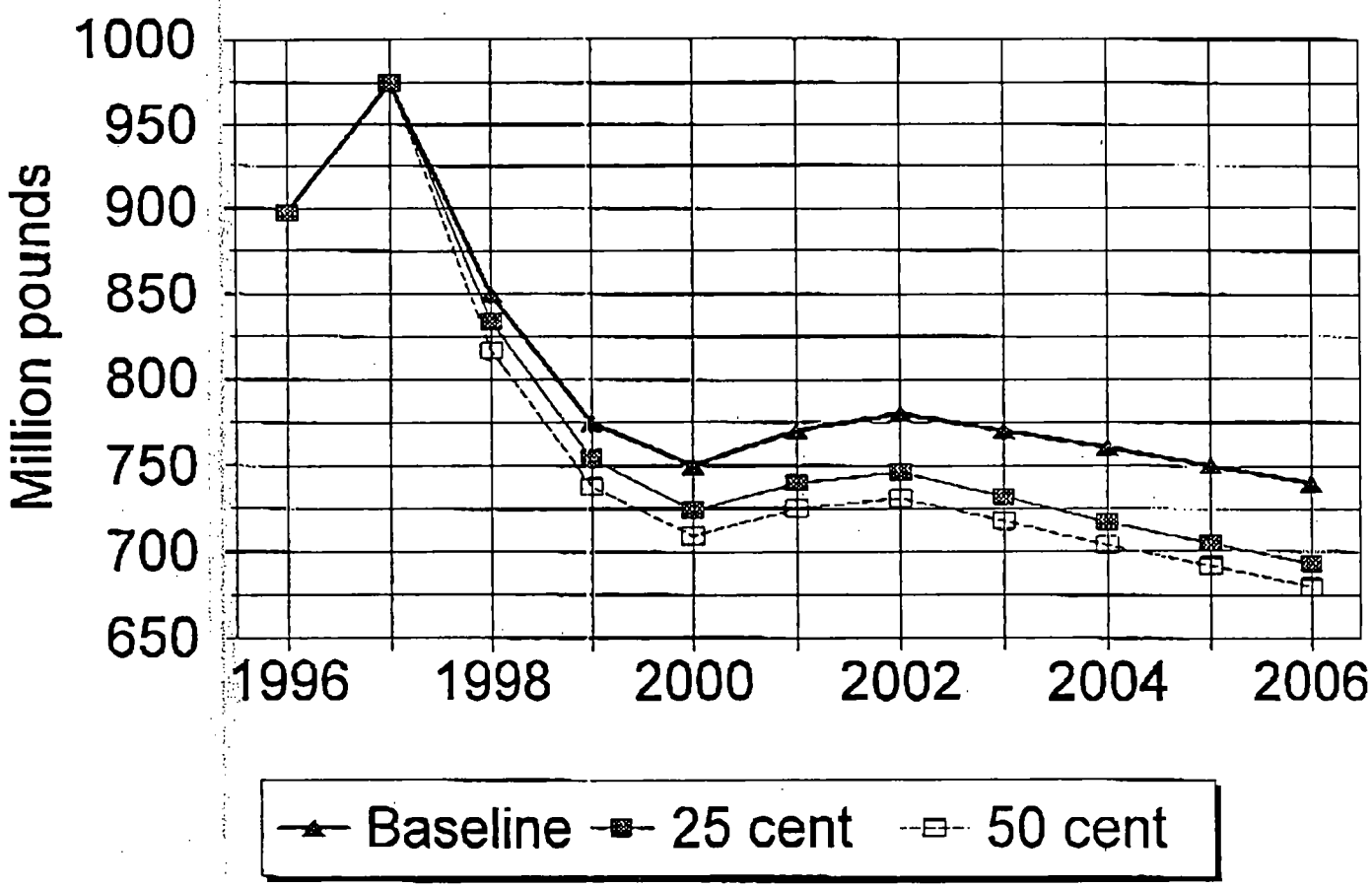
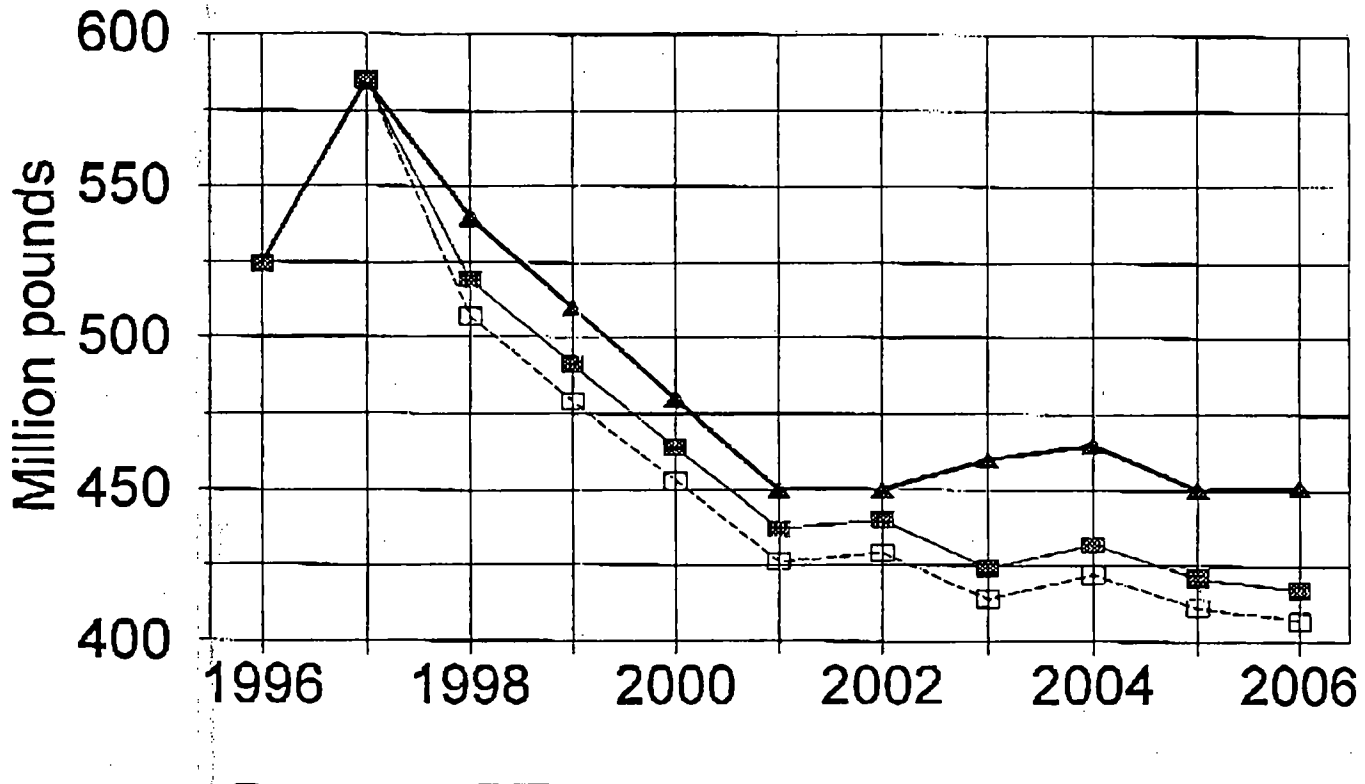


Figure 10

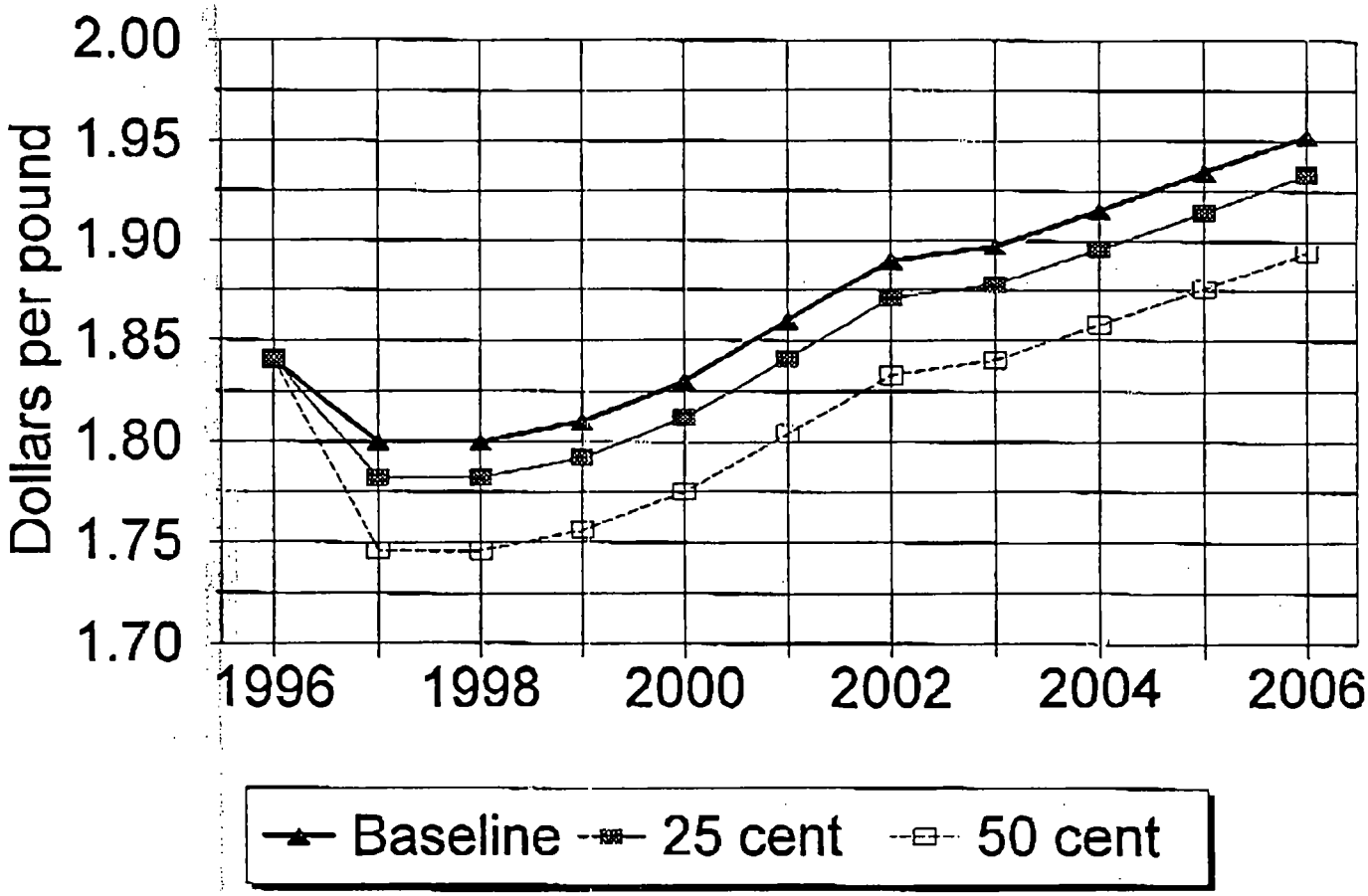
Effects on burley marketings



1.80

Figure 11

Effects on flue-cured prices



Financial Structure of Tobacco Farms In Kentucky and North Carolina

U.S. tobacco production is primarily concentrated in Kentucky/Tennessee (burley) and the southeastern States (flue-cured), although other States grow small amounts. The 1992 Census of Agriculture reported 69,373 farms in Kentucky (268,140 tobacco acres) and 17,625 farms in North Carolina (263,900 tobacco acres) growing of tobacco.

Tobacco acreage on Kentucky and North Carolina farms differs dramatically in size of plantings. Over 50 percent of farms with tobacco in Kentucky have less than 3 acres planted to the crop, compared with just under 30 percent in North Carolina. In Kentucky, the largest number of farms (40 percent) plant 3-9 acres, while in North Carolina the largest number of farms (39 percent) plant 10 or more acres to tobacco.

Distribution of Farms By Tobacco Acreage

[illegible] Tobac[illegible]

According to USDA's [illegible] accounted for an average [illegible] percent of total farm value of production on Kentucky farms growing tobacco. This compares with 57.3 percent in North Carolina. In Kentucky cattle were ranked second while in North Carolina hogs ranked second.

With farms defined as SIC tobacco farms (more than 50 percent of total farm value of production comes from tobacco), the importance of tobacco grows. SIC tobacco farms in Kentucky had an average 81.4 percent of total value of production from tobacco, compared with 80.0 percent in North Carolina. For Kentucky SIC tobacco farms, crops played only a minor role in the farms' commodity mix, but cattle were still important. In North Carolina, however, hogs were a minor enterprise but soybeans and corn remained important.

The FCRS showed an average farm size of 124 acres in Kentucky and 156 acres in North Carolina. Tobacco acreage accounted for an average 3.7 acres and 12.7 acres in the 2 States, respectively.

Value of selected farm products for farms with tobacco, 1995

	[illegible]		North Carolina	
	All farms with tobacco	SIC tobacco farms 1/	All farms with tobacco	SIC tobacco farms 1/
Number of farms	[illegible]	25,576	16,878	[illegible]
		Average dollars per farm		
Farm value of production	[illegible]	[illegible]	86,811	[illegible]
Crop value of production	[illegible]	17,924	64,096	[illegible]
Tobacco value of production	[illegible]	[illegible]	[illegible]	[illegible]
Corn value of production	2,406	[illegible]	[illegible]	[illegible]
Soybean value of production	[illegible]	[illegible]	[illegible]	[illegible]
Cotton value of production	0	0	1,692	[illegible]
Wheat value of production	257	[illegible]	[illegible]	[illegible]
Livestock value of production	11,525	2,703	22,715	706
Hogs value of production	1,858	68	16,878	99
Cattle value of production	[illegible]	2,484	[illegible]	[illegible]
[illegible]	20	[illegible]	[illegible]	[illegible]

ERS/USDA

[redacted]

[redacted] Kentucky and North Carolina farms with tobacco show the average net cash income of $6,407 in Kentucky and $5,443 in North Carolina. For the largest farms, these levels rise to $18,765 and $16,383 for Kentucky and North Carolina, respectively. Regardless of the State or the level of specialization in tobacco, direct Government payments (deficiency payments) played a small role in determining the level of farm income. However, the Government tobacco programs are designed as an indirect control mechanism. Tobacco production is regulated by a Federal poundage quota price support program. Growers are guaranteed a minimum price through supports in exchange for their limiting production. Therefore, tobacco program support is reflected in tobacco receipts rather than in Government payments.

On the expense side, chemicals and hired labor accounted for the greatest expense. Equipment-related expenses for fuels and repairs also ranked high. For farms with livestock, feed expenses became important.

[illegible]

Income statements for farms with tobacco, 199[illegible]

	Kentucky		North Carolina	
[illegible]	All farms with tobacco	[illegible] tobacco farms 1/	All farms with tobacco	[illegible] tobacco farms 1/
	Average dollars per farm			
Gross cash income	25,668	59,011	16,651	54,412
Crop sales	14,168	53,434	13,150	52,244
Livestock sales	10,165	1,663	2,437	906
Government payments	172	[illegible]	70	[illegible]
Other farm-related income	1,163	[illegible]	[illegible]	[illegible]
Less: Cash expenses	19,259	40,229	13,029	38,030
Variable	15,093	32,110	9,964	21,049
Livestock purchases	249	149	60	24
Feed	3,592	223	1,198	164
Other livestock expenses	394	[illegible]	[illegible]	36
Seed and plants	698	[illegible]	[illegible]	[illegible]
Fertilizer and chemicals	1,117	[illegible]	[illegible]	[illegible]
Labor	[illegible]	[illegible]	[illegible]	[illegible]
Fuels and oils	4,032	3,364	[illegible]	[illegible]
Repairs and maintenance	1,903	3,833	[illegible]	3,851
Machine-hire and custom work	419	859	189	927
Utilities	635	1,856	857	1,507
Other variable expenses	847	1,254	584	1,152
Fixed	[illegible],165	8,118	3,064	6,981
Real estate, property taxes	505	817	337	789
Interest	1,856	[illegible]	1,335	1,872
Insurance premiums	993	2,031	840	2,015
Rent and lease payments	811	[illegible]	553	[illegible]
Equals: Net cash farm income	6,409	[illegible]	[illegible]	[illegible]
Less:				
Depreciation	[illegible]	[illegible]	[illegible]	[illegible]
Labor non-cash benefits	[illegible]	[illegible]	[illegible]	[illegible]
Plus:				
[illegible] inventory change	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Tobacco accounts for over 50 percent [illegible]

Tobacco Costs of Production

[illegible] costs of producing the 1994 tobacco crop [illegible] at the national level only [illegible] planted acre, variable cash costs of $2,446.04 for burley and [illegible] for flue-cured. While fuel and curing expenses are much higher for flue-cured tobacco, burley's high post-harvest labor costs are more than offsetting. [redacted]

U.S. costs of production for tobacco, 1994

	Burley	Flue-cured
	Dollars per acre	
Cash receipts	4,293.90	4,089.80
Variable Costs:		
Labor	1,409.06	705.17
Noncash benefits	[illegible]	27.79
Fertilizer and lime	[illegible]	296.27
Plant bed materials	[illegible]	[illegible]
Chemicals	[illegible]	117.80
Custom operations	[illegible]	[illegible]
Fuel and lubrication	[illegible]	[illegible]
Curing and heating fuel	[illegible]	[illegible]
Repairs	[illegible]	[illegible]
Marketing (burley) & warehousing (flue-cured)	[illegible]	108.38
No-net-cost & marketing assessments	[illegible]	[illegible]
Inspection and grading fee	[illegible]	16.94
Interest	19.08	[illegible]
Other	21.23	[illegible]
Total variable costs	2,446.04	1,884.66
Machinery and farm ownership costs:		
Capital replacement	[illegible]	[illegible]
Return to nonland capital	109.81	[illegible]
Taxes and insurance	[illegible]	[illegible]
Total ownership costs	[illegible]	[illegible]
Other Costs:		
General farm overhead	425.10	[illegible]
Land and quota charge	[illegible]	[illegible]
Total, excluding land and quota	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Cash and Net Returns for Selected Vegetables and Field Crops

Tobacco growers are currently growing a mix of other field and specialty crops such as corn, soybeans, cotton, and wheat. Between 1 and 2 percent of FCRS farms with tobacco reported harvesting vegetables. Data from North Carolina are available that allow comparisons among costs and returns for major vegetable crops. Kentucky data were not available.

Except for tomatoes, other vegetable crops are more likely to be grown in flue-cured tobacco areas than in burley areas. Returns vary widely from year to year, depending on growing conditions and market conditions in a specific season.

The gross returns are based on yields and prices reported by NASS for 1994. Cash variable costs are based on enterprise budget estimates developed at the North Carolina State University and have been adjusted to represent average production practices for 1994. The net returns represent earnings to land, labor, capital, machinery, overhead, and management.

Although some tobacco producers could produce vegetables on tobacco acreage, the majority of any displaced tobacco land would likely go into field crops. The demand for vegetables is relatively inelastic, meaning that even small increases in the quantity results in relatively large price declines. Because the vegetable acreage is so small relative to tobacco, a small percentage shift of tobacco land could represent a substantial increase in vegetable acreage. This would lower prices and reduce vegetable returns.

