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Economic Regulation and the Colonial Economy: The Maryland Tobacco Inspection Act of 1747

MARY MCKINNEY SCHWEITZER

In 1747 the colony of Maryland enacted a law to improve the general quality of tobacco exports. Tobacco prices rose significantly after the law went into effect, while total tobacco exports continued to increase. The widespread use of tobacco as money, coupled with the exchange of inspection notes for tobacco at inspection sites, led to changes in the Maryland money supply due to the law. Transaction costs fell as a result of marketing all Maryland tobacco through inspection warehouses. The law also appears to have accelerated the trend toward diversification of the economy.

MUCH has been written about England's attempts to control the economies of the American colonies, but relatively little has been written about the colonial governments' efforts to influence their own economic activities. Maryland's Tobacco Inspection Act of 1747 provides an interesting example of colonial economic regulation. This study examines the origins and impact of that law, a measure that represented an important break from previous attitudes in Maryland and resulted in significant changes in the Maryland economy.¹

The Maryland government's earlier attempts to increase revenues from tobacco, the major product of the colony, generally took the form of legislating a reduction in output in an effort to raise prices abroad. Such laws met with failure, proving so unpopular that the government could not enforce them. Maryland planters thus initially were skeptical about Virginia's 1730 inspection law; they considered the regulation to be one more effort to force prices up by reducing output. By the 1740s, however, Maryland planters had come to realize that by regulating the quality of tobacco exports Virginia had dramatically increased revenues for its producers with devastating effects on Maryland's tobacco prices. Planters living

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¹ Early accounts of the inspection law of 1747, such as Vertrees J. Wyckoff, *Tobacco Regulation in Colonial Maryland* (Baltimore, 1936), were generally descriptive. The only attempt to analyze the effects of the law in depth is Lewis C. Gray's perceptive article, "The Market Surplus Problems of Colonial Tobacco" in *Agricultural History*, 2 (Jan. 1928), 1-34. Recently Carville Earle has claimed that the law was harmful to the Maryland economy because it reduced the amount of marketable tobacco; see *The Evolution of a Tidewater Settlement System* (Chicago, 1975).

across the Potomac from Virginia (as well as those on the Pennsylvania border where wheat had been inspected for almost three decades) felt that Maryland needed an inspection law to keep pace with colonial trade.² As one planter wrote in defense of the law:

All trading Nations . . . have made laws to regulate . . . *Trades and Manufactures*, and more especially their *Staple Commodities*, to prevent *Frauds and Deceits* in them . . . such Regulations are no Violations of Liberty, but very consistent with it, and absolutely necessary to secure every Man in his property.³

The 1747 law had several significant effects on the local economy. The gap between Virginia and Maryland tobacco prices evident in the preceding decade closed after the law went into effect, and Maryland prices began a sharp upward trend after decades of stagnation. Along with rising demand and higher prices for grains and livestock, the law seems to have acted as a catalyst in the diversification of the economy. Producers who had had difficulty getting quality tobacco to market turned increasingly to the production of foodstuffs, leaving other planters to specialize in the production of good tobacco. Centrally located warehouses decreased distribution costs in the tobacco trade. Because tobacco served as a form of currency as well as a commodity in colonial Maryland, the law also affected the economy through its impact on the money supply. Despite the framers' explicit attempt to cushion adjustments caused by a revaluation of tobacco, the law resulted in a sudden redistribution of wealth between debtors and creditors and of income from renters to proprietors. Finally, the inspection notes exchanged for tobacco at inspection sites circulated more easily than tobacco itself had, bringing about an increase in the velocity of money at the same time the quantity of tobacco circulating in Maryland was increasing. Before evaluating these effects in detail, however, we shall briefly review tobacco's role in the eighteenth-century Chesapeake economy.

BACKGROUND OF THE INSPECTION ACT

As the major export and source of revenue for both Maryland and Virginia, tobacco dominated the Chesapeake economy through the colonial period. A brief boom in the early years of cultivation was followed by sixty years of falling prices and rising output. From 1680 to 1720, tobacco output and prices remained relatively stable. Chesapeake tobacco exports began to rise again in 1720, increasing steadily until the Revolution. In Maryland, from 1720 to 1747, tobacco prices continued to stagnate, whereas the quantity exported rose. After 1747, however, the price of

² Wyckoff, *Tobacco Regulation*, pp. 51–58, 128, 146; *Archives of Maryland: Proceedings and Acts of the Assembly* (15, 16), vols. 36 and 37 (1727–32).

³ *Maryland Gazette*, July 12, 1753.

