98-133 ENR
Updated July 6, 1998

Compensating Farmers for the Tobacco Settlement

Jasper Womach
Specialist in Agriculture Policy
Environment and Natural Resources Policy Division

Summary

Legislative proposals designed to reduce smoking, primarily by teenagers, are likely to have negative economic consequences for tobacco growers and tobacco-dependent communities. This is because reduced 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. Bill sponsors undoubtedly would like the support of Members of Congress from tobacco states and communities. Therefore, how much, if any, funds 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 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 down and lease prices up. First, there is substantial uncertainty about the long-term

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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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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 two USDA reports.[5] Most tobacco farms are located in areas that have a low dependence on farming and less so on tobacco farming for economic activity. 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%). The most tobacco dependent counties also have the fewest nonfarm opportunities for the workforces.

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,

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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, pp 37-43; Economic Structure of Tobacco-Growing Regions, *Tobacco Situation and Outlook Report*, Economic Research Service, U.S. Department of Agriculture, September 1997, pp 40-47.

but are quota lessees, and to provide economic development assistance to tobacco dependent communities. When compared to the rental and sale prices agreed to in the marketplace, the proposed compensation rates appear to be on the generous side.

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 no more than $16.5 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.

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. 1415 (McCain) (as brought to the Senate floor on May 18, 1998, but recommitted to the Commerce Committee on June 17, 1998). Going into debate, the bill contained two competing farmer alternatives with a majority vote, which did not happen, intended to determine the outcome. One alternative would be similar to a combined S.1310 & S 1582. It would provide assistance for 25 years to tobacco farmers, displaced industry workers, and tobacco-dependent communities. For relinquishing all quota or for future reductions in quota from the 1995-97 average (the base quota), quota owners would be paid $4/lb per year, subject to a lifetime limit of $8/lb on the total base quota. Quota lessees also would be paid up to $4/lb. The burley program would continue largely unchanged. Flue-cured marketing permits (nontransferable) would replace quotas. Economic development block grants would be made to tobacco states, displaced tobacco industry workers would be eligible for special assistance, and higher education assistance would be targeted toward tobacco farm families. Total cost is estimated by the sponsor to be $28.5 billion. The other alternative (incorporating a modified version on S. 1313) would eliminate the quota program and phase out price support loans, but compensate quota holders at $8 per pound and lessees at $4.00. Another $1 billion would be distributed as community economic development block grants. Total cost is estimated by the sponsor to be $18 billion.

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 (thereby eliminating rental costs). 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.