In contrast, tobacco acreage represents a relatively small percentage of field crop acreage. Consequently, a relatively large shift could occur from tobacco to field crops without having a noticeable impact on either field crop prices or returns.

Estimated average costs and returns for selected vegetable and field crops in North Carolina, 1994

Crop	Gross receipts[1]	Variable expenses[2]	Returns above cash variable expenses
		Dollars per acre	
Sweet potatoes	[illegible]	1,118.92	508.58
Cucumbers, Processing	992.00	1,041.62	[illegible]
Cucumbers, Fresh market	440.00	466.61	-26.61
Bell peppers, Fresh market	717.50	864.81	-62.38
Snap beans, Fresh market	983.50	600.06	383.44
Watermelon	675.00	485.86	190.63
Cabbage, Fresh market	1,900.00	1,016.36	883.64
Tomatoes, Fresh market	4,332.00	3,735.50	596.50
Corn (Southeast region)	278.20	157.86	120.34
Soybeans (Southeast region)	170.91	95.10	75.81
Cotton (Southeast region)	[illegible]	291.70	331.90
Flue-cured tobacco	4,089.80	1,884.68	2,205.12

1 Average price times average yield per acre. Source: USDA, NASS.
2 Vegetable expenses are based on Extension enterprise budgets from North Carolina State University. Budgets modified to represent average production practices for 1994. Field crop expenses are from USDA's costs-of-production [illegible].

Tobacco Producers

Tobacco is produced in 21 states with North Carolina and Kentucky accounting for 65% of production. An estimated 124,000 farms grew tobacco in 1992, about 3/4 of them classified as tobacco farms meaning that tobacco comprises at least 50% of sales. Tobacco is the 6th largest cash crop, and is a significant factor in the economy of many states. For instance, USDA estimates that there are 16,380 jobs (0.47% of state's total) in tobacco manufacturing in North Carolina, 9,550 tobacco manufacturing jobs in Virginia (0.31%), and Kentucky has 4,210 jobs (0.25%). Tobacco is an extraordinarily profitable crop, approximately 20 times more profitable on a per acre basis than the next most lucrative crop.

Most U.S. production has been under a price support and supply control program since the 1930s. Producers are guaranteed higher prices in exchange for limiting marketings through marketing quotas. In response to surging tobacco imports, Congress enacted a provision in the Omnibus Budget reconciliation Act (OBRA) of 1993 which required US manufactured cigarettes to contain 75% US grown tobacco. As a part of the Uruguay Round implementing legislation, domestic content provisions were replaced by the establishment of a tariff rate quota for certain imported tobacco, primarily flue-cured and burley.

Internal notes:

The settlement makes no provision for economic effects on farmers and tobacco related rural economies. The USDA estimates that a 50 cent per pack price increase would lead to a 10.5% decline in volume consumed. Cigarette exports are not restricted by the settlement and would likely continue their upward trend, thus USDA forecasts do not currently predict adverse economic effects on farmers.

Secretary Shalala and Bruce Reed have made clear in meetings with legislators and farmer representatives that farmers should receive protection in any legislative settlement, and that the Administration will work closely with them in forging a consensus. Secretary Glickman has traveled to Virginia and North Carolina to express this commitment directly to farmers.

Farmers groups and legislators have generally expressed support for proposals with certain shared characteristics: continuation of the governmental tobacco program, guaranteed purchase of tobacco crops at preordained levels by tobacco companies, and some provision for buy out and transition to other crops, on a voluntary basis, for farmers. The most discussed proposal is one released this month by Senators Ford and McConnell that would require companies to buy a minimum amount of domestic tobacco over 25 years and would install penalties on companies that do not meet the stated goals for tobacco buying. The proposal would also create a "Tobacco Community Revitalization Fund" administered by USDA, but not subject to the appropriation process which be able to spend up to $1 billion a year for 25 years from the settlement fund and would cover costs related to the tobacco program such as administration and crop insurance, make supplemental payments of up to $500 million to producers whose income according to 3 criteria from tobacco drops below the 1996 level, pay up to $100 million in benefits for displaced cigarette factory workers; pay up to $250 million a year for rural economic

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Effects of the Tobacco Settlement on Tobacco Farmers and the USDA Price Support Program

The Tobacco Settlement between numerous States' Attorneys General and the Tobacco Industry on Friday June 20 is aimed at resolving issues relating to underage smoking and reimbursements to States for Medicaid expenditures related to tobacco-related illnesses. The Settlement also sets national standards controlling the manufacture of tobacco products, restricts advertising alternatives, and mandates a nationwide smoking cessation program. There are no immediate and direct implications for tobacco farmers or the USDA price support program. Nonetheless, there will be indirect effects resulting from the Settlement as the industry restructures in compliance with the 9 titles included in the Settlement.

Agriculture as Addressed by the Settlement

Direct mention of the USDA or tobacco farming occur in two instances within the agreement. The first simply states that tobacco farmers will not be subject to additional regulations over and above those existing for other producers of raw products. "Tobacco farmers will face no greater regulatory burden than the producers of other raw products regulated by the federal government." [Title I, Subtitle E. (See appendix)]

The second mention of agriculture addresses the issue of limitations on FDA regulatory jurisdiction and states: "-- Grower Limitation: FDA jurisdiction does not extend to the growing, cultivation or curing of raw tobacco (USDA has exclusive authority)." [Title V, Subtitle A. (See appendix)]

Indirect Implications of the Settlement for farmers

The primary implication of the Settlement for tobacco growers is added impetus to discourage consumption of tobacco products, reducing the demand for leaf tobacco used in domestic manufacturing.

Declining consumption due to reduced underage smoking

Currently, the proportion of total consumption attributable to underage smokers is not known with certainty. Estimates range from 3 to 5 percent. U.S. consumption in 1996 was 487 billion cigarettes of which between 15 to 24 billion could have been consumed by underage smokers. The Settlement seeks to reduce underage smoking significantly over the next decade and maintain the reduction thereafter:

> Underage use of cigarette products must decline by at least 30% from estimated levels over the last decade by the fifth year after the legislation takes effect, by at least 50% from estimated levels over the last decade by the seventh year after the legislation

takes effect, by at least 60% from estimated levels over the last decade by the tenth year after the legislation takes effect, and remain at such reduced levels or below thereafter. [Title II]

If the Settlement reduces underage consumption by 30 percent by the fifth year, consumption will decline between 5 to 8 billion pieces, assuming underage consumption of 15 to 24 billion cigarettes annually. This is the equivalent of 5.7 to 9.2 million pounds of tobacco (farm sales weight), based on current domestic leaf use per cigarette. U.S. tobacco production in 1996 was 1,517 million pounds.

The Settlement also covers smokless tobacco products in much the same terms as cigarettes. This increases the number of leaf types that may be affected.

Declining adult consumption may result if prices rise because of the Settlement.

At this point, it is difficult to tell how the Settlement will affect retail cigarette prices. Cigarette companies are liable for huge payments under the agreement, beginning with an up-front payment of $10 billion at signing and $8.5 billion due at the end of the first full calendar year following signing. The up-front penalty equals approximately 41 cents per pack (20 cigarettes) based on 1996 U.S. consumption and 26 cents per pack based on total output (including exports). Adding the first annual payment raises the amount to 76 cents per pack for domestic sales and 49 cents for total output. Retail cigarette prices averaged $1.91 nationwide in 1996. Wholesale prices were 99 cents per pack for premium cigarettes, which make up about 72 percent of total output.

Given the imperfectly competitive structure of the cigarette industry and inelastic consumer demand, we would expect much of the additional costs to be transferred to consumers. However, in the past, the cigarette industry has reduced wholesale prices, such as in 1993 when the prices for premium cigarettes were slashed to regain market share from discount brands.

Some respected Wall Street analysts are forecasting a 50-cent per pack increase at the wholesale level, combined with a consumption decline of about 11 percent.

Using a commonly accepted price elasticity of demand for cigarettes, the following table illustrates potential changes in cigarette consumption with 4 levels of retail price increases. The change in cigarette consumption is converted to change in domestic leaf use for each price change. These estimates assume no change in the proportion of imported tobacco leaf used in U.S. manufactured cigarettes. A $1.00 increase in the retail price of a pack of cigarettes results in a 20.9 percent decrease in cigarette consumption and a 116.7 million pound decrease in domestic leaf use, about 8 percent of U.S. production in 1996. Likewise, a 25 cent increase in the retail price results in a 5.2 percent decline in cigarette consumption and a 29.2 million pound decline in domestic tobacco use, about 2 percent of 1996 U.S. production.

Estimated effects of cigarette price increases

1996 average price per pack ($)	1.91
1996 total U.S. consumption (billion cigarettes)	487
Price elasticity of demand	-0.40

price change cents	pct chng price percent	pct chng vol percent	quantity billions	domestic use per 1,000 cigarettes lbs.	domestic use mil. lbs.	pct chng	est chng mil. lbs.
25	13.1	-5.2	462	1.144	528	-6.2	-29.2
50	26.2	-10.5	436	1.144	499	-10.5	-58.3
75	39.3	-15.7	411	1.144	470	-15.7	-87.5
100	52.4	-20.9	385	1.144	440	-20.9	-116.7

The cigarette industry uses both domestically grown and imported tobacco leaf to manufacture cigarettes. In 1995, the most recent data available, U.S.-manufactured cigarettes contained about 35 percent foreign tobacco leaf. U.S. tobacco growers likewise supply both domestic cigarette manufacturers and the export market. In 1996, leaf exports accounted for about 33 percent of U.S. production. U.S.-manufactured cigarettes are consumed domestically and exported. In 1996, 32 percent of the cigarettes manufactured in the United States were shipped overseas.

The effects of changes in domestic consumption of cigarettes on tobacco growers are tempered by prospects for foreign demand for U.S. cigarettes and the proportion of foreign tobacco used by U.S. cigarette manufacturers. The impact of the Settlement and associated price changes on the mix of domestic and foreign leaf used by manufacturers, and the level of leaf imports, is difficult to determine. As manufacturers attempt to cut costs, use of lower-priced imported leaf may rise, accentuating downward price pressures on U.S. tobacco leaf. If, however, facing declining domestic consumption, manufacturers export more cigarettes, that could temper any downward price pressure on U.S. tobacco leaf. Currently tobacco leaf imports are limited by a tariff rate quota; however, in the past year, only about 68 percent of the quota was utilized. In addition, imported leaf which is used to manufacture cigarettes subsequently exported is subject to a duty drawback. If domestic consumption is relatively stable, manufacturers will likely continue using the same proportions of domestic and foreign leaf.

The increase in retail cigarette prices may be less than indicated by the size of the penalties to be paid by the manufacturers. The Settlement contains a provision [Title VI B. 5. (See appendix)] which rebates part of the penalty paid by manufacturers if adult consumption falls below the 1996 level. This provision should negate some of the price effect of the penalty by enabling manufacturers to use the rebate to lower prices and thus regain sales. In addition, the penalties are paid using pre-tax dollars, further lessening the financial burden of cigarette manufacturers and reducing amount prices might be increased. Advertising expenditures, which total about $6 billion annually for the industry, are likely

to decline also.

Indirect Implications for the USDA Tobacco Program

The indirect implications for the USDA program are mainly political in nature. Congressional attention focused on the Settlement has already spawned tangential tobacco-related legislative proposals, such as the bill introduced by Senator Mitch McConnell to have cigarette manufacturers cover the costs of the Tobacco Program. In recent sessions of Congress, the Tobacco Program has come under attack and narrowly survived.

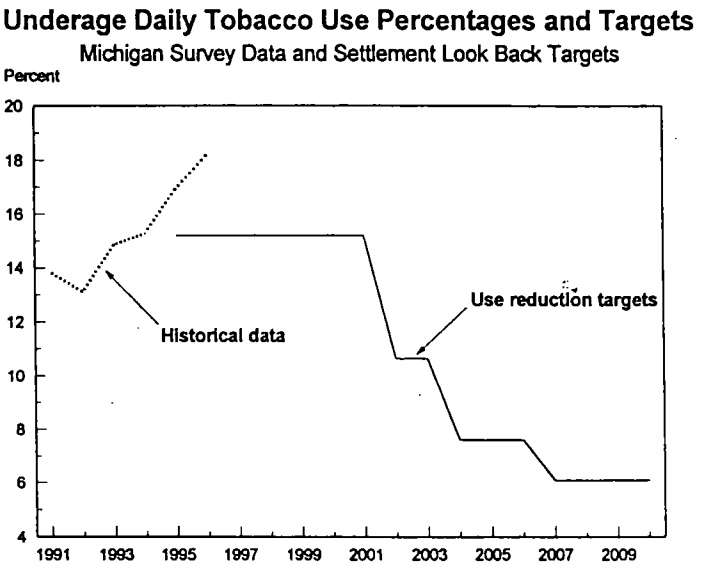
(Preliminary – NOT final)

THE "LOOK BACK" SURCHARGE

The settlement attempts to provide economic incentives to promote "dramatic and immediate reductions in the number of underage consumers of tobacco products." Manufacturers would face surcharges if the tobacco-use reduction targets are not met. Surcharges will be imposed on the basis of a "look back" comparing actual teen tobacco use percentages to the targeted reduction percentages.

Will the surcharge be effective? No.

Our initial calculations indicate that the present value of the stream of profits from a higher percentage of teen tobacco use exceeds the cost of the surcharge by a factor in the range of 3 to 6 -- hence, the economic incentive to firms to reduce teen smoking will not be effective.



- The daily tobacco use percentage for underage teens in 1996 was 18.2 % -- well above the target base of 15.2 % (calculated from data over the past 11 years).

- The surcharge would be imposed beginning in the 5th year after enactment and every year thereafter based on the difference in the actual and targeted percentage reductions in underage use -- at the rate of $80 million for each percentage point (adjusted for changes in the size of the relevant population and industry profits).

- For the case of no change in the level of teen daily use (staying at 18.2 %), the surcharge for the fifth year would be about $660 million (in 1997 dollars). The present value of the future profit stream from the additional smokers above the target would be much higher at about $3.6 billion -- *5-1/2 times greater than the cost of the surcharge.* (After-tax comparisons would yield the same ratio under the assumption that the profits tax rate remains unchanged through time.) Similar ratios apply to the surcharges in other years.

- If we assume that teen use declines because of higher cigarette prices from higher excise taxes, the use percentage falls to about 13-1/2 percent and the surcharge in the fifth year would be about $400 billion and the present value of profits would be about $1.4 billion for a ratio of about 3-1/2.

These results indicate that to be effective, the surcharge would have to be increased by a factor of about 3-1/2 to 5-1/2, or somewhere in the range of $280 million to $440 million per percentage point.

Some Assumptions:

Discount rate:	4.0 %	
Profit per pack:	$0.30	
Intensity of use:	1 pack a day	
Survival probability:	taken from FDA rule in Federal Register	
Teen population:	Census middle series	
Teen price elasticity:	-1.0	(second scenario assumes that % decline in use translates in to % decline in users)

NOTES ABOUT THE TOBACCO MEMO:

A. The fees growers pay based on the national loan rate

Each year, the government assigns a support price (loan rate) to each grade of tobacco. If no buyers bid above the government's rate, the grower may receive that rate (less some administrative fees). The tobacco is then taken by a cooperative association, which arranges for the receiving, redrying, packing, storing and eventually selling the tobacco under loan.

Each year, growers are assessed 0.5% of the support price on the tobacco they sell. This money is targeted to reduce the federal budget deficit, and the legislation which creates this arrangement will expire in 1998. For example, if a grower sells tobacco worth $100,000 and that is the exact amount of the support price for that type of tobacco, the grower pays 0.5% of $100,000 into the fund for the federal budget deficit. Adjustments are made if the tobacco is over- or under- priced compared to the support price.

B. The fees growers pay under the "No-Net-Cost Tobacco Program of 1982"

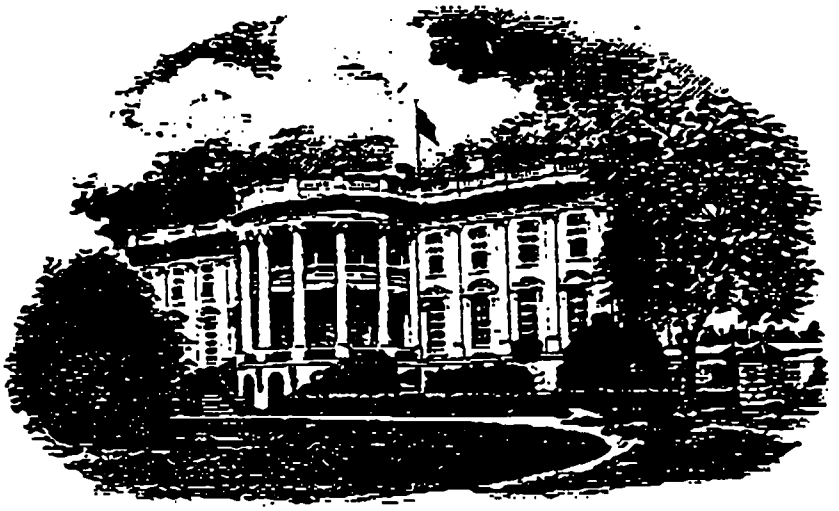
Every year, growers who want to qualify for price support pay assessments into a fund that was set up by the cooperative association that makes Federal support loans available to producers. These funds are targeted at covering the operating costs of the price support program.

C. The Government program

In addition to quotas, the tobacco program involves:

- loan rate (support price);
- testing of imported tobacco for pesticide residues similar to testing required for domestically grown leaf;
- limited lease and transfer of flue-cured tobacco quotas under disaster conditions
- assistance to farmers if a crop is lowered more than 40% by damaging weather or related conditions
- minimum content requirements on U.S.-made cigarettes

Office of Management and Budget



Natural Resources, Agriculture Branch

Fax Transmittal Cover Sheet

Number of pages (including cover) 6

Date:

To: Tom Freedman

Phone: **Fax:**

From: STUART KASDIN

Comments: Additional background materials
(1) OMB (early) estimates on dairy impacts
(2) Bruce Gardner document handed out by Virginia producer/co-op group

Phone: (202) 395-3446 **Fax: (202) 395-4941**

1/30/98 (revised)

TOBACCO QUOTA BUYOUT VALUES

1. BUYING OUT THE VALUE OF QUOTA

(give producers "freedom to farm" their choice of crops)

	NC Flue-cured	KY Burley	Total	Assuming quota value is 20% less
Quota rental value (per lb.)	$0.45	$0.43		
Production (mil.lbs) (projected by USDA for 2006)	770	465	1235	
Total Quota rental value	$346.50	$199.95	$546.45	$437.16

Quota Present Value at:	(in millions of dollars)	
6%	$9,081	$7,265
7%	$7,797	$6,238
8%	$6,828	$5,462
9%	$6,071	$4,856

2. BUYING OUT THE PRODUCTION PROFIT

(producers prohibited from growing anything - no allowance for profit from growing alternative crops.)