Maryland tobacco began to rise, and it continued on its upward trend as tobacco exports increased for the rest of the colonial period.⁴

Tobacco was not the only product of the colonial Chesapeake region; the Maryland economy was more diversified than is generally assumed. During the early to mid-1700s, wheat began to encroach upon tobacco as an important cash crop, especially in the regions bordering Pennsylvania and Delaware. The value of corn exceeded that of tobacco on many estates in central Maryland, and large numbers of cattle, sheep, and swine were also common.⁵

Tobacco, however, remained the staple of the Chesapeake economy, which produced three major strains of the product. Sweetscented, grown only in southeastern Virginia, was considered the finest of the three and brought high prices in London. Brightleaf oronoco grew in Maryland along the Patuxent and on the middle western shore, and was sold in northern Europe. By the late 1700s brightleaf was enjoying increasing demand in England as a substitute for sweetscented. Dullbrown oronoco, the third strain, grew in northern Virginia as well as in Maryland along the Potomac and on the Eastern Shore. Considered inferior by Chesapeake planters, but apparently preferred by French consumers because of its stronger flavor, dull-leaf was sought out by French buyers.⁶

The methods by which these varieties of tobacco were marketed changed during this period as increasingly only the better grades of tobacco were bought through direct contact between planters and European purchasers. The French government permitted only one firm to market tobacco; Chesapeake planters producing tobacco for the French market thus faced a monopsony. In the late 1730s and 1740s, Scottish factors, representatives of Scottish and English Outport merchant houses involved in the growing French trade, began to come directly to the Chesapeake to buy tobacco in bulk. Extending credit liberally (some would say rashly), factors quickly took over large parts of the trade on the Potomac and the Eastern Shore.⁷

As tobacco came to be bought in bulk in the Chesapeake, to be shipped to a merchant with no contact with the growers, quality became a matter

⁴ Russel R. Menard, "Economy and Society in Early Colonial Maryland," unpublished Ph.D. dissertation, University of Iowa, 1975, pp. 1-2; also see Appendix to this paper.

⁵ David Klingaman, "The Significance of Grain in the Development of the Tobacco Colonies," this JOURNAL, 29 (June 1969), 268-78; Paul G. Clemens, "From Tobacco to Grain: Economic Development on Maryland's Eastern Shore, 1660-1750," unpublished Ph.D. dissertation, University of Wisconsin at Madison, 1974; Prince George's County Estate Inventories 1740-47, DD#1, Maryland Hall of Records MdHR 9794; 1747-58, DD#2, Maryland Hall of Records MdHR 9795.

⁶ Lewis C. Gray, *History of Agriculture in the Southern United States to 1760* (Gloucester, MA, 1958), pp. 37, 253, 318; Jacob M. Price, *France and the Chesapeake: A History of the French Tobacco Monopoly, 1674-1791* (Ann Arbor, 1973), pp. 651, 661-2, 667.

⁷ Price, *France and the Chesapeake*, pp. 661-66; Arthur P. Middleton, *Tobacco Coast: A Maritime History of the Chesapeake Bay* (Newport News, VA, 1953), p. 109; John W. Tyler, "Foster Cunliffe and Sons: Liverpool Merchants in the Maryland Tobacco Trade, 1738-1765," *Maryland Historical Magazine*, 73 (Sept. 1978), 263.

of increasing concern. Great distances in time and space separated the production of tobacco in Maryland and its final consumption in Europe, allowing considerable leeway for those who sought to abuse the market. Where planters and merchants continued to conduct business on an individual basis, the market served to separate producers of low quality from those of high quality tobacco. In the new bulk market, however, merchants abroad had no knowledge as to who had produced a particular hogshead. When shipments arrived, some tobacco was in good condition and frequently some was not.

In particular, European merchants complained of the practice of including "trash" tobacco in the shipments. Contemporaries described "trash" as foreign substances stuffed into a hogshead with leaf tobacco, tobacco ruined by a poor job of curing and packing, or tobacco damaged when rolled to the wharfs. (The common means of transporting hogsheads was simply to roll them along the ground, a hazardous journey given the state of the roads at the time.) Such tobacco was worthless overseas; as one observer wrote in 1748: "TOBACCO badly cured or spoiled in the pressing, contracts a funky loathsome Scent, that must render it very unhealthy, and raise an Aversion in the takers to the Commodity itself."⁸

For an export commodity of no value abroad, however, trash tobacco commanded a surprisingly high price in inventories in the 1740s: four to six shillings per one hundred pounds, a price one fourth as high as top tobacco.⁹ Although trash tobacco was used for fertilizer in Maryland, there is no evidence it was ever sold as such. Trash tobacco was more likely of value to Maryland planters because it was indeed widely used as a stuffer—to fill out a light hogshead or to complete an otherwise small shipment.