	Flue-cured	Burley	Total	
1997 Data				
Gross revenue per lb.	$1.92	$1.76		
Variable expenses (lb.)	$0.96	$0.72		
Net Profit on production (lb.)\1	$0.96	$1.04		Profit at 20% less
Total lb. produced (mil.)	1008	560		
Total Tobacco profit:	967.68	582.4	$1,550.08	$1,240.06

Profit Present Value at:	(in millions of dollars)	
6%	$25,759	$20,607
7%	$22,118	$17,695
8%	$19,367	$15,494
9%	$17,220	$13,776

1\ excluding fixed costs, including quota rents, land, etc.

EFFECT OF TOBACCO PROGRAM ELIMINATION

Effect on Tobacco Producers

(USDA estimates of FY 2006, assumes no settlement)

	Flue-cured	Burley
Baseline (pre-settlement)		
Ave. Price/farmer ($/lb.)	1.84	1.94
Production (million lbs)	770	465
Revenue ($ millions)	1,417	902
No Program 1 -- inelastic 1		
Ave. Price/farmer ($/lb.)	1.54 (-16%)	1.66 (-14%)
Production (million lbs)	887 (+15%)	527 (13%)
Revenue ($ millions)	1,366	875
Change ($ millions)	-51	-27
No Program 2 -- elastic 2		
Ave. Price/farmer ($/lb.)	1.57 (-15%)	1.69 (-13%)
Production (million lbs)	1,058 (+37%)	616 (+32%)
Revenue ($ millions)	1,661	1,041
Change ($ millions)	241	139

1\ Elasticity of demand for leaf tobacco of -0.8
2\ Elasticity of demand for leaf tobacco of -2.0

Elimination of the tobacco program would allow farmers who do not presently hold tobacco quota (production) rights to plant tobacco, and those with quota to expand production. The question as to whether tobacco production is a net winner or loser from eliminating the USDA program depends largely on one's assumptions about demand. Nevertheless, the grower's association for flue-cured tobacco has previously expressed an interest in eliminating the USDA price-support and supply control program. (A 1997 study on the Impacts of Elimination of the Flue-Cured Tobacco Program by Brown, Thurman and Dugan, professors at NC State, estimated an increase in production of 32% and an increase in farm receipts of 20% for elimination of the program).

Effect on Quota Holders and Communities

Net benefits for tobacco overall do not distinguish the distributions of income. Quota owners would lose relative to non-quota owners. In some cases, landowners have purchased quota rights and this investment would be lost. USDA estimates that 463,000 individuals own quotas, but 340,000 of them do not grow tobacco. A 1991 survey indicated that only 7% of flue-cured operators owned their entire tobacco quota they produced, 21 % rented all their quota, and 72 % owned and rented quota.

Estimates on the value of quota rights come from different sources. A survey of markets produced average annual rental rates for flue-cured quota of $0.45/lb., and $0.43/lb. for burley tobacco. This annual rental rate is higher than the sales value of the quota since the effects of the presumed settlement, as well as the long-term decreasing domestic demand, reduce the sales value. The sale value of quota has been reported as $3.50/lb for flue-cured tobacco and $2.00/lb for burley tobacco. Flue-cured quota income for both non-producers that rented quota and growers who owned quota was about $316 million in 1992 (Brown, et. al). With growers owning about 1/3 of the national quota, their annual quota rent is about $101 million, while non-growers received about $215 million.

The fully capitalized value of the quota equals $546 million annually, or $9 billion on a present value basis, assuming a 6% (Treasury) discount rate (see chart attached). Crudely adjusting for the risk that quota values will decline over the uncertainty of tobacco's future, by using a risk-adjusted discount rate of 9%, the quota value would equal $6 billion.

Estimated average costs and returns for vegetable and field crops in North Carolina, 1994
($ per acre)

	Gross Revenue	Cash Variable Expenses	Net profit (Revenue>variable expenses)
Flue-cured Tobacco	4,090	1,885	2,205
Cabbage, Fresh market	1,900	1,016	884
Tomatoes, Fresh market	4,332	3,736	597
Cotton (without Federal payments)	624	292	332

Source: USDA

Also, production would shift to different, lower-cost production sites, especially for burley tobacco, which has very restrictive lease and transfer provisions for quota.. These shifts could hurt local industries in tobacco-dependent areas.

Testimony: Senate Committee on Agriculture, Nutrition, and Forestry
September 18, 1997

Issues in a Buyout for Tobacco Growers

by

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Summary

The basic idea of a buyout is simple: the U.S. government's tobacco support program would be ended, and the farm participants in this program would be compensated for their loss of benefits. Proponents of the program will ask, why end it? Opponents will ask, why pay compensation for the loss of benefits?

The answer to the first question is that while the tobacco program has been successful in stabilizing the tobacco market, and the program's cost has been largely shifted from taxpayers to the industry, the detailed regulation of production has created needless inefficiency in the economic organization and location of production. Moreover, the support of prices has constrained tobacco exports and induced imports, further reducing demand for U.S. tobacco. High-cost, highly regulated tobacco growing, with declining product demand, is not sustainable. Such economic costs were good reasons for the market-oriented reforms for grains and cotton in the 1996 Farm Act, and they are good reasons for deregulation of tobacco growing, too.

On the second question, the reason for a "buyout" approach which pays farmers for giving up the regulatory approach is again related to the treatment given to producers of other crops in 1996. Producers of other crops were compensated, so fairness suggests compensating tobacco growers, too. There are however several analytical issues that have to be addressed in detail before a buyout can be seriously proposed, and they are not easy ones:

1. What would be the effects of ending the tobacco program on tobacco production, prices, smoking and health, farm income, and other variables?

2. How would a buyout be implemented?

3. How much would a buyout cost, and where would the funds come from?

4. Are there really net economic gains to the nation, and if so how large are they?

My tentative answers are:

1. With the quantities of flue-cured and burley tobacco not subject to marketing quotas, and the support price eliminated, U.S. tobacco production would increase. Supply and demand parameters suggest about a 10 percent increase in U.S. tobacco output in the first year marketing restrictions are lifted. Longer-term increases would be larger. The large majority of the U.S. increase would be exported as tobacco leaf and products, and some of the rest would replace imported tobacco in U.S. production of cigarettes. The farm level price of tobacco would fall by about 10 percent in the short run, and cigarette consumption would rise slightly, by about one quarter of one percent. The rise in cigarette consumption is small in both the short and long run because so little of the cost of cigarettes is accounted for by the cost of tobacco. U.S. smokers spend almost $50 billion annually on cigarettes which contain about $2 billion worth of U.S. tobacco, so when the price of tobacco falls 10 percent, the most consumers can save is $200 million or less than one-half of 1 percent of

the price of cigarettes, even if the tobacco price decline is fully passed on to smokers by cigarette sellers.

At the level of farm production of tobacco, net income would fall. My estimate of the decline is about $200 million annually, but the incidence would be very different for two groups of people: owners of marketing quotas and growers. Growers typically own some quota, but also lease quota, so they are members of both groups. Quota owners would lose the entire value of their quota, in annual rental terms more than $500 million per year for flue-cured and burley combined. But growers would be better off as producers of tobacco, by perhaps $300 million annually, partly from growing more tobacco for increased net exports, which an end to production restrictions would bring, and partly due to lower costs when growers are able to consolidate tobacco production in larger acreages in the lowest-cost locations.

2. Implementation of a buyout involves determining the value of quotas and the timing and amounts of payments to each quota owner. I believe the best means of implementation would provide payments that varied by county. In each county, lease and sales data for quota and tobacco land would be used to estimate the average value of quota in a base period, say 1995-97. This amount would be paid over a period of several years, perhaps 7 as in the 1996 Farm Act.

The funds needed could be collected by raising the cigarette excise tax or by earmarking additional funds in the tobacco industry settlement, if the settlement comes to pass.

3. What would a buyout cost? Using a U.S. average capital value of quotas of $3.00 per pound, 1.6 billion pounds of quota would cost $4.8 billion. Over 10 years, about $500 million annually would be needed. This amount could be raised by increasing the cigarette tax by less than 2 cents a pack.

This tax would reverse the slight increase in smoking that ending quota restrictions would generate—the tax increase offsets the decline in the farm price of tobacco, leaving the demand for cigarettes roughly where it is under current marketing restrictions.

4. The net gains cannot be estimated with precision, of course. The most difficult issues, involving smoking and health, are placed to one side by setting up the buyout analysis so that the U.S. consumer price and consumption of cigarettes are unchanged. Taxpayers are not affected because the payments to growers are financed by the additional excise tax on cigarettes. The main change is that smokers and cigarette makers would be levied a tax to pay quota owners cash, rather than paying growers through the higher price caused by the tobacco program's marketing and production restrictions. Similarly, quota owners are just compensated for the loss of their quota rents, and neither gain nor lose. The gains to the nation are the gains to tobacco growers from an expanded export market and lower costs of production brought by their increased freedom of action. These gains, which I provisionally suggest are in the neighborhood of $50 to $200 million per year, are the nation's gains from a buyout.

An important transitional issue is the problems that are likely to arise in adjustment to a no-program situation, both for farmers who lose the stability of income provided by the program and for communities in which tobacco growing declines or even disappears in the absence of program protections. The latter problem may justify some form of adjustment assistance to particular areas as a use for some of the buyout funds. The former problem, of providing stability in market-oriented tobacco farming, could be addressed by appropriate private-sector insurance and storage businesses. The cigarette manufacturers might find it worthwhile to offer forward-priced contract or buying guarantees, as have been developing recently in other agricultural markets. The role of the Flue-Cured Tobacco Cooperative Stabilization and Burley Stabilization Corporations is worth special attention in this respect. Perhaps they could be privatized and perform the kind of functions that grain elevators and non-government marketing cooperatives now provide for other commodities.

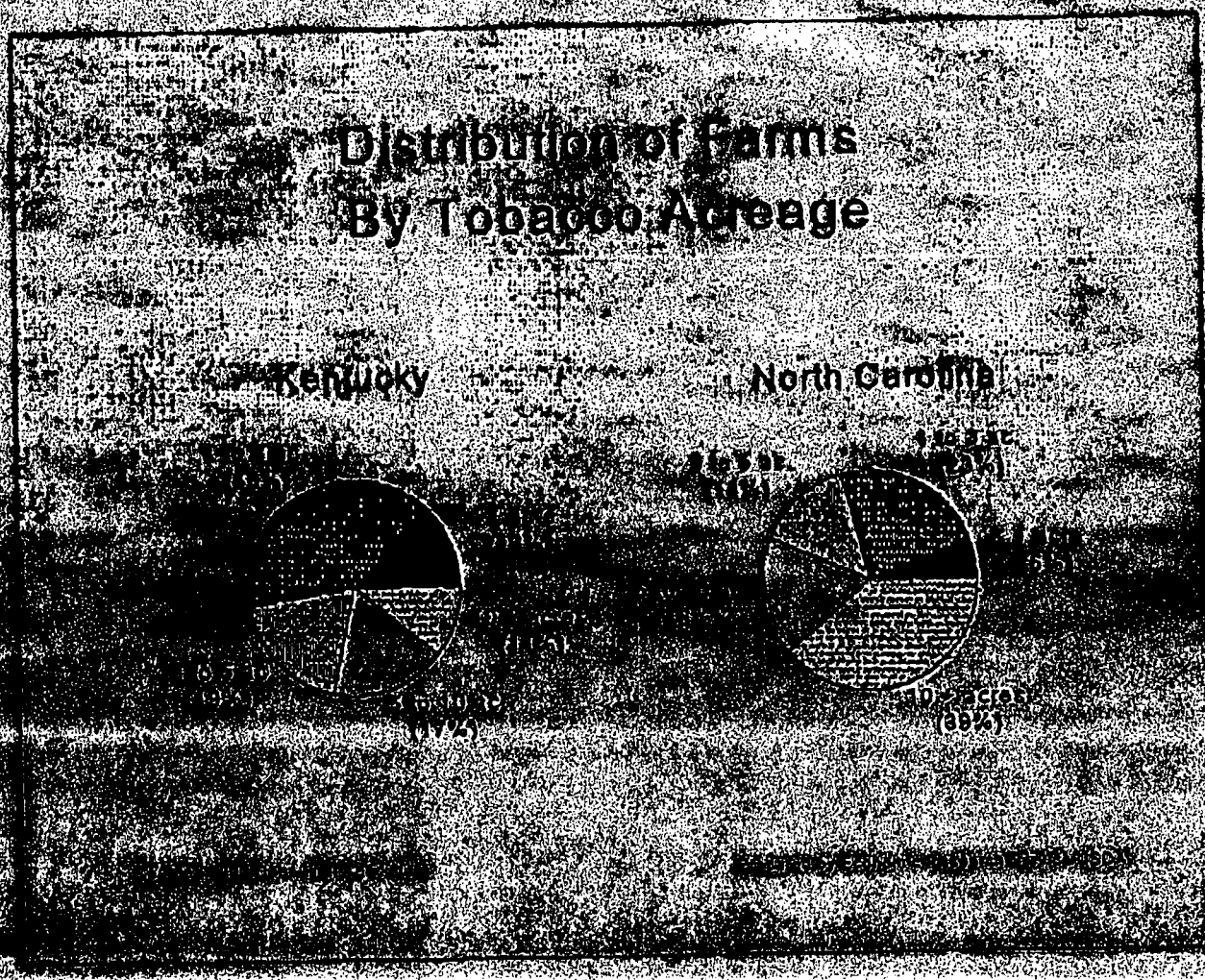
The following provides more detail on the background and analytical basis for the preceding assessment. Background

The spirit of market orientation and deregulation that has influenced recent agricultural commodity policy, especially the FAIR Act of 1996, could be carried further in tobacco policy. One reason the tobacco programs—more specifically the programs for flue-cured and burley tobacco—have been largely left alone is

Financial Structure of Tobacco Farms In Kentucky and North Carolina

U.S. tobacco production is primarily concentrated in Kentucky/Tennessee (burley) and the southeastern States (flue-cured), although other States grow small amounts. The 1992 Census of Agriculture reported 59,373 farms in Kentucky (268,140 tobacco acres) and 17,625 farms in North Carolina (283,900 tobacco acres) growing of tobacco.

Tobacco acreage on Kentucky and North Carolina farms differs dramatically in size of plantings. Over 50 percent of farms with tobacco in Kentucky have less than 3 acres planted to the crop, compared with just under 30 percent in North Carolina. In Kentucky, the largest number of farms (40 percent) plant 1-3 acres, while in North Carolina the largest number of farms (39 percent) plant 10 or more acres to tobacco.



Importance of Tobacco

According to USDA's 1994 Farm Costs and Returns Survey (FCRS), tobacco accounts for an average 51.2 percent of total farm value of production on Kentucky farms growing tobacco. This compares with 57.3 percent in North Carolina. In Kentucky cattle were ranked second while in North Carolina hogs ranked second.

With farms defined as SIC tobacco farms (more than 50 percent of total farm value of production comes from tobacco), the importance of tobacco grows. SIC tobacco farms in Kentucky had an average 81.4 percent of total value of production from tobacco, compared with 80.0 percent in North Carolina. For Kentucky SIC tobacco farms, crops played only a minor role in the farms' commodity mix, but cattle were still important. In North Carolina, however, hogs were a minor enterprise but soybeans and corn remained important.

The FCRS showed an average farm size of 124 acres in Kentucky and 156 acres in North Carolina. Tobacco acreage accounted for an average 3.7 acres and 12.7 acres in the 2 States, respectively.

Value of selected farm products for farms with tobacco, 1994

	Kentucky		North Carolina	
	All farms with tobacco	SIC tobacco farms 1/	All farms with tobacco	SIC tobacco farms 1/
Number of farms	85,977	25,576	16,878	14,518
		Average dollars per farm		
Farm value of production	[illegible]	[illegible]	86,811	[illegible]
Crop value of production	[illegible]	[illegible]	[illegible]	[illegible]
Tobacco value of production	[illegible]	[illegible]	[illegible]	[illegible]
Corn value of production	[illegible]	[illegible]	[illegible]	[illegible]
Soybean value of production	[illegible]	[illegible]	[illegible]	[illegible]
Cotton value of production	0	0	[illegible]	[illegible]
Wheat value of production	[illegible]	[illegible]	[illegible]	[illegible]
Livestock value of production	[illegible]	2,703	22,715	706
Hogs value of production	[illegible]	[illegible]	16,678	[illegible]
Cattle value of production	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	20	[illegible]	[illegible]	[illegible]

Source: [illegible] ERS/USDA.

The 1994 income statements for Kentucky and North Carolina farms with tobacco show an average net cash income of $6,409 in Kentucky and $3,523 in North Carolina. For STC tobacco farms, these levels rise to $18,783 and $16,383 for Kentucky and North Carolina, respectively. Regardless of the State or the level of specialization in tobacco, direct Government payments (deficiency payments) played a small role in determining the level of farm income. However, the Government tobacco programs are designed as an indirect control mechanism. Tobacco production is regulated by a Federal poundage quota price support program. Growers are guaranteed a minimum price through supports in exchange for their limiting production. Therefore, tobacco program support is reflected in tobacco receipts rather than in Government payments.

On the expense side, chemicals and hired labor accounted for the greatest expense. Equipment-related expenses for fuels and repairs also ranked high. For farms with livestock, feed expenses became important.

Income statements for farms with tobacco, 1994

	Kentucky		North Carolina	
	All farms with tobacco	SIC tobacco farms 1/	All farms with tobacco	SIC tobacco farms 1/
	Average dollars per farm			
Gross cash income	25,668	59,011	16,551	54,412
Crop sales	14,168	53,434	13,150	52,244
Livestock sales	10,165	1,663	2,437	706
Government payments	172	526	70	292
Other farm-related income	1,163	3,389	894	1,179
Less: Cash expenses	19,259	40,229	13,029	38,030
Variable	15,093	32,110	9,964	31,049
Livestock purchases	249	149	60	34
Feed	3,392	223	1,198	164
Other livestock expenses	394	33	[illegible]	36
Seed and plants	698	[illegible]	[illegible]	[illegible]
Fertilizer and chemicals	[illegible]	[illegible]	[illegible]	[illegible]
Labor	[illegible]	7,816	[illegible]	[illegible]
Fuels and oils	1,032	5,364	[illegible]	[illegible]
Repairs and maintenance	1,903	7,833	1,323	3,851
Machine-hire and custom work	419	859	159	927
Utilities	635	1,656	557	1,507
Other variable expenses	847	1,254	584	1,152
Fixed	[illegible]	8,118	3,064	6,981
Real estate, property taxes	605	[illegible]	[illegible]	789
Interest	1,856	[illegible]	[illegible]	[illegible]
Insurance [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Equals: Net cash farm income	[illegible]	[illegible]	[illegible]	[illegible]
Less:				
Depreciation	[illegible]	[illegible]	[illegible]	[illegible]
Labor, noncash benefits	[illegible]	[illegible]	[illegible]	[illegible]
Plus:				
Value of inventory change	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Tobacco accounts for over 50 percent of [illegible]

Tobacco Costs of Production

[illegible] of the costs of producing the 1994 tobacco crop are available at the national level only. These [illegible] average [illegible] variable cash costs of $2,446.04 for burley and [illegible] for flue-cured. While fuel and curing expenses are much higher for flue-cured tobacco, burley's high post-harvest labor costs are more than offsetting. Net returns over variable cash costs averaged [illegible] for burley tobacco and [illegible] for flue-cured tobacco. [illegible] returns averaged [illegible] for burley and positive $[illegible] for flue-cured.

negative?