Buyers in the Chesapeake and Europe responded to stuffing by adjusting prices offered for tobacco to the expected general quality of the shipment. As a result, planters who shipped only good tobacco were penalized with a lower price because of the European merchants' uncertainty; planters who shipped trash benefitted from being able to sell inferior tobacco. The planters perceived they had a problem that could not be resolved through the existing market structure, but it took the example of Virginia's inspection law to demonstrate the possibilities of a legislative solution.

When tobacco prices were depressed in the past, both Maryland and Virginia had responded with laws intended to raise prices by restricting the quantity of tobacco exported or produced. None of these laws was enforced, and all were permitted to lapse. In the belief that lack of cooperation between the two colonies had caused the failure of the earlier laws,

⁸ Clarence P. Gould, *Money and Transportation in Maryland* (Baltimore, 1915), p. 58; Gray, *History of Agriculture*, pp. 224–5; Middleton, *Tobacco Coast*, p. 120; *Maryland Gazette*, Dec. 9, 1747.

⁹ Prince George's County Estate Inventories, 1740–47.

representatives from both legislatures met in the late 1720s to write a bill providing for regular inspection of tobacco to improve prices in the tobacco market. The Virginia legislature passed the inspection law in 1730, but the Maryland legislature chose instead to renew an old law restricting planting. The Maryland law suffered the same fate as the earlier laws restricting output, but the Virginia law appears to have been successfully enforced from the beginning.¹⁰

The Maryland legislature soon enacted laws against smuggling unsuspected Virginia tobacco into Maryland for export, but otherwise the Virginia law was ignored until the middle of the next decade, when Maryland planters began to show concern that prices for Maryland tobacco had fallen relative to the Virginia product (see Figure 1). Petitions appeared in the Maryland legislature from dull-leaf-producing counties, and in 1746 and 1747 a series of pseudonymously written letters in the *Maryland Gazette* argued for a tobacco inspection law to repair the discrepancy between Virginia and Maryland prices.¹¹ As "Mercator" wrote in 1747,

The French agents give 11 l. per hogshead for the *Virginia Purchase Tobacco*, and but 8 l. for that from *Maryland* . . . The difference therefore they make in the price of the Tobacco from each Colony, must be wholly regulated by the Trash they have found in ours . . . a proportionable part of which they will always reckon upon in every cargo they purchase from hence, until they can be assured of the goodness of this commodity, on the public faith of the Province.¹²

Responding to pressure from Lord Baltimore in England as well as to their Maryland constituents, the Maryland legislature enacted an inspection law in 1747 that closely resembled the Virginia law of 1730. All tobacco was to be brought to one of 75 warehouses established by law. Salaried inspectors would then unpack the hogsheads, inspect for trash, repack the tobacco, and burn whatever was unfit for export. No tobacco could be exported from the colony except in hogsheads from an inspection landing. At the warehouse, planters were to be given notes in exchange for tobacco. "Crop notes" would refer to specific hogsheads, so that a planter who had enough tobacco to make full hogsheads (800–1200 pounds each) could still market his own crop. "Transfer notes" would be given to planters who brought in parcels less than a hogshead; their tobacco (which came to be called "transfer tobacco") would then be combined with all the other bulk product in the warehouse. A crop note could be exchanged for transfer notes, but the holder of the note would lose the ability to specify the tobacco exchanged. A merchant with enough trans-

¹⁰ Wyckoff, *Tobacco Regulation*, pp. 51–55, 128, 145–49; *Archives of Maryland: Proceedings and Acts of the Assembly* (15), vol. 36 (1727–29), p. 226.

¹¹ *Archives of Maryland: Proceedings and Acts of the Assembly* (15–18), vols. 36–39 (1727–36); *Maryland Gazette*, 1746–47; Harold B. Gill, Jr., "Cereal Grains in Colonial Virginia" (unpublished report prepared for the Colonial Williamsburg Foundation, Inc., Oct. 1974), Appendix.

¹² *Maryland Gazette*, April 7, 1747. By "Purchase Tobacco" the author meant bulk tobacco for the French trade.