U.S. costs of production for tobacco, 1994

	Burley	Flue-cured
	Dollars per acre	
Cash receipts	4,293.90	4,089.80
Variable Costs:		
Labor	1,409.06	705.17
Noncash benefits	15.31	23.79
Fertilizer and lime	243.89	296.27
Plant bed materials	76.25	45.49
Chemicals	92.78	212.80
Custom operations	[illegible]	[illegible]
Fuel and lubrication	[illegible]	55.26
Curing and heating fuel	[illegible]	[illegible]
Repairs	103.62	140.33
Marketing (burley) & warehousing (flue-cured)	225.43	108.38
No-net-cost & marketing assessment	105.90	72.60
Inspection and grading fee	16.38	16.94
Interest	19.08	21.13
Other	21.23	3.74
Total variable costs	2,446.04	1,884.68
Machinery and farm ownership costs:		
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
Other Costs:		
General farm overhead	[illegible]	[illegible]
Land and quota charge	[illegible]	[illegible]
[illegible] including land and quota	[illegible]	[illegible]
Returns:		
[illegible] over variable cash costs	[illegible]	[illegible]
[illegible] total costs	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Costs and Returns for Selected Vegetables and Field Crops

Tobacco growers are currently growing a mix of other field and specialty crops such as corn, soybeans, cotton, and wheat. Between 1 and 2 percent of FCRS farms with tobacco reported harvesting vegetables. Data from North Carolina are available that allow comparisons among costs and returns for major vegetable crops. Kentucky data were not available.

Except for tomatoes, other vegetable crops are more likely to be grown in flue-cured tobacco areas than in burley areas. Returns vary widely from year to year, depending on growing conditions and market conditions in a specific season.

The gross returns are based on yields and prices reported by NASS for 1994. Cash variable costs are based on enterprise budget estimates developed at the North Carolina State University and have been adjusted to represent average production practices for 1994. The net returns represent earnings to land, labor, capital, machinery, overhead, and management.

Although some tobacco producers could produce vegetables on tobacco acreage, the majority of any displaced tobacco land would likely go into field crops. The demand for vegetables is relatively inelastic, meaning that even small increases in the quantity results in relatively large price declines. Because the vegetable acreage is so small relative to tobacco, a small percentage shift of tobacco land would represent a substantial increase in vegetable acreage. This would lower prices and reduce vegetable returns.

In contrast, tobacco acreage represents a relative small percentage of field crop acreage. Consequently, a relative large shift could occur from tobacco to field crops without having a noticeable impact on either field crop prices or returns.

[redacted] Average costs and returns for selected vegetable and field crops, [redacted] Carolina, 1994

	[redacted]	[redacted] expenses	Above cash [redacted] expenses
	Dollars per acre		
Sweet potatoes	1,627.50	1,118.92	508.58
Cucumbers, Processing	992.00	1,041.62	-95.63
Cucumbers, Fresh market	440.00	466.61	-26.61
Bell peppers, Fresh market	717.50	864.81	-62.56
Snap beans, Fresh market	983.50	600.06	383.44
Watermelon	675.00	485.86	190.63
Cabbage, Fresh market	1,900.00	1,016.36	883.64
Tomatoes, Fresh market	4,332.00	3,735.50	596.50
Corn (Southeast region)	278.20	157.86	120.34
Soybeans (Southeast region)	170.91	95.10	75.81
Cotton (Southeast region)	423.60	291.70	131.90
Flue-cured tobacco	4,069.80	1,864.68	2,205.12

1 Average price times average yield per acre. Source: USDA, NASS.
2 Vegetable expenses are based on Extension enterprise budgets from North Carolina State University. Budgets modified to represent average production practices for 1994. Field crop [redacted] from USDA's costs of production [redacted].

II. HOW THE GOVERNMENT PROGRAM WORKS

- Most U.S. tobacco production has been under a price support and supply control program since the 1930s. Producers are guaranteed higher than market equilibrium prices in exchange for limiting marketings through marketing quotas.

- Quota levels have generally declined since the mid-1970s, following the decline in marketings. Quota levels are up for both flue-cured and burley tobacco in 1997, reflecting increased marketings and reduced stock levels in 1996.

- A 1991 survey of farms showed that only 7% of flue-cured operators owned the entire tobacco quota they produced; about 21% rented all their quota, and 72% owned and rented quota. The percentage of burley farmers owning all of their quota is higher, reflecting the more restrictive rules governing burley transfer and leasing.

- In response to surging tobacco imports (which increased nearly 250% from 1990- 93), Congress enacted a provision in the Omnibus Budget Reconciliation Act (OBRA) of 1993 which required US-manufactured cigarettes to contain 75% US-grown tobacco. As part of the Uruguay Round implementing legislation, domestic content provisions were replaced by the establishment of a tariff rate quota for certain imported tobacco, primarily flue-cured and burley.

- The OBRA of 1990 imposed an assessment of 0.5% of the national loan rate on all growers; it expired in 1995, but the OBRA of 1993 extended it through 1998.

- The "No-Net-Cost Tobacco Program Act of 1982" required that, to be eligible for price support, tobacco producers 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.

III. EXPECTED EFFECTS OF THE SETTLEMENT ON FARMERS

- Based on a short run elasticity of -0.4, a 25 cent per pack increase in retail price would likely result in a 5.2% decline in volume consumed. A 50 cent per pack price increase would lead to a 10.5% decline in volume.

- Cigarette exports are not restricted by the settlement and will likely continue their upward trend

- A 25-cent increase in cigarette prices is estimated to result in a decline in the use of flue-cured and burley tobacco for domestic cigarette consumption of 10% and 8.4 %, respectively, by 2006.

- This decline will be partially offset by the use of domestic tobacco for increased cigarette production for export.

- Total flue-cured and burley marketings will likely fall by 6.4% and 7.5%, respectively, by 2006.

- A 50-cent increase is estimated to result in a decline in total flue-cured and burley marketings of 8.1% and 9.8%, respectively.

IV. SOME PROPOSALS

Special Article

The Tobacco Program—A Summary and Update

by

Tom Capehart

Abstract: Most tobacco production in the United States has been under a price support-production control program since the early 1930's. A number of changes have been made in the program, especially during the last 15 years. Changes in the program from the early 1930's are summarized and more recent changes evaluated in this article.

Keywords: Tobacco, tobacco program, price support.

1930 to 1981

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.

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 them. With two-thirds or more of tobacco growers voting approval of marketing quotas for their kind of tobacco, growers received price support up to 75 percent of parity. Parity price calculations used 1910-14 as the base period for most commodities, but August 1919-July 1929 was designated for tobacco.

Despite many legislative changes since 1938, the authority to provide an adequate and balanced flow of tobacco through the marketing quota continues. The program is available for all kinds of tobacco except shade-grown wrapper and Perique. Excluding 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 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, which 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 1959 indexes.

Under the loan program, a support price (loan rate) is established for each grade of tobacco. If the buyers are not willing to bid above 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 Commodity Credit Corporation (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 warehouse 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 substantially changed the program. Their adoption was impelled by a number of pressing concerns. Health groups and some members of Congress were concerned that the U.S. Treasury made outlays on a commodity statistically associated with various illnesses. Another concern among some grow-

ers 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." The 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 actual 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. The law also permitted the Secretary of Agriculture to reduce burley quotas as much as 10 percent in any year, if necessary, to control overproduction; previously, the maximum reduction permitted was 5 percent.

The third law made further changes in the tobacco program, as follows:

- Flue-cured 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.
- The lease and transfer of flue-cured tobacco quota was abolished beginning in 1987.
- Imported tobacco, except for Oriental and cigar tobacco, must be inspected for grade and quality to the extent feasible. An amendment to the Food Security Act of 1985 required that imported tobacco be tested for pesticide residues similar to testing required for domestically grown leaf.
- Beginning in 1986, the law required forfeiture of any flue-cured quotas assigned to a farm on which tobacco had not been planted (or considered planted) during at least 2 of the 3 previous years.
- The last permitted announcement date for flue-cured tobacco quota 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. These problems were addressed by the Consolidated Omnibus Budget Reconciliation Act of 1985. The Act, enacted in April 1986, affected the tobacco control programs as follows:

- Beginning in 1987, after being lowered in 1985 for burley and 1986 for flue-cured, 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. The procedure for setting price supports for any kind of tobacco other than flue-cured and burley was unchanged.
- 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 effective quota or a minimum of 100 million pounds of flue-cured and 50 million pounds of burley). Quota reductions were limited from 1986 to 1993. (The limit was extended to 1996 in subsequent legislation.)
- 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.
- 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.
- 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.
- 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. Any manufacturer that fails to purchase at least 90 percent of the tobacco it said it would purchase is subject to penalties.
- Purchasers of flue-cured and burley tobacco pay the same amount to the associations as producers, to the extent practicable.
- Loan stocks of 1976-84 crops were sold at discount prices over a 5-year period for burley and 8 years for flue-cured.

The Agricultural Reconciliation Act of 1987 made further changes in the tobacco program. The most important change permitted limited lease and transfer of flue-cured tobacco quotas under disaster conditions. The law also reduced effective price support levels in 1988 and 1989.

1988 to 1994

The Drought Assistance Act of 1988 provided assistance to tobacco producers if their crop was lowered more than 35 percent by drought, hail, excessive moisture, or related conditions. The Disaster Assistance Act of 1989 provided payments if tobacco production was reduced more than 40 percent because of damaging weather or related conditions. For producers who obtained crop insurance in 1989 under the Federal Crop Insurance Act, disaster payments were available for losses exceeding 35 percent of expected production with average yields.

Three pieces of legislation affecting tobacco were enacted in November 1990. Under the Omnibus Budget Reconciliation Act of 1990 for 1991-95 crop years, tobacco growers and purchasers of tobacco under marketing quota will annually be assessed 1 percent of the national loan rate on all marketings (0.5 percent each for growers and purchasers). The assessment is targeted to reduce the budget deficit. The marketing assessment has been extended through 1998.

The Food, Agriculture, Conservation, and Trade Act of 1990 included the following provisions:

- The Act authorizes the Secretary of Agriculture to invest trust fund reserves from the imported-tobacco inspection account in insured, or fully collateralized, interest bearing accounts, or authorize the Secretary of the Treasury to invest these funds in U.S. Government debt instruments. Fees, charges, and interest earned from the investment of such funds is added to the applicable appropriation account and available without fiscal year limitation. Interest earned is used to offset imported tobacco inspection fees.

The Farm Poundage Quota Revisions Act of 1990 was designed to increase utilization of burley quota. Major features of the law are:

- The sales of burley tobacco quota within counties was permitted beginning with the 1991 crop year. The buyer must be an active burley grower and the purchase is annually limited to no more than 30 percent of the existing quota of the buyer's farm, or 20,000 pounds, whichever is greater. Sales of poundage quotas have been permitted for flue-cured tobacco since 1982.
- A farm that purchases quota is not permitted to sell any quota within 3 years of the last year of purchase. The total tobacco acreage permitted on a receiving farm cannot exceed 50 percent of the cropland in the farm.
- Quota holders are required to lease, or attempt to grow, their quota 2 out of 3 years or forfeit the quota. This replaces the 1- out of 5-year plan.
- Divisions of farm quota cannot be less than 1,000 pounds (except when the division is among family members or pursuant to probate proceedings).
- The amount that could be leased to a receiving farm was increased from 15,000 to 30,000 pounds, thereby permitting individual farms to lease in the larger amount.
- Lease and transfer across county lines was authorized in Tennessee. Tennessee burley producers approved such transfer in a Statewide referendum in January 1991.

In December 1991, legislation was enacted to correct technical errors and clarify various provisions of the 1990 Food, Agriculture, Conservation, and Trade Act. It contained a number of provisions, including the repeal of the Tobacco Seed and Plant Exportation Act. This repeal lifted constraints on U.S. export of tobacco seeds and plants. Another provision permits lease and transfer of burley quota across county lines in Virginia. However, growers did not approve State lease and transfer in a Statewide referendum. Finally, the Tobacco Adjustment Act of 1983 was amended to exempt reporting requirements for tobacco used in cigars, pipes, and chewing tobacco and snuff in retail packages.

In October 1992, an amendment to the Agricultural Adjustment Act of 1938 required that sale or lease of allotments between farms by producers of fire-cured, dark air-cured, and Virginia sun-cured tobacco be approved on an acre-for-acre basis. Previously, the law required a reduction in the allotment transferred when the normal yield for the farm getting the allotment exceeded by more than 10 percent the normal yield of the farm releasing the allotment.

The Omnibus Budget Reconciliation Act (OBRA) of 1993 (P.L. 103-66) contained a provision that required U.S. manufactured cigarettes to contain at least 75 percent domestically grown tobacco during each calendar year, whether for domestic consumption or export. Penalties were assessed manufacturers that exceeded the maximum allowed foreign content. The limit and penalties could be waived during natural disasters or because of low reserve stocks.

In addition to the minimum content requirement, the OBRA of 1993 legislation imposes budget-deficit and no-net-cost assessments on importers. The rate for the budget deficit assessment is the same as for purchasers of domestic leaf, and the rate for the no-net-cost assessment is equal to the combined rates of fees collected from producers and purchasers of U.S.-grown flue-cured and burley leaf. Also, fees for inspecting all imported tobacco will be comparable with fees and charges fixed and collected for services provided in connection with tobacco produced in the United States.

U.S. growers and purchasers of domestic leaf have paid special assessments equal to 1 percent of the average price sup-

port since 1991 to help reduce the Federal budget deficit. The new budget deficit assessment on importers applies to the 1994-98 crops and applies to all tobacco imported, including Oriental. Failure to remit the budget deficit fee will result in a penalty equal to 37.5 percent of the sum of the average price of flue-cured and burley tobacco for the immediately preceding year on the quantity of tobacco on which the failure occurs.

The no-net-cost assessments cover projected losses in operating the tobacco price-support program. U.S. flue-cured and burley growers have paid no-net-cost fees since 1982, while purchasers have paid fees on U.S.-grown tobacco since 1986. Beginning in 1994, no-net-cost assessments are being levied on importers of flue-cured and burley tobacco. Noncompliance by importers to no-net-cost assessments results in a penalty equal to the average price of the tobacco involved for the preceding year times the quantity of tobacco which the failure occurs.

The new act extended to 1996 a provision in previous law that limited the reduction in the national marketing quota for flue-cured and burley tobacco to no more than 10 percent of the amount of each quota in the preceding year. When determining the marketing quota for the 1995 and 1996 crop years, the Secretary of Agriculture can waive the 10 percent quota reduction limit if loan stocks exceed 150 percent of the reserve stock level.

1995 to Present

President Clinton proclaimed a tariff-rate quota (TRQ), effective September 13, 1995, for certain imported tobacco, primarily flue-cured and burley. The proclamation also eliminated duties on cigar wrapper, binder, filler, and Oriental tobacco. The TRQ replaced the domestic content rule (OBRA) of 1993, which was determined to be inconsistent with the General Agreement on Tariffs and Trade (GATT). GATT implementing legislation contained provisions ending the domestic content provisions once the President proclaimed a TRQ on certain types of tobaccos. The TRQ is the result of negotiations which conform to existing GATT requirements. Negotiations with supplier countries established a tariff-rate quota for imported flue-cured and burley tobacco as a GATT/WTO-consistent alternative.

The TRQ places limitations on the quantities imported for consumption. Because of superseding agreements, Canada, Mexico, and Israel are not included under the quantitative restrictions. Imports above quota levels are subject to a 350-percent ad valorem duty. However, most of the duty may be refunded if the same tobacco imported is used to manufacture cigarettes that are exported. Imports under nine harmonized tariff subheadings during the period September 13 to September 12 of any year are limited to the following quantities:

	Million pounds (declared weight)
Argentina[1]	26.5
Brazil	176.8
Chile	6.1
Guatemala[2]	19.6
EU-15	22.0
Malawi	26.5
Philippines	6.8
Thailand	15.4
Zimbabwe	26.5
Other	6.6
Total	332.6

Summary and Conclusions

Many changes have been made to the Federal tobacco price support production control program—especially during the last 15 years. Changes have been made to increase the U.S. competitive position in world markets and significantly lower potential taxpayer costs for operating the program. Even though taxpayer costs are relatively small, the association between use of tobacco products and various diseases has spawned the introduction in Congress of several bills to eliminate the price support program.

The implementation of the tariff-rate quota has brought the United States in line with the GATT/Uruguay Round accord. Imports have increased under the less restrictive TRQ and are expected to continue at higher levels than were under the domestic content rule. However, U.S. growers may benefit from increased exports of leaf, and cigarette companies will not have the incentive to move production offshore that existed under the domestic content rule.

[1] Argentina's quota will decline to 24.3 million pounds on September 13, 1998 and to 23.7 million pounds on September 13, 1999.

[2] Guatemala's quota will increase annually beginning September 13, 1996 to 19.6 million, 20.4 million, 21.2 million, and 22 million pounds by September 13, 1999.

DRAFT

EFFECTS OF THE PROPOSED SETTLEMENT ON TOBACCO PRODUCERS

Background

Total U.S. cigarette output was a record 760 billion cigarettes in 1996 (figure 1). Cigarette output rose steadily throughout most of this century and reflected the steady increase in domestic cigarette consumption. Domestic cigarette disappearance peaked at 640 billion cigarettes in 1981 (figure 2). Between 1981 and 1996, domestic cigarette consumption fell by over 150 billion cigarettes. U.S. cigarette output initially reflected this decline, but by the early 1990s output had rebounded reflecting the increase in cigarette exports. In 1996, the United States exported a record 260 billion cigarettes, with the European Union and Japan accounting for over half of the U.S. export market.

Tobacco is produced in 21 states, with 65 percent of the acreage in Kentucky and North Carolina. Several different types and kinds of tobacco are grown, but flue-cured and barley--the primary cigarette tobaccos--account for about 94 percent of total production. Tobacco is usually the sixth largest cash crop, behind corn, soybeans, wheat, hay and cotton. There were an estimated 124,000 farms that grew tobacco in 1992. The average farm grew about 6.7 acres of tobacco.

Cigarettes account for about 90 percent of the tobacco used in the United States. U.S. cigarette manufacturers used an estimated 1.44 billion pounds of tobacco in cigarettes in 1995. Domestic burley accounted for about 27 percent of the tobacco used in cigarettes; domestic flue-cured, 37 percent; Maryland, 1 percent; and imported, the remaining 35 percent. Since the mid-1970s, the shares of both U.S. flue-cured and burley have declined. U.S. tobacco production and marketings have declined as a result (figures 3, 4, and 5).

The decline has been offset by a shift to an increasing share of imported tobacco in U.S. cigarettes (figure 6). U.S. leaf imports for consumption climbed from 413 million pounds in 1990 to more than 1 billion pounds in 1993. The main reason for this surge was the rising popularity in the United States and abroad for low and mid-priced brands. To meet this demand, manufactures imported an increasing amount of lower cost foreign tobacco. In response to surging tobacco imports, Congress enacted a provision in the Omnibus Budget Reconciliation Act of 1993 which required U.S.-manufactured cigarettes to contain 75 percent U.S.-grown tobacco. As part of the Uruguay Round implementing legislation, domestic content provisions were replaced by the establishment of a tariff rate quota for certain imported tobacco, primarily flue-cured and burley. Imports of cigarette leaf tobaccos (excluding Oriental) which exceed predetermined quota are now subject to an import duty of 350 percent ad valorem, although a draw-back provision allows most of the duty to be refunded if the imported leaf is re-exported in the form of manufactured tobacco or cigarettes.