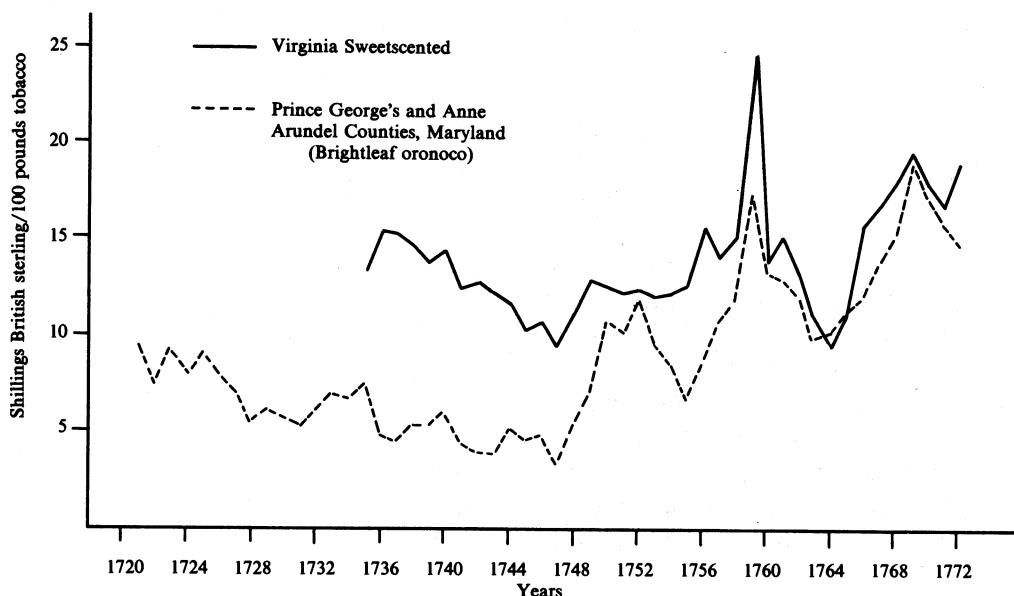


FIGURE 1
TOBACCO PRICES IN MARYLAND AND VIRGINIA, 1721-1772

Sources: Virginia prices: Harold B. Gill, Jr., "Cereal Grains in Colonial Virginia" (unpublished report prepared for Colonial Williamsburg Foundation, Inc., October 1974), Appendix. Maryland prices: Carville Earle, *The Evolution of a Tidewater Settlement System* (Chicago, 1975), pp. 228-29. Conversion rates from Maryland and Virginia current money to British sterling in John J. McCusker, *Money and Exchange in Europe and America, 1600-1775* (Chapel Hill, 1978), pp. 117-50.

fer notes to put together a hogshead could have it packed out of the loose tobacco in the warehouse. At the end of the season the remaining transfer tobacco was to be packed by inspectors and sold at auction, with proceeds retained for holders of transfer notes. (Inspectors were specifically prohibited in later legislation from engaging in the tobacco trade themselves.)¹³

The Maryland bill differed from the Virginia statute in that it expressly took into account tobacco's function as money in the Chesapeake region. Most debts in Maryland, as well as government fees, taxes, and salaries, were enumerated in terms of tobacco. To compensate for the expected reduction in quantity and increase in quality, all debts contracted in tobacco before 1748 were to be reduced by one fourth and legal fees were to be re-

¹³ Wyckoff, *Tobacco Regulation*, pp. 165-66; "An Act for amending the Staple of Tobacco, for preventing Frauds in his Majesty's Customs, and for the Limitation of Officers Fees," *Archives of Maryland: Proceedings and Acts of the Assembly* (21), vol. 44 (1746-47); "An Act for amending the Staple of Tobacco, for preventing Frauds in his Majesty's Customs, and for the Limitation of Officers Fees," *Archives of Maryland: Proceedings and Acts of the Assembly* (23), vol. 50 (1752-54).

duced by one fifth. The law also provided an exchange rate by which county levies could be paid in paper currency for the first time.¹⁴

The Lower House passed the law in 1747 with a close vote; 25 representatives voted for the law and 21 voted against it. Votes split by regions, with merchants and planters voting together in seven counties and splitting their votes in the others. Counties bordering colonies with staple inspection laws (Charles, St. Mary's, Cecil, and Kent) voted unanimously in favor of the law. Dorchester, Somerset, and Worcester, which had nearly abandoned tobacco until the Scottish traders appeared, voted against the law. The remaining seven counties split their votes: ten representatives voted yes and twelve voted no. In these undecided counties eight of the ten votes in favor of the law were by planters; ten of the twelve against it were by merchants.¹⁵

Assembly votes in Maryland seldom divided planters and merchants so sharply, and it is not entirely clear why merchants in the undecided counties strongly opposed the measure. Having voted against the debt-reduction clause earlier in the session, the merchants probably were displeased with its inclusion in the final draft of the bill. Other factors may have influenced the merchants (who owned unusually large amounts of land): ownership of land in other counties, or fear that inspection warehouses might make their marketing services redundant.

Both merchant and regional opposition to the measure were short-lived; the law was easily renewed in 1753 by a vote of 40 to 12 in the Lower House. With minor adjustments designed to strengthen enforcement, the law remained in effect in Maryland until the 1770s.¹⁶

EFFECTS OF THE LAW

The Tobacco Inspection Act of 1747 could have affected the Maryland economy on three levels. In the aggregate, both the Virginia and Maryland laws potentially influenced the colony's welfare through changes in the total gross income derived from tobacco exports. Within Maryland the law could have brought about changes as individual planters adjusted to the higher production costs resulting from the new regulations. Finally, the Maryland inspection law could have affected the money supply, of which tobacco was an important component.

The most obvious and immediate effect of the law was to close the gap

¹⁴ John J. McCusker, *Money and Exchange in Europe and America, 1600-1775* (Chapel Hill, 1978), pp. 116-17; Gould, *Money and Transportation*, pp. 82-97; "An Act for amending the Staple of Tobacco," 1747, 1753.

¹⁵ *Archives of Maryland: Proceedings and Acts of the Assembly* (21), vol. 44 (1745-47); I am indebted to Dr. Edward Papenfuss of the Maryland Archives for allowing me to use unpublished biographies of Maryland assemblymen currently being compiled at the Hall of Records in Annapolis, Maryland.

¹⁶ *Archives of Maryland: Proceedings and Acts of the Assembly* (23), vol. 50 (1752-54).

that had developed between Maryland and Virginia tobacco prices (see Figure 1). The price of Maryland brightleaf, which averaged 39 percent that of Virginia sweetscented in the years 1735–1747, suddenly jumped to an average of 81 percent of Virginia prices in the period 1748–1772. Indeed, Maryland brightleaf actually commanded a higher price than the Virginia tobacco in 1764 and 1765.¹⁷

Looking at the trend in the Maryland price level alone, the law appears to have been at least partially responsible for the sudden upward movement of prices after 1747. Although it is true that Virginia prices also seem to have been stalled in the 1740s, they do not show the dramatic reversal of the Maryland prices.¹⁸

The shift to upward-trending prices after 1747 had impressive consequences for the total revenue derived from tobacco produced in Maryland, as the quantity of tobacco exports continued to rise along with prices. Short-term variations in Maryland or Virginia exports would probably emerge if the Chesapeake export data could be disaggregated between the two colonies,¹⁹ but we are interested here in the long-run trend. Perhaps Maryland planters responded to the law as a Virginia planter had described in 1747: "Our Planters are now got into such a method, that they make as much good tobacco, as they used to make good and bad before the Law was made."²⁰

Although effects were positive for the colony as a whole, the impact of the inspection law was not evenly distributed among individual producers. The amount of total profit (or loss) any given producer experienced due to the law depended on how much the price increase com-

¹⁷ Gill, "Cereal Grains," Appendix.

¹⁸ See Appendix in this paper.

¹⁹ Jacob Price suggests that the Maryland tobacco trade grew more slowly than Virginia's through the 1700s. "There is evidence that, about 1701–04, Maryland accounted for over 40 percent of British North American output. This had declined to 36.4–37.5 percent by 1758–66 (according to a contemporary estimate), to 32.5 percent by 1768–72, and to only 22 percent by 1773." I feel, however, that the data are not strong enough to establish any trend in Maryland exports during this period. The most reliable figures come from the 1768–72 series compiled from British customs records by Lawrence Harper, which shows an average of 32.5 percent with no discernible trend. According to Harper, Maryland exports as a percentage of British North American tobacco exports were: 35 percent in 1768, 31 percent in 1769, 30 percent in 1770, 35 percent in 1771, and 32 percent in 1772. The 1758–66 figure of 36.4 to 37.5 percent is from merchants' account books and should be compared with estimates from a similar source. Price's own estimates of Maryland tobacco exports in 1701–02 account for over 40 percent of British North American output, but he also notes that the figure was 35.5 percent in 1703–04. Finally, the estimate of 22 percent in 1773 comes from a contemporary French report on the state of Maryland exports; the figure represents such a sharp drop from the 1772 proportion of 32 percent that I can only conclude the French report is inaccurate. (The proportion of Maryland tobacco in Scottish imports over the period 1729–74 was 22.7 percent, remarkably close to the French estimates. Because most of this tobacco was bound for France, perhaps the French were concerned solely with their own market in making the report.) (Price, *France and the Chesapeake*, p. 668, fns. 71, 74, and 77, p. 1060; U.S. Department of Commerce, *Historical Statistics of the United States*, Series Z.460–472, p. 1191.)