Most U.S. tobacco production has been under a price support and supply control program since the 1930s. Producers are guaranteed higher than market equilibrium prices in exchange for limiting marketings through marketing quotas. Support prices for burly and flue-cured tobacco are set annually based on the previous year's level, adjusted by changes in the 5-year moving

average of prices and in the cost of production index (figure 7). Flue-cured and burley marketing quotas are based on 1) intended purchases by cigarette manufactures, 2) average annual exports for the 3 previous years, and 3) the amount of tobacco needed to attain a specified reserve level. Quota levels have generally trended downward since the mid-1970s, following the decline in marketings (figure 8). Quota levels are up for both flue-cured and burley tobacco in 1997, reflecting increased marketings and reduced stock levels in 1996.

The higher tobacco prices resulting from the program have created values for marketing quota rights. Because rules governing quota transfer are highly restrictive, these values have been capitalized into land values. Currently, quota rents are approximately 50 to 60 cents per pound. A 1991 survey of farms showed that only 7 percent of the flue-cured operators owned the entire tobacco quota they produced, about 21 percent rented all their quota, and the remaining 72 percent owned and rented quota. The percent of burley quota owners who produce all of their quota is typically higher reflecting the more restrictive rules governing burley transfer and leasing.

The "No-Net-Cost Tobacco Program Act of 1982" 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. Further changes in tobacco legislation in 1986 extended the no-net-cost provisions to tobacco purchasers.

Estimated Effects of the Settlement on Cigarette Consumption

The settlement between cigarette manufacturers and the State Attorneys General will likely result in an increase in the retail price of cigarettes on the order of 25 to 50 cents per pack of 20 cigarettes. This price increase stems from the lump-sum and penalty payments which will be made by cigarette manufacturers as part of the agreement. The effects of the penalties will be lessened somewhat by rebates based on declining adult consumption. If the price increases result in lower adult consumption compared with 1996, a rebate is paid. The payment to be made is equal to the ratio of that year's adult consumption to 1996 adult consumption times the penalty. For example, a 100 million decline in cigarette consumption would result in a penalty of $6.7 billion instead of $8.5 billion for the first year.

The following analysis assume a one-time change in price and estimates the effect of the price change on cigarette consumption. The effects of the price change on cigarette consumption are additive with the long-term downward trend in domestic cigarette consumption. Demand effects are based on a short-run elasticity of domestic demand for cigarettes of -0.4.

The total per-pack-equivalent of the $18.5 billion penalty to be paid the first year (1997) is estimated to be about 75-80 cents per pack. It is unlikely, however, that the full penalty will be transmitted to domestic consumers in the form of a price increase. Cigarette manufacturers have

shown in the past they are capable of absorbing relatively large price decreases. For example, in November 1993, wholesale premium cigarette prices declined 30 percent as manufacturers moved to regain market share from discount brands. The penalty payments are tax-deductible expenses, so the cigarette manufacturers will not have to bear the full burden. In addition, manufacturers will receive a partial rebate of the penalty for any decline in adult consumption from the 1996 level (as described above). For the purposes of this analysis, 25 and 50 cent per pack price increases are evaluated.

A 25-cent increase in the price of a pack of cigarettes would raise the price from the current $1.91 per pack to $2.16 per pack, a 13.1 percent increase. A 50-cent increase in the price of cigarettes would raise the retail price to $2.41 cents per pack, an increase of 26.2 percent. The price increases are assumed to be a one-time event, even though it is likely that the increases would be gradually phased in.

Based on a short run elasticity of -0.4, a 13.1-percent gain (25 cents per pack) in the retail price of cigarettes would likely result in a 5.2 percent decline in volume consumed. Likewise, a 50 cent rise in the retail price would lead to a 10.5 percent decline in volume.

Cigarette exports are not restricted by the settlement and will likely continue their upward trend. Cigarette exports could increase above baseline levels, particularly if U.S. manufacturers seek to maintain near-current production levels to efficiently utilize manufacturing capacity. Assuming the agreement would enter into effect in 1997 and prices rose 25 cents per pack, total 1998 disappearance (domestic consumption plus exports) of U.S.-produced cigarettes would decline 2.5 percent--from 731 billion to 713 billion pieces. Under the 50-cent increase scenario, 1998 disappearance would fall 6 percent to 689 billion pieces. By 2006, disappearance of U.S. produced cigarettes would fall to about 600 billion cigarettes with a 25-cent increase, about 9 percent below expected disappearance of 660 billion pieces in the current baseline. With a 50-cent increase, consumption in 2006 is expected to be 580 billion cigarettes, 12 percent less than the level of cigarette disappearance expected in 2006 without the settlement.

Implications for Tobacco Producers

Decreases in cigarette disappearance will primarily affect domestic tobacco production. First, the duty draw-back provisions of the tariff rate quota will mean that any growth in cigarette exports will likely increase imports of lower-cost foreign tobacco. Second, U.S. tobacco leaf exports are not likely to be affected because prices for domestic tobacco will remain above the support price.

A 25-cent increase in cigarette prices is estimated to result in a decline in the use of flue-cured and burley tobacco for domestic cigarette consumption of 10 percent and 8.4 percent, respectively, by 2006. Some of the decline will be offset by the use of domestic tobacco for increased cigarette production for export. Total flue-cured and burley marketings will likely fall by 6.4 percent and

7.5 percent, respectively, by 2006 (figures 9 and 10). A 50-cent increase in cigarette prices is estimated to result in a decline in total flue-cured and burley marketings of 8.1 percent and 9.8 percent, respectively, by 2006.

Because of the relatively high tobacco loan rates, decreases in flue-cured and burley use will likely lead to a small decrease in market prices, at least in the short term. Over the long run, support prices will fall, reflecting the adjustment factors based on the 5-year moving average market price. By 2006, average prices paid to flue-cured and burley growers are expected to drop by about 1 percent assuming a 25 cent increase in cigarette price and by about 3 percent assuming a 50-cent increase (figures 11 and 12). Assuming no changes in the tobacco program, 2006 quota levels for flue-cured tobacco will likely fall below baseline levels by about 6 percent assuming a 25-cent increase in cigarette prices and by 8 percent assuming a 50-cent increase. Quota levels for burley are estimated to fall by 7.5 percent for a 25-cent per pack increase and almost 10 percent for a 50-cent per pack increase.

Figure 1

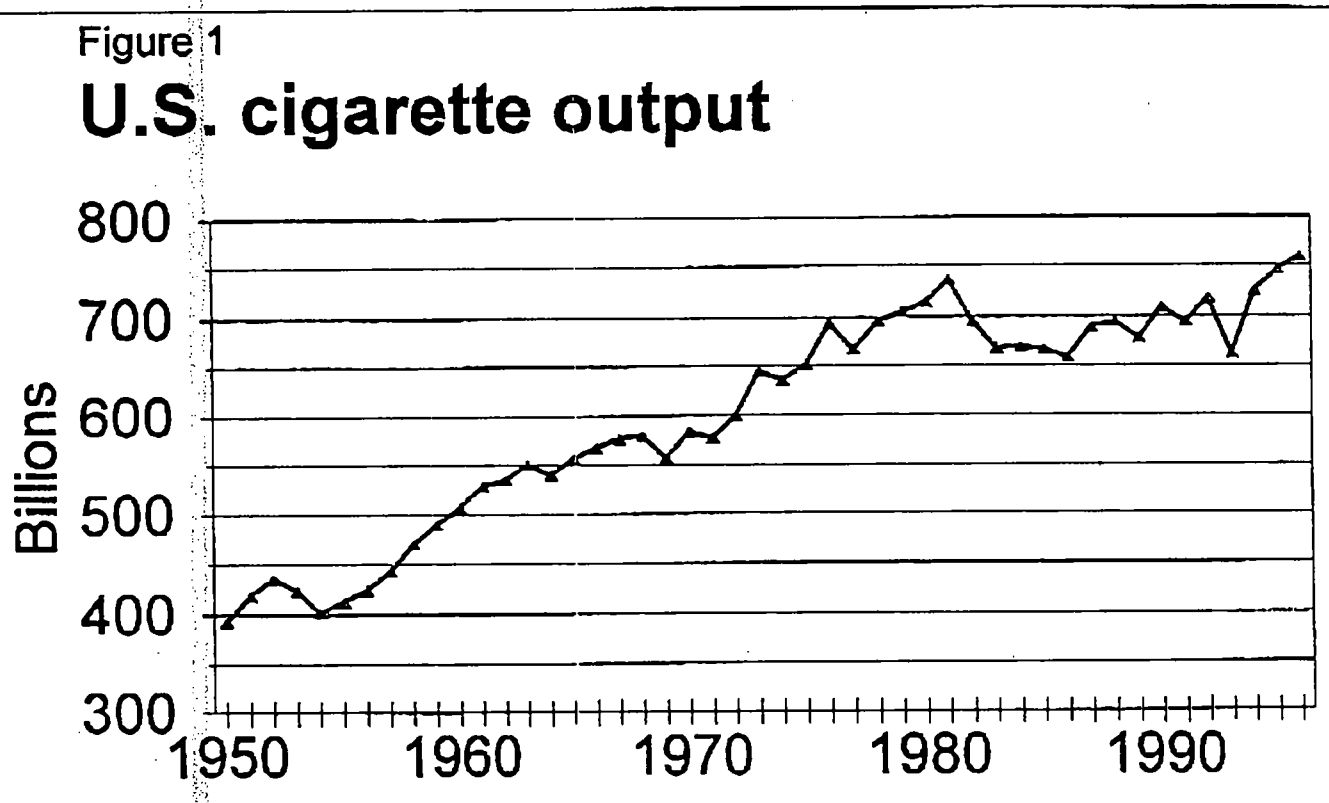

U.S. cigarette output
Billions
800
700
600
500
400
300
1950
1960
1970
1980
1990

Figure 2

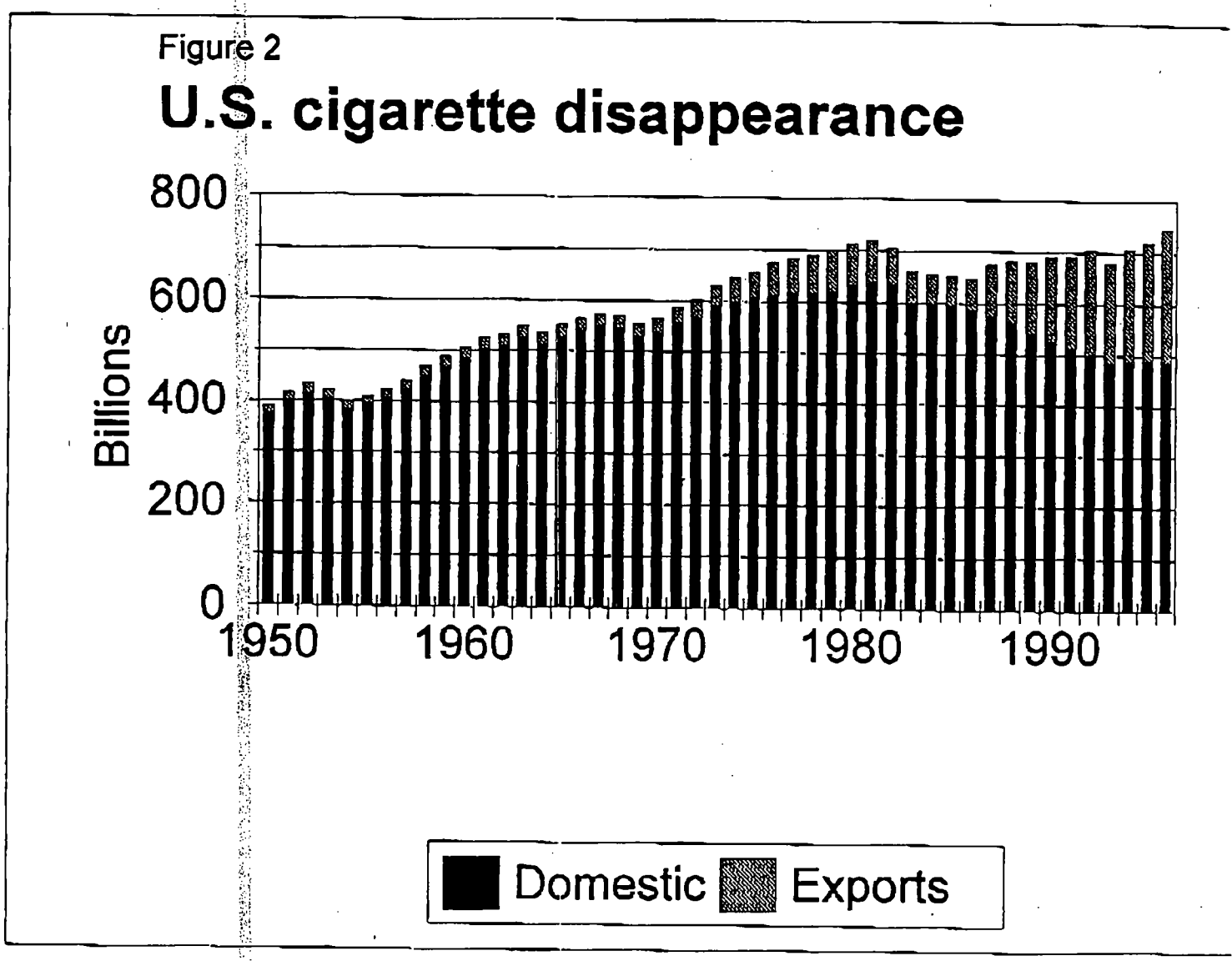

U.S. cigarette disappearance
800
600
400
200
0
Billions
1950
1960
1970
1980
1990
Domestic
Exports

Figure 3

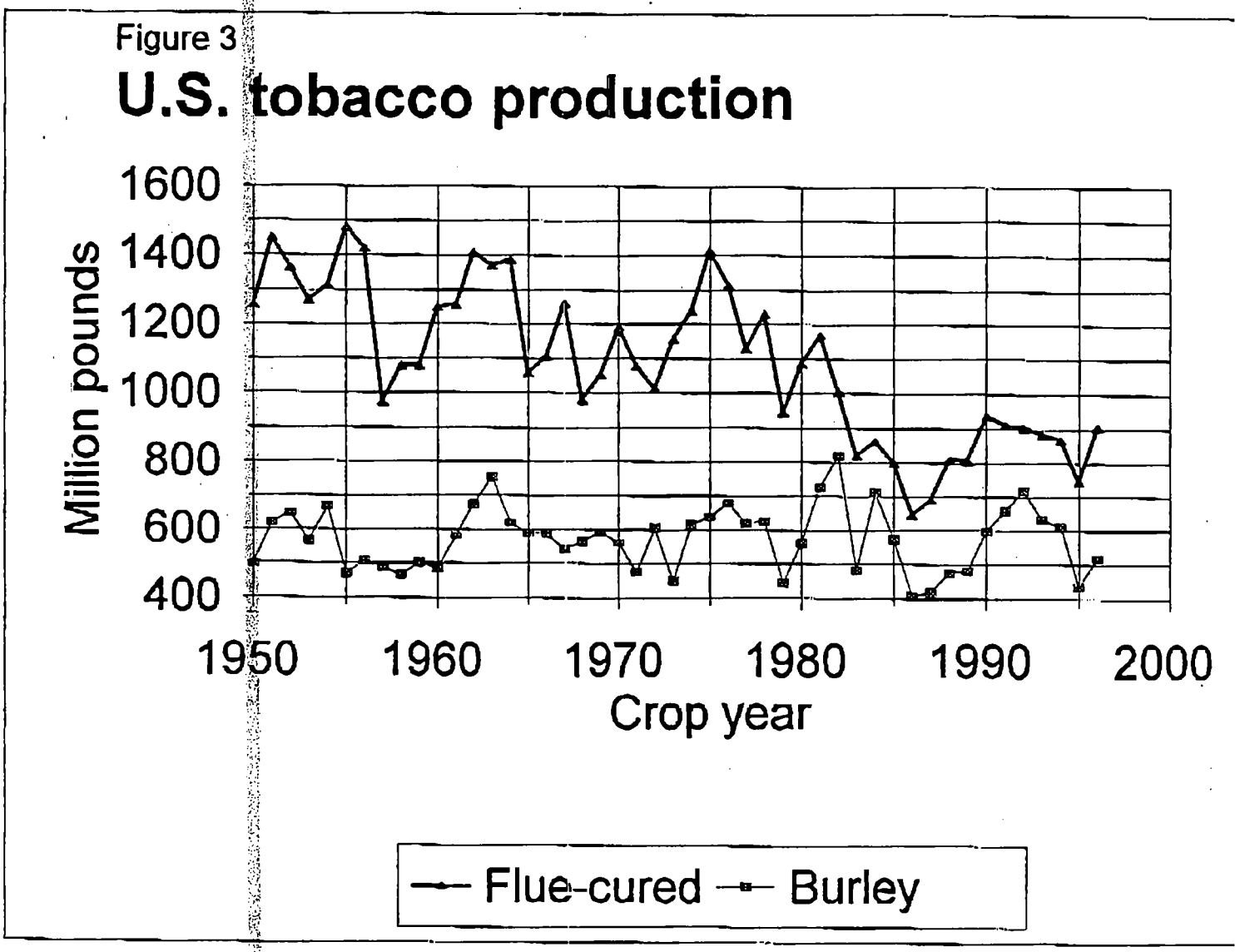

U.S. tobacco production
Million pounds
1600
1400
1200
1000
800
600
400
1950
1960
1970
1980
1990
2000
Crop year
Flue-cured
Burley