²⁰ *Maryland Gazette*, May 19, 1747.

pensated for increased costs incurred through marketing only quality tobacco. Plantation size, land quality, proximity to river transportation, and the region of Maryland in which a plantation was located all contributed to the costs of omitting trash from a planter's marketed output.

Writers in the *Maryland Gazette* tended to refer to producers of trash tobacco as "slovens," implying that only lack of scruples or talent separated planters who marketed trash from the rest.²¹ Carelessness clearly explained some of the problem, but other factors help explain why some planters had difficulty producing quality tobacco.

The size of the plantation could well have affected the quality of tobacco. The inspection law's major opponent in the *Maryland Gazette* observed that the law was "a Hardship on poor Tenants, who gives [sic] seven or eight hundred Pounds of Tobacco per Year, for their Rent, and will not perhaps make near that Quantity good, so as to pass Inspection (for we cannot make our Tobacco Good as we please)." On this point the best his adversaries could say in defense of the law was that before its passage either rents were too high or landlords were getting cheated by tenants who paid in trash. They could not, however, deny the problem existed.²²

Both economies and diseconomies of scale operated with regard to tobacco production: the optimal size of a plantation was large enough for slave labor but small enough for the owner to retain direct control over the operation. Economies of scale would perhaps explain the plight of the "poor Tenants"; diseconomies might explain why Maryland had so few of the very large plantations that comprise the stereotype of the slave economy.²³ Owners of large estates tended to have acreage scattered around the county, sometimes around the colony; owners may have had difficulty coordinating production on the various plantations. This could also explain why Annapolis merchants, all of whom held large amounts of scattered acreage, voted against the inspection law, whereas planters in the Assembly, who owned medium-sized estates, voted in favor of regulation.

Land quality probably played a part as well, although the effects were apparently small. As land wore out, tobacco yields per laborer fell. It must have been tempting to keep yields up by including trash. Most present-day historians, however, believe that land was not wearing out rapidly in the mid-1700s; landholdings were still large enough to enable planters to reforest old tobacco fields. Historians also have argued that tenants were

²¹ *Maryland Gazette*, May 1, 1753, for example.

²² *Maryland Gazette*, June 7, 1753, *ibid.*, 1753.

²³ A comparison of estates of different sizes in Prince George's County Estate Inventories in the 1740s shows that estates with crops of less than 2,000 or more than 10,000 pounds of tobacco tended to have a greater percentage of trash tobacco than did medium-sized estates. Since the large estates also included rent from tenants, it is possible that the trash attributed to those estates was actually produced on a smaller plantation. I could not, however, find any evidence for this.

careful about field rotation, as most leases were of relatively long duration. Soil exhaustion, then, had only a mild influence on the costs of producing quality tobacco.²⁴

Of far greater importance was the distance from plantations to the nearest navigable rivers. Trash frequently resulted from good tobacco's having been "damaged in Rolling"—clearly the further the tobacco had to travel by land the more likely it was to arrive at the wharf in bad condition. This was a problem producers of grains or livestock (or cotton and sugar, for that matter) did not have. The first settlers to a Maryland region took the land along the river and the backwoods were settled later; latecomers possibly were affected more severely by the law. On the other hand, by re-packing inspected tobacco in good hogsheads before shipment overseas, inspectors probably performed a valuable service for those planters who had difficulty either packing or rolling tobacco.

Regional differences also affected costs of producing quality tobacco. Historians and contemporaries alike have insisted that the French market for tobacco differed radically from the North European market, but prices from Prince George's and Anne Arundel Counties showed the same responses to the Maryland law as did the two price series from Somerset and Talbot Counties, areas that produced for the French (see Figure 2). It is possible that the law had an effect on the quantity of tobacco grown in the different regions, but data on exports from individual counties are unavailable. Such a change in quantity exported is supported, however, by a study of Foster Cunliffe and Sons, a Liverpool merchant house purchasing tobacco on the Eastern Shore for the French market, which shows tobacco purchases by their factors in Oxford, Maryland, declining dramatically after the inspection law went into effect. Apparently the Foster Cunliffe firm's experience was not isolated—throughout the rest of the century Maryland tobacco fell steadily as a proportion of total French imports.²⁵ As the French monopsony consistently offered a lower price for tobacco than other European purchasers, a movement away from France as a major consumer of Maryland tobacco certainly would not have harmed the Maryland economy. Perhaps after the law went into effect Maryland dull-leaf producers left tobacco to the brightleaf growers, who were now successfully competing with planters of Virginia sweetscented in the luxury market.