Figure 4

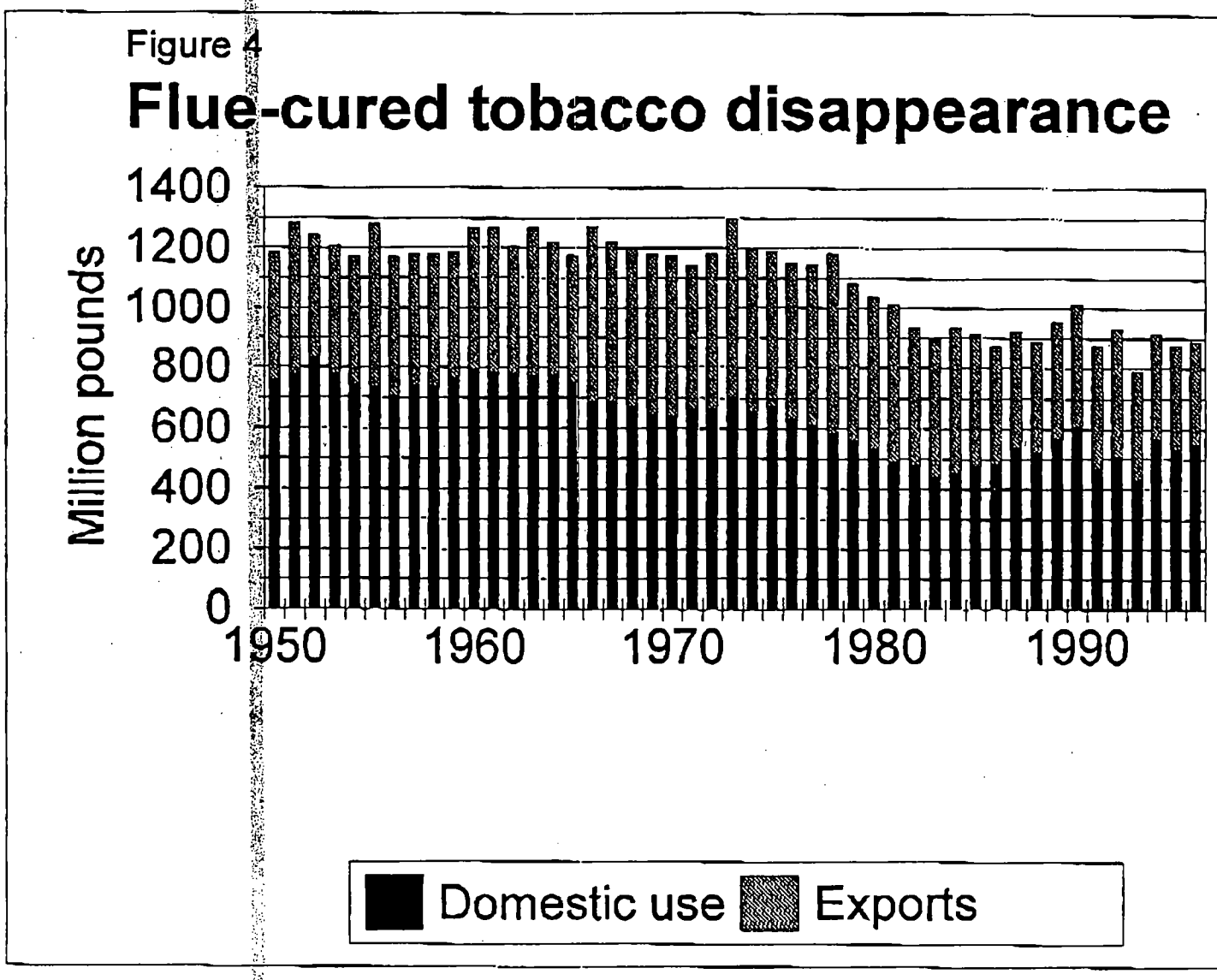

Flue-cured tobacco disappearance
Million pounds
1400
1200
1000
800
600
400
200
0
1950
1960
1970
1980
1990
Domestic use
Exports

Figure 5

Burley tobacco disappearance

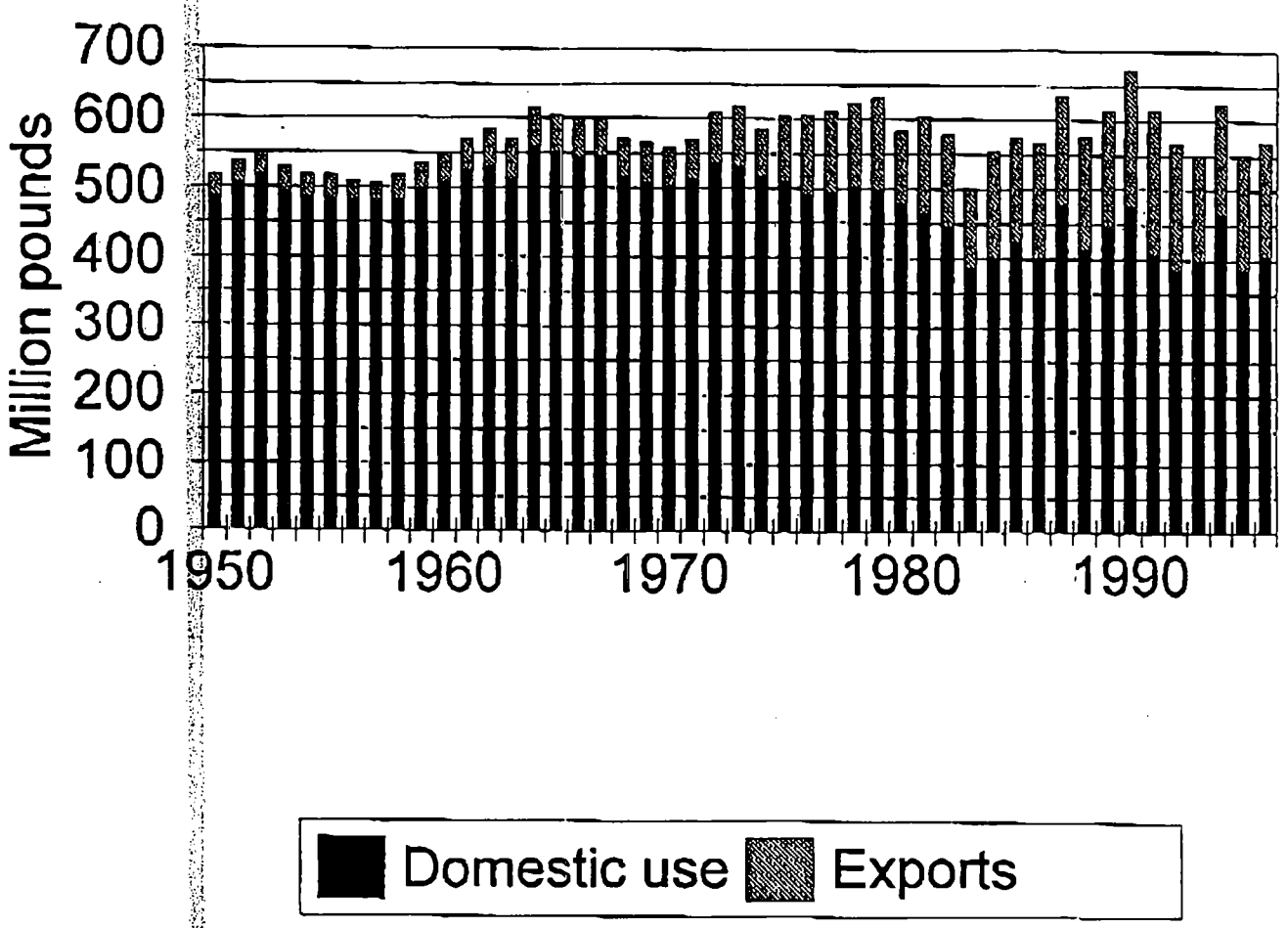


Figure 6

U.S. tobacco imports

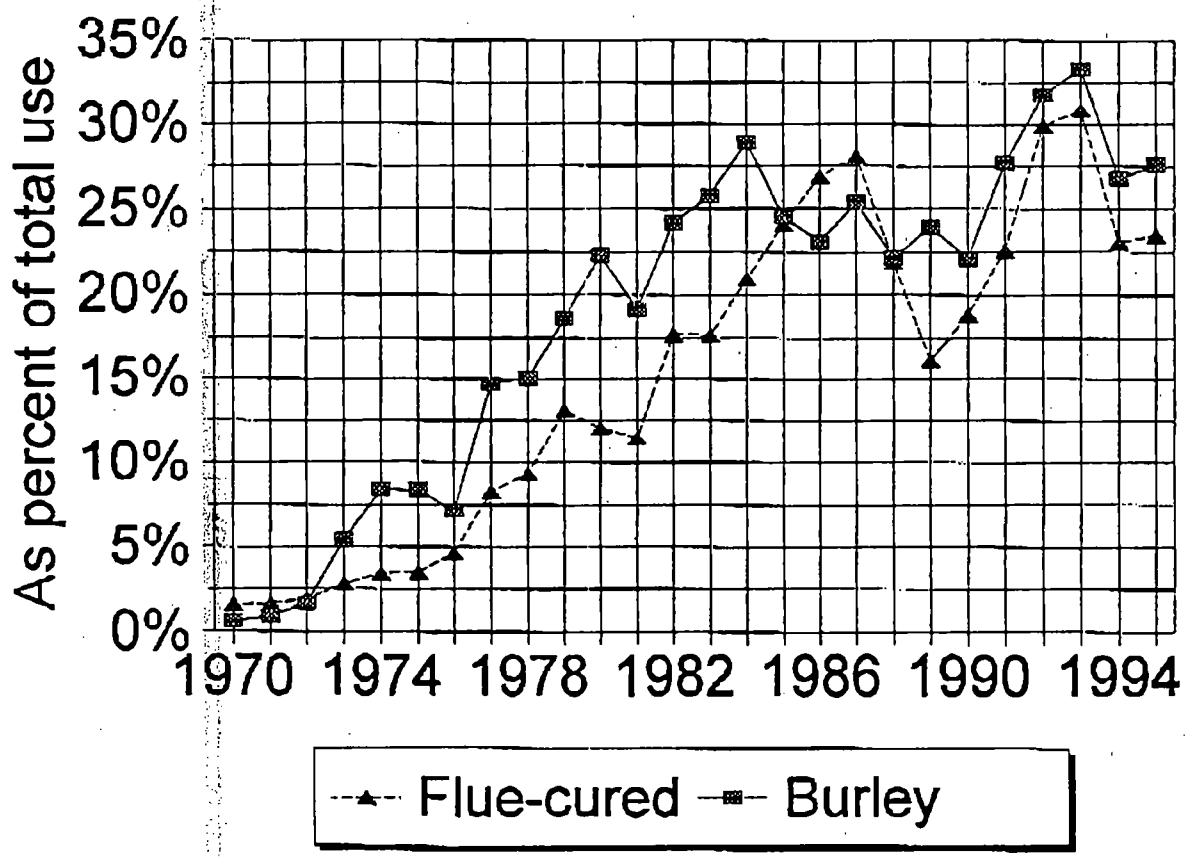


Figure 7

Tobacco support rates

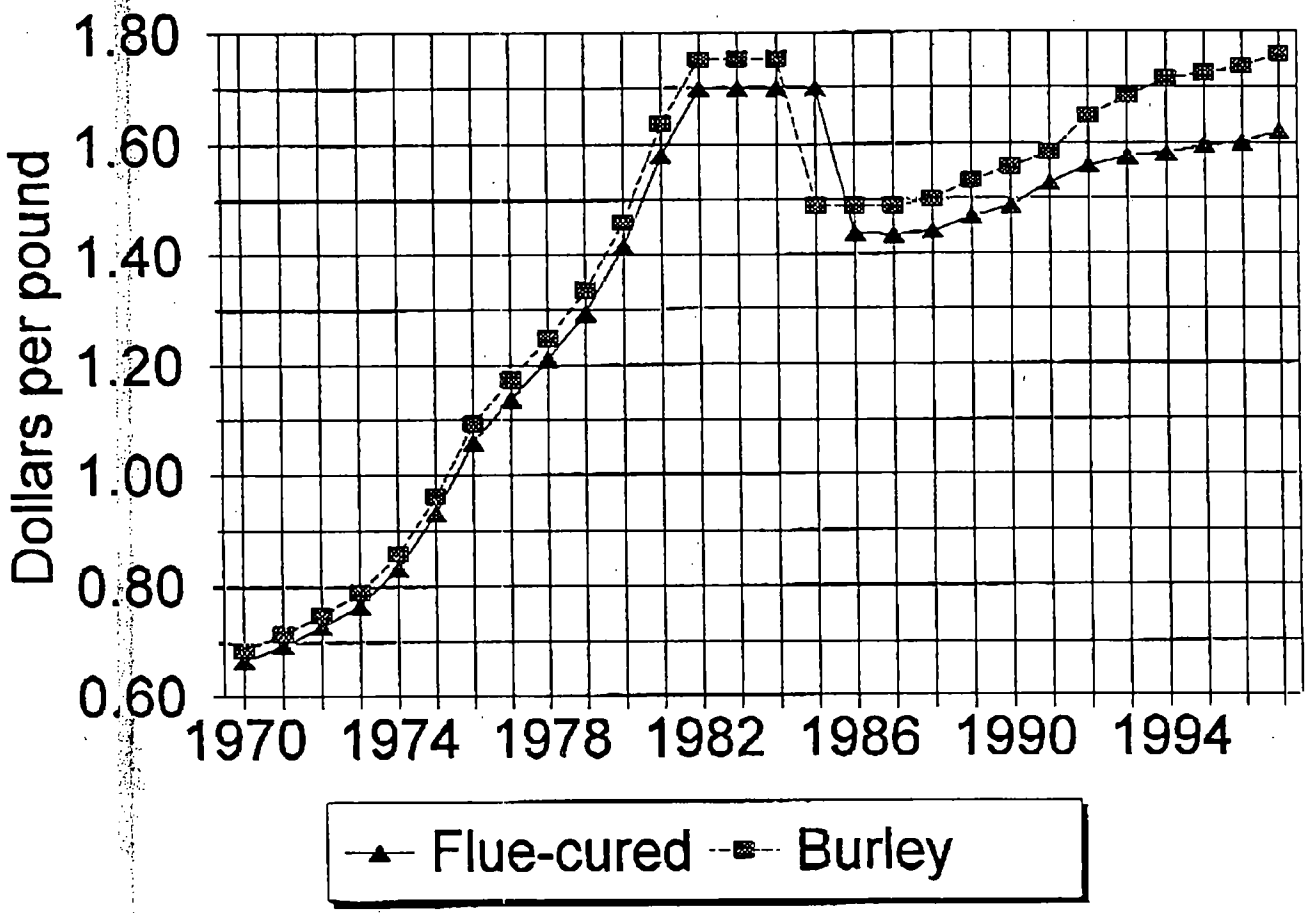


Figure 8

Tobacco marketing quotas

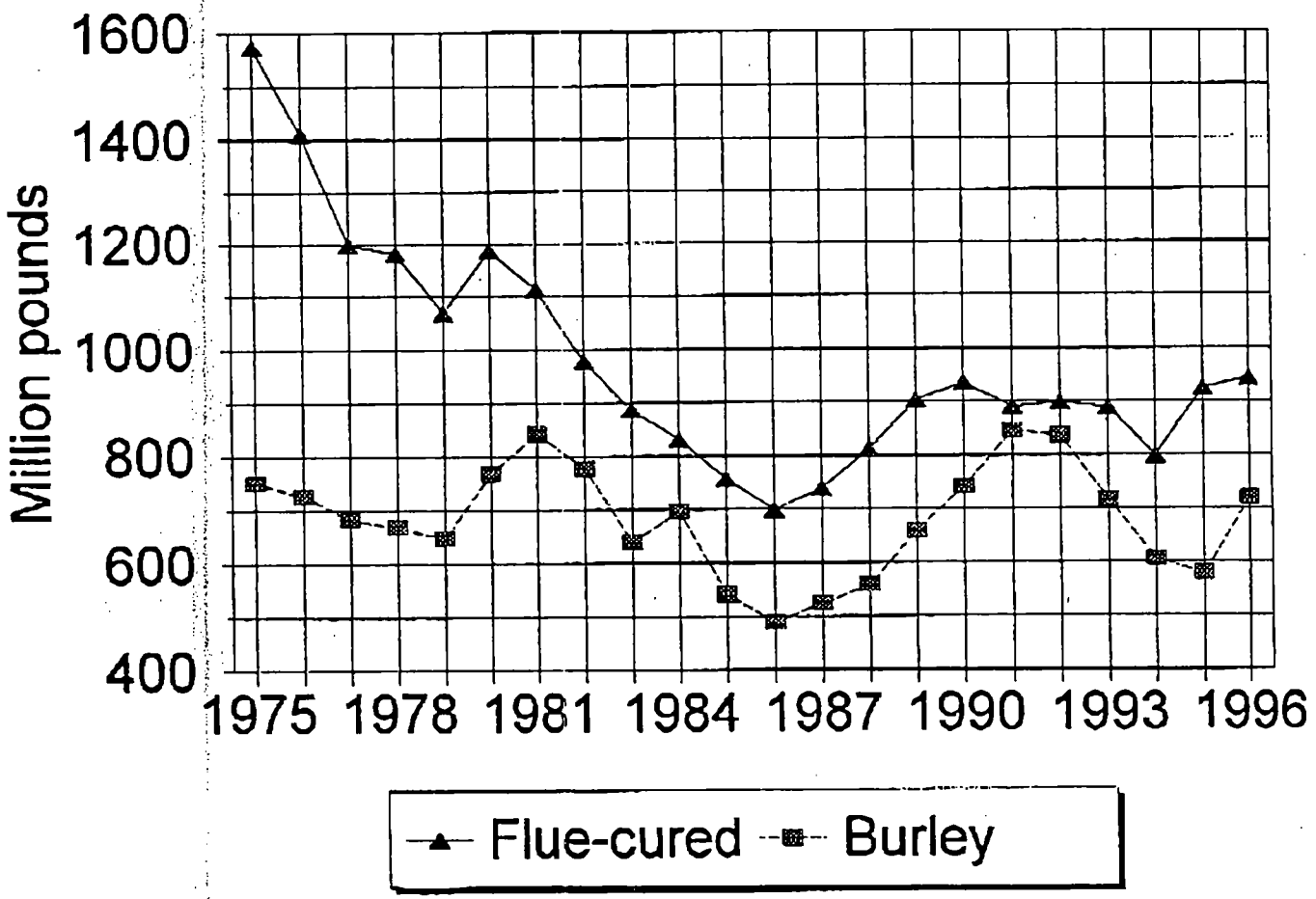


Figure 9

Effects on flue-cured marketings

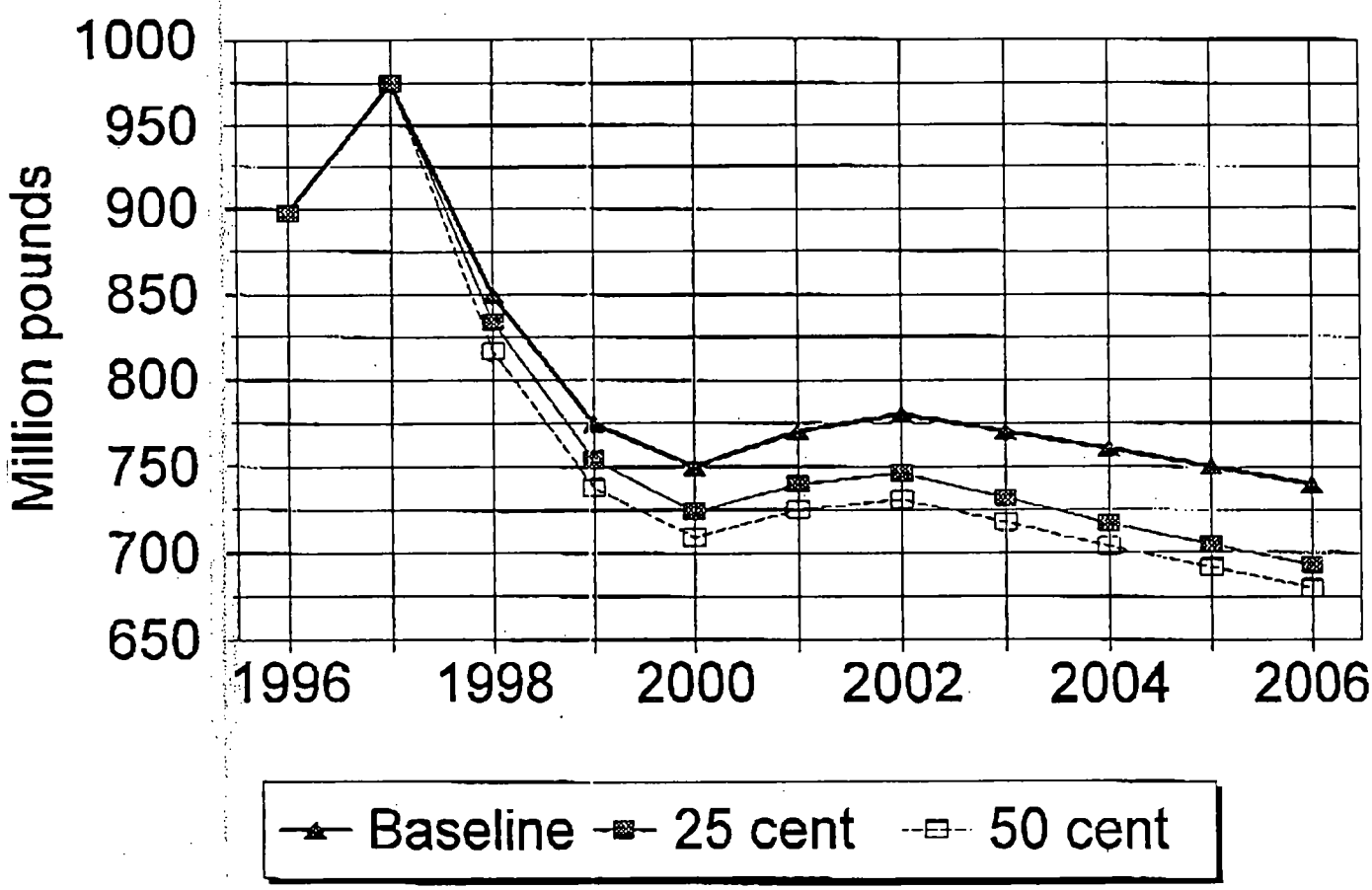


Figure 10

Effects on burley marketings

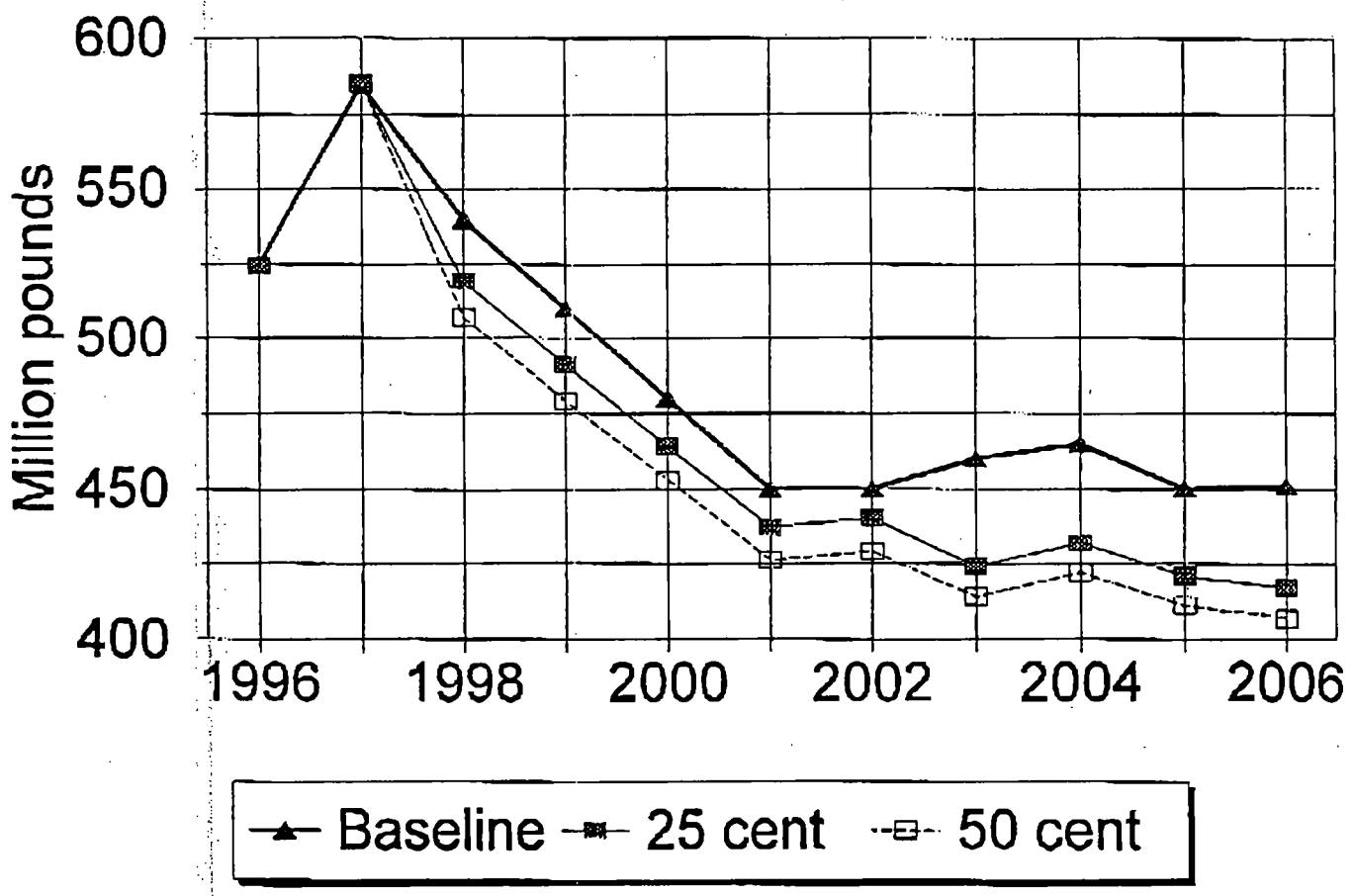


Figure 11

Effects on flue-cured prices

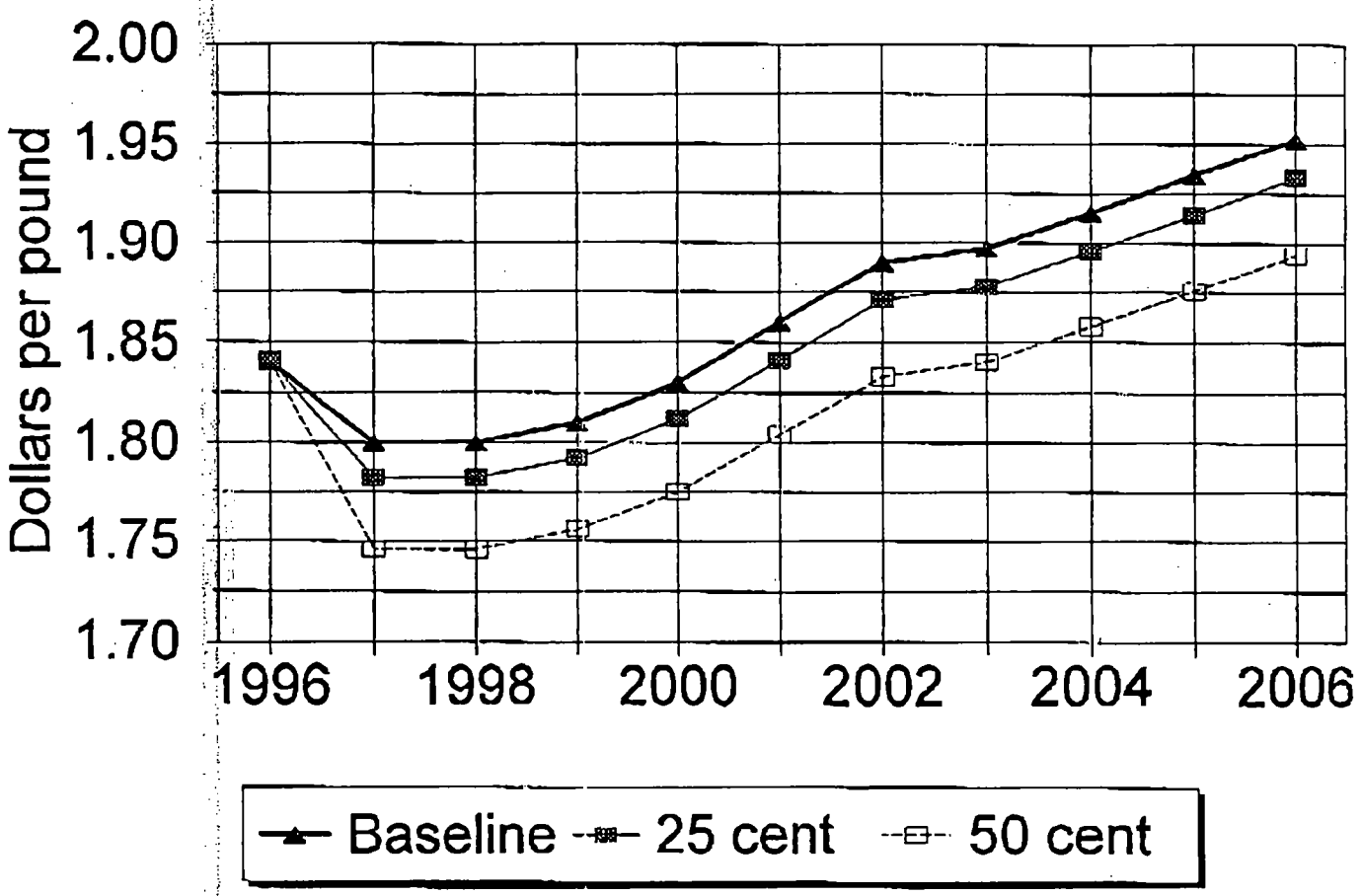
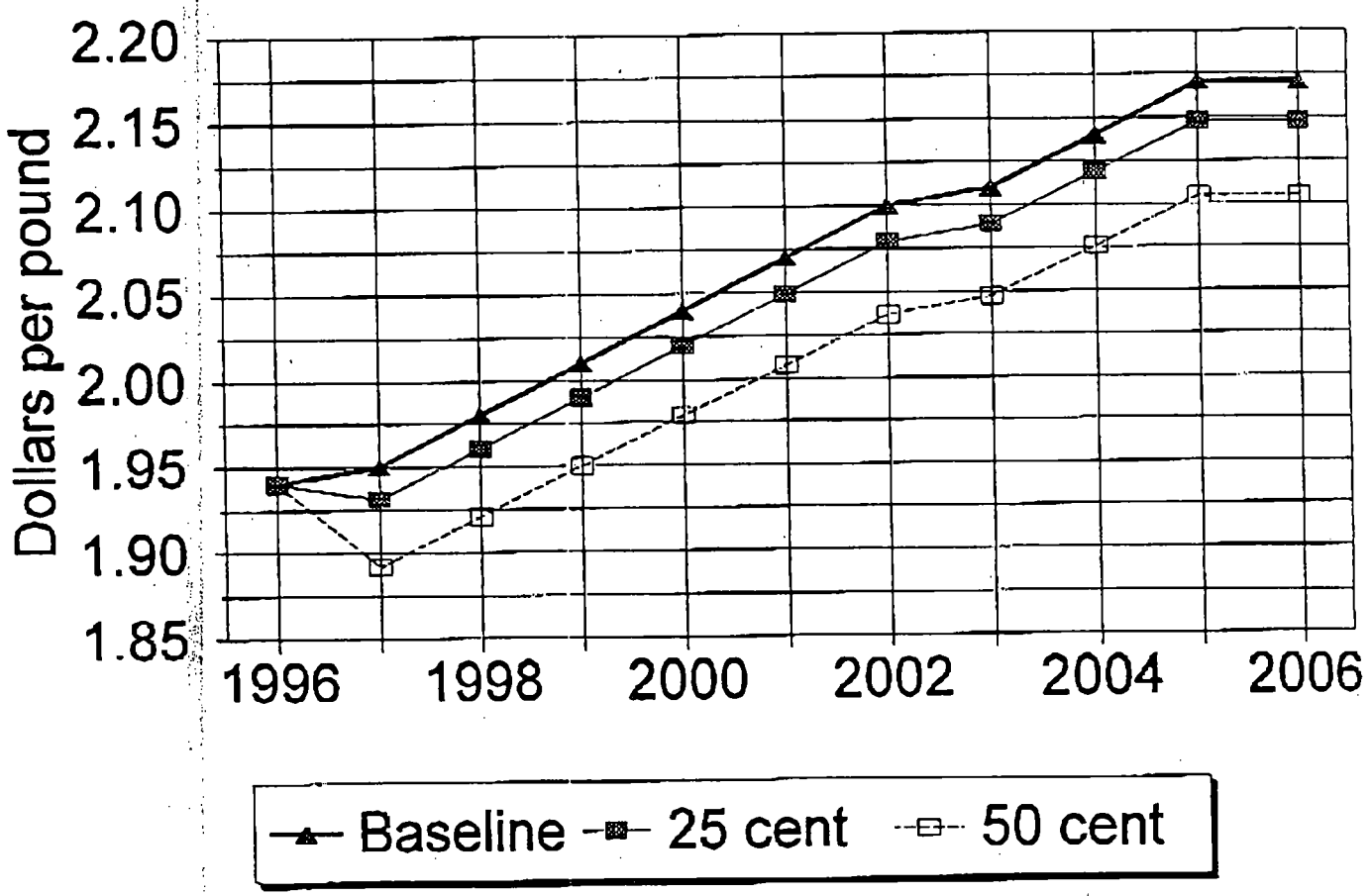


Figure 12

Effects on burley prices



The Tobacco Program—A Summary and Update

by

Tom Capehart

Abstract: Most tobacco production in the United States has been under a price support-production control program since the early 1930's. A number of changes have been made in the program, especially during the last 15 years. Changes in the program from the early 1930's are summarized and more recent changes evaluated in this article.

Keywords: Tobacco, tobacco program, price support.

1930 to 1981

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.

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 them. With two-thirds or more of tobacco growers voting approval of marketing quotas for their kind of tobacco, growers received price support up to 75 percent of parity. Parity price calculations used 1910-14 as the base period for most commodities, but August 1919-July 1929 was designated for tobacco.

Despite many legislative changes since 1938, the authority to provide an adequate and balanced flow of tobacco through the marketing quota continues. The program is available for all kinds of tobacco except shade-grown wrapper and Perique. Excluding 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 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, which 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 1959 indexes.

Under the loan program, a support price (loan rate) is established for each grade of tobacco. If the buyers are not willing to bid above 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 Commodity Credit Corporation (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 warehouse 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 substantially changed the program. Their adoption was impelled by a number of pressing concerns. Health groups and some members of Congress were concerned that the U.S. Treasury made outlays on a commodity statistically associated with various illnesses. Another concern among some grow-

ers 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." The 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 actual 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. The law also permitted the Secretary of Agriculture to reduce burley quotas as much as 10 percent in any year, if necessary, to control overproduction; previously, the maximum reduction permitted was 5 percent.

The third law made further changes in the tobacco program, as follows:

- Flue-cured 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.
- The lease and transfer of flue-cured tobacco quota was abolished beginning in 1987.
- Imported tobacco, except for Oriental and cigar tobacco, must be inspected for grade and quality to the extent feasible. An amendment to the Food Security Act of 1985 required that imported tobacco be tested for pesticide residues similar to testing required for domestically grown leaf.
- Beginning in 1986, the law required forfeiture of any flue-cured quotas assigned to a farm on which tobacco had not been planted (or considered planted) during at least 2 of the 3 previous years.
- The last permitted announcement date for flue-cured tobacco quota 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. These problems were addressed by the Consolidated Omnibus Budget Reconciliation Act of 1985. The Act, enacted in April 1986, affected the tobacco control programs as follows:

- Beginning in 1987, after being lowered in 1985 for burley and 1986 for flue-cured, 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. The procedure for setting price supports for any kind of tobacco other than flue-cured and burley was unchanged.
- 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 effective quota or a minimum of 100 million pounds of flue-cured and 50 million pounds of burley). Quota reductions were limited from 1986 to 1993. (The limit was extended to 1996 in subsequent legislation.)
- 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.
- 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.
- 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.
- 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. Any manufacturer that fails to purchase at least 90 percent of the tobacco it said it would purchase is subject to penalties.
- Purchasers of flue-cured and burley tobacco pay the same amount to the associations as producers, to the extent practicable.
- Loan stocks of 1976-84 crops were sold at discount prices over a 5-year period for burley and 8 years for flue-cured.

The Agricultural Reconciliation Act of 1987 made further changes in the tobacco program. The most important change permitted limited lease and transfer of flue-cured tobacco quotas under disaster conditions. The law also reduced effective price support levels in 1988 and 1989.

1988 to 1994

The Drought Assistance Act of 1988 provided assistance to tobacco producers if their crop was lowered more than 35 percent by drought, hail, excessive moisture, or related conditions. The Disaster Assistance Act of 1989 provided payments if tobacco production was reduced more than 40 percent because of damaging weather or related conditions. For producers who obtained crop insurance in 1989 under the Federal Crop Insurance Act, disaster payments were available for losses exceeding 35 percent of expected production with average yields.

Three pieces of legislation affecting tobacco were enacted in November 1990. Under the Omnibus Budget Reconciliation Act of 1990 for 1991-95 crop years, tobacco growers and purchasers of tobacco under marketing quota will annually be assessed 1 percent of the national loan rate on all marketings (0.5 percent each for growers and purchasers). The assessment is targeted to reduce the budget deficit. The marketing assessment has been extended through 1998.

The Food, Agriculture, Conservation, and Trade Act of 1990 included the following provisions:

- The Act authorizes the Secretary of Agriculture to invest trust fund reserves from the imported-tobacco inspection account in insured, or fully collateralized, interest bearing accounts, or authorize the Secretary of the Treasury to invest these funds in U.S. Government debt instruments. Fees, charges, and interest earned from the investment of such funds is added to the applicable appropriation account and available without fiscal year limitation. Interest earned is used to offset imported tobacco inspection fees.

The Farm Poundage Quota Revisions Act of 1990 was designed to increase utilization of burley quota. Major features of the law are:

- The sales of burley tobacco quota within counties was permitted beginning with the 1991 crop year. The buyer must be an active burley grower and the purchase is annually limited to no more than 30 percent of the existing quota of the buyer's farm, or 20,000 pounds, whichever is greater. Sales of poundage quotas have been permitted for flue-cured tobacco since 1982.
- A farm that purchases quota is not permitted to sell any quota within 3 years of the last year of purchase. The total tobacco acreage permitted on a receiving farm cannot exceed 50 percent of the cropland in the farm.
- Quota holders are required to lease, or attempt to grow, their quota 2 out of 3 years or forfeit the quota. This replaces the 1- out of 5-year plan.
- Divisions of farm quota cannot be less than 1,000 pounds (except when the division is among family members or pursuant to probate proceedings).
- The amount that could be leased to a receiving farm was increased from 15,000 to 30,000 pounds, thereby permitting individual farms to lease in the larger amount.
- Lease and transfer across county lines was authorized in Tennessee. Tennessee burley producers approved such transfer in a Statewide referendum in January 1991.