Different regions also show dissimilar effects for other reasons mentioned above—soil exhaustion and transportation. Tobacco inspection records from the 1750s show three different trends in Kent, Frederick, and Charles Counties in the first decade of the law's enforcement (see Table

²⁴ Edward C. Papenfuse, Jr., "Planter Behavior and Economic Opportunity in a Staple Economy," *Agricultural History*, 46 (April 1972), 305–06.

²⁵ Tyler, "Foster Cunliffe," 264; Price, *France and the Chesapeake*, p. 668.

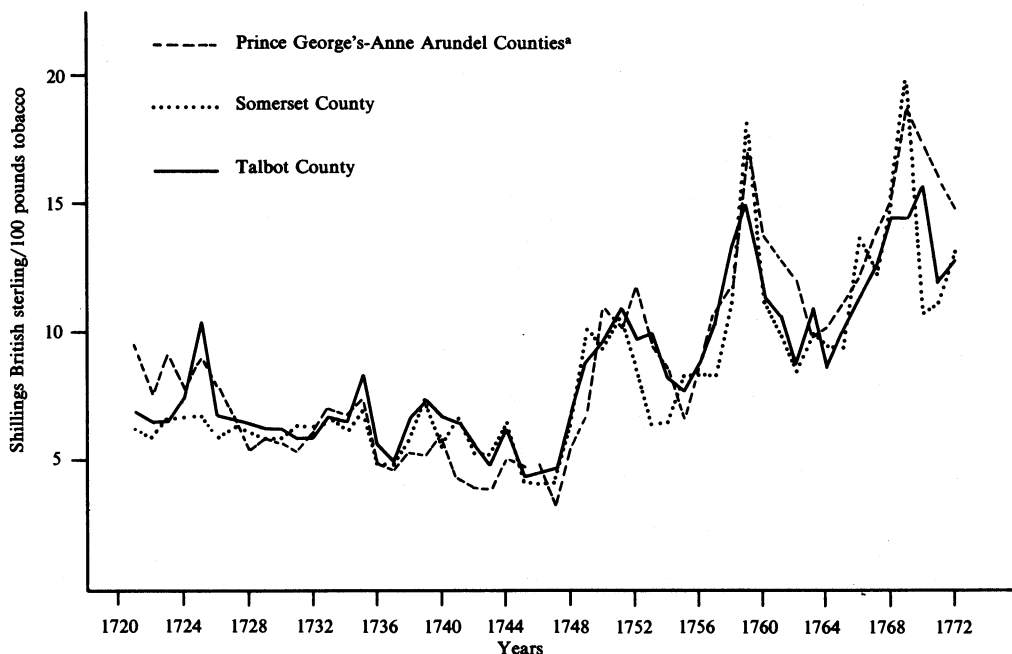


FIGURE 2
TOBACCO PRICES IN THREE MARYLAND REGIONS, 1721-1772

* Prince George's and Anne Arundel Counties are on the middle western shore of the Chesapeake Bay, Somerset County is on the lower Eastern Shore, and Talbot County is on the middle Eastern Shore.

Sources: Prince George's-Anne Arundel Counties prices: Carville Earle, *The Evolution of a Tidewater Settlement System* (Chicago, 1975), pp. 228-29. Somerset County prices: the St. Mary's City Commission. Talbot County prices compiled by Paul Clemens, to be published in a forthcoming book. Conversion rates from Maryland current money to British sterling in John J. McCusker, *Money and Exchange in Europe and America, 1600-1775* (Chapel Hill, 1978), pp. 117-20.

1). In Charles County, the number of hogsheads remained fairly stable, suggesting that established patterns of tobacco production did not change much. Frederick County (including what is now Montgomery County) prospered under the law, with the quantity of tobacco four times as great in 1760 as in 1749, as large tracts of unsettled land remaining along the Potomac were brought under cultivation.²⁶

By contrast, the total quantity of tobacco passing through Kent inspection warehouses fell throughout this period, particularly in the area north of the Chester River. Proportions of transfer tobacco in Kent fell as

²⁶ Price, *France and the Chesapeake*, pp. 661-68; Charles County Tobacco Inspection Records, 1748-54, Maryland Hall of Records MdHR 8170, vol. 69; 1755-69, Maryland Hall of Records MdHR 8171, vol. 70; Frederick County Tobacco Inspection Records, 1748-69, Maryland Hall of Records MdHR 6889.