In December 1991, legislation was enacted to correct technical errors and clarify various provisions of the 1990 Food, Agriculture, Conservation, and Trade Act. It contained a number of provisions, including the repeal of the Tobacco Seed and Plant Exportation Act. This repeal lifted constraints on U.S. export of tobacco seeds and plants. Another provision permits lease and transfer of burley quota across county lines in Virginia. However, growers did not approve State lease and transfer in a Statewide referendum. Finally, the Tobacco Adjustment Act of 1983 was amended to exempt reporting requirements for tobacco used in cigars, pipes, and chewing tobacco and snuff in retail packages.

In October 1992, an amendment to the Agricultural Adjustment Act of 1938 required that sale or lease of allotments between farms by producers of fire-cured, dark air-cured, and Virginia sun-cured tobacco be approved on an acre-for-acre basis. Previously, the law required a reduction in the allotment transferred when the normal yield for the farm getting the allotment exceeded by more than 10 percent the normal yield of the farm releasing the allotment.

The Omnibus Budget Reconciliation Act (OBRA) of 1993 (P.L. 103-66) contained a provision that required U.S. manufactured cigarettes to contain at least 75 percent domestically grown tobacco during each calendar year, whether for domestic consumption or export. Penalties were assessed manufacturers that exceeded the maximum allowed foreign content. The limit and penalties could be waived during natural disasters or because of low reserve stocks.

In addition to the minimum content requirement, the OBRA of 1993 legislation imposes budget-deficit and no-net-cost assessments on importers. The rate for the budget deficit assessment is the same as for purchasers of domestic leaf, and the rate for the no-net-cost assessment is equal to the combined rates of fees collected from producers and purchasers of U.S.-grown flue-cured and burley leaf. Also, fees for inspecting all imported tobacco will be comparable with fees and charges fixed and collected for services provided in connection with tobacco produced in the United States.

U.S. growers and purchasers of domestic leaf have paid special assessments equal to 1 percent of the average price sup-

port since 1991 to help reduce the Federal budget deficit. The new budget deficit assessment on importers applies to the 1994-98 crops and applies to all tobacco imported, including Oriental. Failure to remit the budget deficit fee will result in a penalty equal to 37.5 percent of the sum of the average price of flue-cured and burley tobacco for the immediately preceding year on the quantity of tobacco on which the failure occurs.

The no-net-cost assessments cover projected losses in operating the tobacco price-support program. U.S. flue-cured and burley growers have paid no-net-cost fees since 1982, while purchasers have paid fees on U.S.-grown tobacco since 1986. Beginning in 1994, no-net-cost assessments are being levied on importers of flue-cured and burley tobacco. Noncompliance by importers to no-net-cost assessments results in a penalty equal to the average price of the tobacco involved for the preceding year times the quantity of tobacco which the failure occurs.

The new act extended to 1996 a provision in previous law that limited the reduction in the national marketing quota for flue-cured and burley tobacco to no more than 10 percent of the amount of each quota in the preceding year. When determining the marketing quota for the 1995 and 1996 crop years, the Secretary of Agriculture can waive the 10 percent quota reduction limit if loan stocks exceed 150 percent of the reserve stock level.

1995 to Present

President Clinton proclaimed a tariff-rate quota (TRQ), effective September 13, 1995, for certain imported tobacco, primarily flue-cured and burley. The proclamation also eliminated duties on cigar wrapper, binder, filler, and Oriental tobacco. The TRQ replaced the domestic content rule (OBRA) of 1993, which was determined to be inconsistent with the General Agreement on Tariffs and Trade (GATT). GATT implementing legislation contained provisions ending the domestic content provisions once the President proclaimed a TRQ on certain types of tobaccos. The TRQ is the result of negotiations which conform to existing GATT requirements. Negotiations with supplier countries established a tariff-rate quota for imported flue-cured and burley tobacco as a GATT/WTO-consistent alternative.

The TRQ places limitations on the quantities imported for consumption. Because of superseding agreements, Canada, Mexico, and Israel are not included under the quantitative restrictions. Imports above quota levels are subject to a 350-percent ad valorem duty. However, most of the duty may be refunded if the same tobacco imported is used to manufacture cigarettes that are exported. Imports under nine harmonized tariff subheadings during the period September 13 to September 12 of any year are limited to the following quantities:

	Million pounds (declared weight)
Argentina[1]	26.5
Brazil	176.8
Chile	6.1
Guatemala[2]	19.6
EU-15	22.0
Malawi	26.5
Philippines	6.8
Thailand	15.4
Zimbabwe	26.5
Other	6.6
Total	332.6

Summary and Conclusions

Many changes have been made to the Federal tobacco price support production control program—especially during the last 15 years. Changes have been made to increase the U.S. competitive position in world markets and significantly lower potential taxpayer costs for operating the program. Even though taxpayer costs are relatively small, the association between use of tobacco products and various diseases has spawned the introduction in Congress of several bills to eliminate the price support program.

The implementation of the tariff-rate quota has brought the United States in line with the GATT/Uruguay Round accord. Imports have increased under the less restrictive TRQ and are expected to continue at higher levels than were under the domestic content rule. However, U.S. growers may benefit from increased exports of leaf, and cigarette companies will not have the incentive to move production offshore that existed under the domestic content rule.

[1]Argentina's quota will decline to 24.3 million pounds on September 13, 1998 and to 23.7 million pounds on September 13, 1999.

[2]Guatemala's quota will increase annually beginning September 13, 1996 to 19.6 million, 20.4 million, 21.2 million, and 22 million pounds by September 13, 1999.

U.S. DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

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PLEASE DELIVER TO: JOM

FAX NUMBER: ( ) PHONE NUMBER: ( )

FROM: Charlie Rawls — As discussed

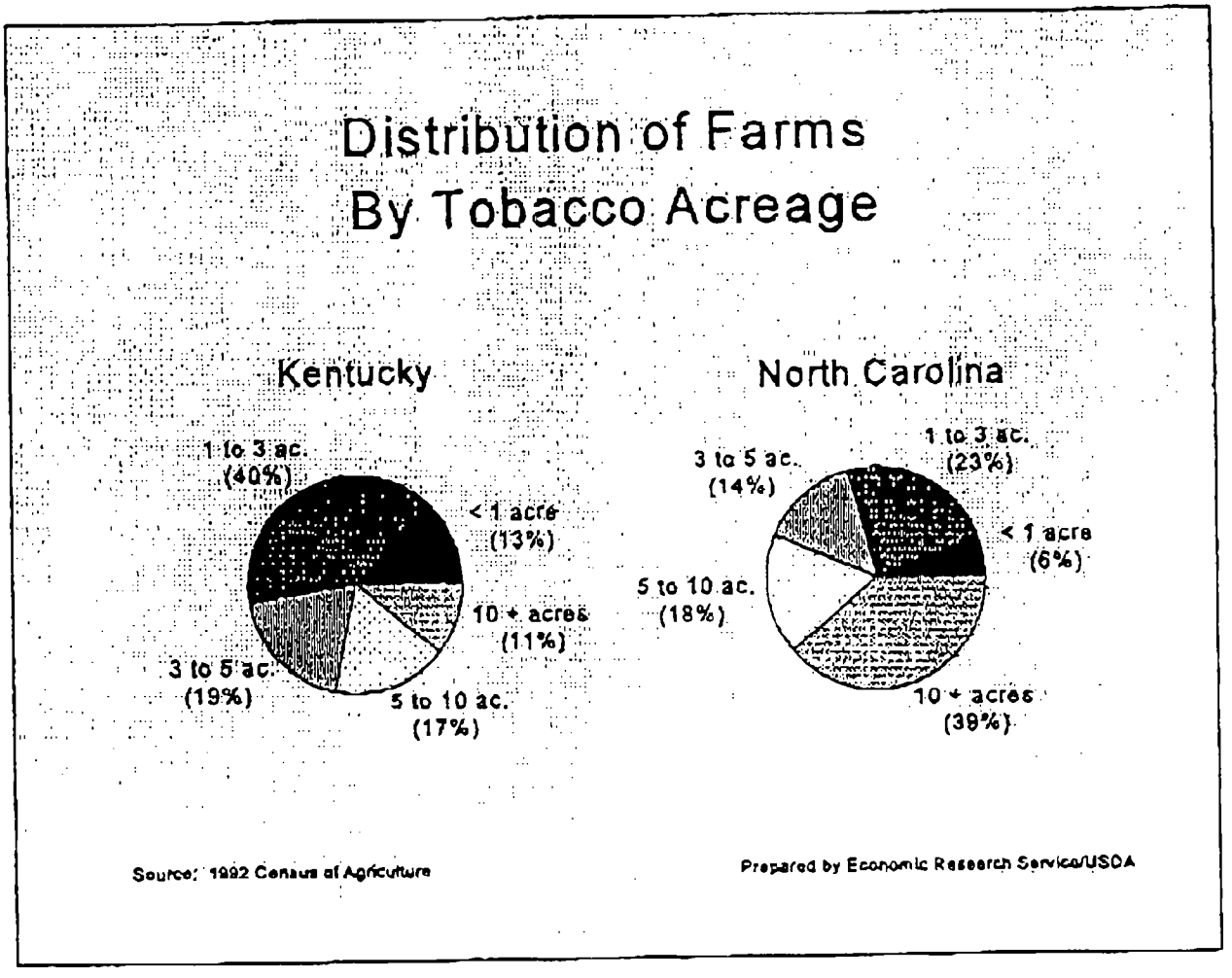
Re: Tobacco & Farm Income

MESSAGE:

Financial Structure of Tobacco Farms In Kentucky and North Carolina

U.S. tobacco production is primarily concentrated in Kentucky/Tennessee (burley) and the southeastern States (flue-cured), although other States grow small amounts. The 1992 Census of Agriculture reported 59,373 farms in Kentucky (268,140 tobacco acres) and 17,625 farms in North Carolina (283,900 tobacco acres) growing of tobacco.

Tobacco acreage on Kentucky and North Carolina farms differs dramatically in size of plantings. Over 50 percent of farms with tobacco in Kentucky have less than 3 acres planted to the crop, compared with just under 30 percent in North Carolina. In Kentucky, the largest number of farms (40 percent) plant 1-3 acres, while in North Carolina the largest number of farms (39 percent) plant 10 or more acres to tobacco.



Importance of Tobacco

According to USDA's 1994 Farm Costs and Returns Survey (FCRS), tobacco accounts for an average 51.2 percent of total farm value of production on Kentucky farms growing tobacco. This compares with 57.3 percent in North Carolina. In Kentucky cattle were ranked second while in North Carolina hogs ranked second.

With farms defined as SIC tobacco farms (more than 50 percent of total farm value of production comes from tobacco), the importance of tobacco grows. SIC tobacco farms in Kentucky had an average 81.4 percent of total value of production from tobacco, compared with 80.0 percent in North Carolina. For Kentucky SIC tobacco farms, crops played only a minor role in the farms' commodity mix, but cattle were still important. In North Carolina, however, hogs were a minor enterprise but soybeans and corn remained important.

The FCRS showed an average farm size of 124 acres in Kentucky and 156 acres in North Carolina. Tobacco acreage accounted for an average 3.7 acres and 12.7 acres in the 2 States, respectively.

Value of selected farm products for farms with tobacco, 1994

	Kentucky		North Carolina	
	All farms with tobacco	SIC tobacco farms 1/	All farms with tobacco	SIC tobacco farms 1/
Number of farms	35,937	25,576	16,878	14,535
	Average dollars per farm			
Farm value of production	33,476	22,632	86,811	64,811
Crop value of production	21,951	19,929	64,096	64,105
Tobacco value of production	17,134	18,417	49,747	51,830
Corn value of production	2,406	427	2,243	1,594
Soybean value of production	1,461	575	7,561	7,781
Cotton value of production	0	0	1,692	501
Wheat value of production	257	110	1,315	1,019
Livestock value of production	11,525	2,703	22,715	706
Hogs value of production	1,858	68	16,678	99
Cattle value of production	4,622	2,484	1,310	607
Poultry value of production	20	0	4,727	0

Source: Farm Costs and Returns Survey, ERS/USDA.
1/ Tobacco accounts for over 50 percent of farm total value of agricultural production.

Farm Income

The 1994 income statements for Kentucky and North Carolina farms with tobacco show an average net cash income of $6,409 in Kentucky and $3,523 in North Carolina. For SIC tobacco farms, these levels rise to $18,783 and $16,383 for Kentucky and North Carolina, respectively. Regardless of the State or the level of specialization in tobacco, direct Government payments (deficiency payments) played a small role in determining the level of farm income. However, the Government tobacco programs are designed as an indirect control mechanism. Tobacco production is regulated by a Federal poundage quota price support program. Growers are guaranteed a minimum price through supports in exchange for their limiting production. Therefore, tobacco program support is reflected in tobacco receipts rather than in Government payments.

On the expense side, chemicals and hired labor accounted for the greatest expense. Equipment-related expenses for fuels and repairs also ranked high. For farms with livestock, feed expenses became important.

Income statements for farms with tobacco, 1994

	Kentucky		North Carolina	
	All farms with tobacco	SIC tobacco farms 1/	All farms with tobacco	SIC tobacco farms 1/
	Average dollars per farm			
Gross cash income	25,668	59,011	16,551	54,412
Crop sales	14,168	53,434	13,150	52,244
Livestock sales	10,165	1,663	2,437	706
Government payments	172	526	70	292
Other farm-related income	1,163	3,389	894	1,170
Less: Cash expenses	19,259	40,229	13,029	38,030
Variable	15,093	32,110	9,964	31,049
Livestock purchases	249	149	60	34
Feed	3,392	223	1,198	164
Other livestock expenses	394	33	272	26
Seed and plants	698	1,693	520	1,514
Fertilizer and chemicals	3,177	9,131	2,498	8,938
Labor	2,347	7,916	2,108	7,424
Fuels and oils	1,032	5,364	685	5,512
Repairs and maintenance	1,903	3,833	1,323	3,851
Machine-hire and custom work	419	859	159	927
Utilities	635	1,656	557	1,507
Other variable expenses	847	1,254	584	1,152
Fixed	4,165	8,118	3,064	6,981
Real estate, property taxes	505	817	337	789
Interest	1,856	1,914	1,335	1,372
Insurance premiums	993	2,081	840	2,015
Rent and lease payments	811	3,306	553	2,805
Equals: Net cash farm income	6,409	18,783	3,523	16,383
Less:				
Depreciation	2,412	3,128	1,359	2,953
Labor, non-cash benefits	125	199	128	184
Plus:				
Value of inventory change	-574	3,644	-236	4,016
Nonmoney income	4,282	4,363	4,255	4,375
Equals: Net farm income	7,580	23,463	6,054	21,637

Source: Farm Costs and Returns Survey, ERS/USDA.
1/ Tobacco accounts for over 50 percent of farm total value of agricultural production.

Tobacco Costs of Production

Estimates of the costs of producing the 1994 tobacco crop are available at the national level only. These estimates show average per-planted-acre variable cash costs of $2,446.04 for burley and $1,884.68 for flue-cured. While fuel and curing expenses are much higher for flue-cured tobacco, burley's high post-harvest labor costs are more than offsetting. Net returns over variable cash costs averaged $1,847.86 per acre for burley tobacco and $2,205.12 for flue-cured tobacco. When all costs are included, net returns averaged negative $468.89 for burley and positive $415.42 for flue-cured.

U.S. costs of production for tobacco, 1994

	Burley	Flue-cured
	Dollars per acre	
Cash receipts	4,293.90	4,089.80
Variable Costs:		
Labor	1,409.06	705.17
Noncash benefits	15.31	23.79
Fertilizer and lime	243.89	296.27
Plant bed materials	76.28	45.49
Chemicals	92.78	212.80
Custom operations	10.86	7.81
Fuel and lubrication	101.63	55.26
Curing and heating fuel	7.19	274.97
Repairs	103.62	140.33
Marketing (burley) & warehousing (flue-cured)	225.43	108.38
No-net-cost & marketing assessment	105.30	72.60
Inspection and grading fee	16.38	16.94
Interest	17.08	21.13
Other	21.23	3.74
Total, variable costs	2,446.04	1,884.68
Machinery and barn ownership costs:		
Capital replacement	273.31	289.72
Return to nonland capital	109.81	98.78
Taxes and insurance	125.06	134.22
Total ownership costs	508.18	522.72
Other Costs:		
General farm overhead	425.10	289.72
Land and quota charge	1,383.47	977.26
Total excluding land and quota	3,379.32	2,697.12
Returns:		
Receipts less variable cash costs	1,847.86	2,205.12
Receipts less total costs	-468.89	415.42
Yield (lbs./acre)	2,108	2,420

Costs and Returns for Selected Vegetables and Field Crops

Tobacco growers are currently growing a mix of other field and specialty crops such as corn, soybeans, cotton, and wheat. Between 1 and 2 percent of FCRS farms with tobacco reported harvesting vegetables. Data from North Carolina are available that allow comparisons among costs and returns for major vegetable crops. Kentucky data were not available.

Except for tomatoes, other vegetable crops are more likely to be grown in flue-cured tobacco areas than in burley areas. Returns vary widely from year to year, depending on growing conditions and market conditions in a specific season.

The gross returns are based on yields and prices reported by NASS for 1994. Cash variable costs are based on enterprise budget estimates developed at the North Carolina State University and have been adjusted to represent average production practices for 1994. The net returns represent earnings to land, labor, capital, machinery, overhead, and management.

Although some tobacco producers could produce vegetables on tobacco acreage, the majority of any displaced tobacco land would likely go into field crops. The demand for vegetables is relatively inelastic, meaning that even small increases in the quantity results in relatively large price declines. Because the vegetable acreage is so small relative to tobacco, a small percentage shift of tobacco land would represent a substantial increase in vegetable acreage. This would lower prices and reduce vegetable returns.

In contrast, tobacco acreage represents a relative small percentage of field crop acreage. Consequently, a relative large shift could occur from tobacco to field crops without having a noticeable impact on either field crop prices or returns.

Estimated average costs and returns for selected vegetable and field crops in North Carolina, 1994

Crop	Gross revenue[1]	Cash variable expenses[2]	Net above cash variable expenses
	Dollars per acre		
Sweet potatoes	1,627.50	1,118.92	508.58
Cucumbers, Processing	992.00	1,041.62	95.63
Cucumbers, Fresh market	440.00	466.61	-26.61
Bell peppers, Fresh market	717.50	864.81	-62.56
Snap beans, Fresh market	983.50	600.06	383.44
Watermelon	675.00	485.86	190.63
Cabbage, Fresh market	1,900.00	1,016.36	883.64
Tomatoes, Fresh market	4,332.00	3,735.50	596.50
Corn (Southeast region)	278.20	157.86	120.34
Soybeans (Southeast region)	170.91	95.10	75.81
Cotton (Southeast region)	623.60	291.70	331.90
Flue-cured tobacco	4,089.80	1,884.68	2,205.12

[1] Average price times average yield per acre. Source: USDA, NASS.
[2] Vegetable expenses are based on Extension enterprise budgets from North Carolina State University. Budgets modified to represent average production practices for 1994. Field crop expenses are from USDA's costs-of-production accounts.