TABLE 1
TOBACCO INSPECTION RECORDS, KENT, CHARLES, AND FREDERICK COUNTIES

Date	Kent		Charles		Frederick	
	<i>Transfer Tobacco/ All</i>	<i>Total^a</i>	<i>Transfer Tobacco/ All</i>	<i>Total^a</i>	<i>Transfer Tobacco/ All</i>	<i>Total^a</i>
	<i>Tobacco</i>		<i>Tobacco</i>		<i>Tobacco</i>	
1749	.56	1021	.20	2162	.37	373
1750	.45	1387	.14	3490	.26	754
1751	.48	966	.11	4127	.13	833
1752	.30	1673	.09	4217	.09	990
1753	.24	1389	.07	4580	.13	919
1754	.19	1638	.09	5430	.11	977
1755	.14	579	—	—	.09	844
1756	.18	451	.09	2837	.15	420
1757	.15	704	.08	4124	.03	577
1758	.15	951	.09	5217	.04	1277
1759	.09	863	.10	3894	.41	1219
1760	.09	1632	.05	6490	.04	1444

^a Number of hogsheads exported from each county (800–1200 pounds each).

Sources: Kent County, MD: "Proceedings of the Justice under the Law for the Inspection of Tobacco," 1748–87, Maryland Hall of Records, Annapolis, MdHR 8767. Charles County, MD: Tobacco Inspection Records 1748–54, Maryland Hall of Records, Annapolis, MdHR 8170, vol. 69; 1755–69, Maryland Hall of Records, Annapolis, MdHR 8171, vol. 70. Frederick County, MD: Tobacco Inspection Records 1748–69, Maryland Hall of Records, Annapolis, MdHR 6889.

well, from 50 percent of the total in 1749 to less than 10 percent in 1760. Transfer tobacco resulted from a planter's not having enough tobacco to make a full hogshead; this drop in transfer tobacco perhaps was a result of independent small producers leaving the market. (Problems with transfer tobacco could explain why Kent's delegates, who had voted unanimously in favor of the law in 1747, voted against the measure in 1753.) In Prince George's County, where land along rivers was already settled and the backwoods filling as well, tobacco production also appears to have dropped. Estates inventoried after the inspection law show a decline in the proportion of estates listing tobacco: only 13 percent of inventories between 1749 and 1753 included tobacco in contrast to 29 percent between 1741 and 1748.²⁷

If some producers left tobacco, what did they grow as a substitute? Kent was on the border of wheat-producing country in Cecil County, and in northern Kent farmers were shifting from tobacco to wheat as a cash crop. In Prince George's County, however, farmers apparently increased production of corn and livestock.²⁸ More research is needed to determine whether these food products were marketed to the West Indies or con-

²⁷ Kent County "Proceedings of the Justice under the Law for the Inspection of Tobacco," 1748–87, Maryland Hall of Records MdHR 8767; *Archives of Maryland: Proceedings and Acts of the Assembly* (21), vol. 44 (1745–57), p. 547; Prince George's County Estate Inventories.

²⁸ Prince George's County Estate Inventories; see footnote 5.

sumed in Maryland, but internal specialization appears to have increased after the new regulation was introduced.

The inspection law could not affect tobacco as a commodity without also affecting tobacco's role as money. The tobacco inspection law changed the value of the colony's most common form of currency (an effect which framers of the law had anticipated, as we saw before, by reducing all tobacco debts by one fourth and all public fees and levies by one fifth).²⁹ Most transactions in the colony took place through the extension of credit by a merchant on the promise that the planter would pay when his tobacco crop came in. To the extent that debts were contracted in tobacco that consisted of one fourth trash, the debt could be paid off in tobacco notes at a rate commensurate with the increased value of inspected tobacco. It is unlikely, however, that any given planter had previously conducted business using trash as precisely one fourth of his tobacco payment. A debtor who had contracted his debts in tobacco containing proportions of trash higher than the average one fourth found his real debt increased by the law, whereas a planter with lower than average trash content gained against his creditors.

The matter was further complicated when some merchants apparently recontracted debts in anticipation of the law, a practice that prompted an intense debate between the Lower and Upper Houses of the Maryland Assembly in 1748. In an effort to have a new debt reduction clause included in the 1753 bill, the Lower House wrote the Upper House that "several Creditors in order to evade that Part of the Law [reducing debts by one fourth] have Compelled many Poor unthinking People to enter into new Contracts for their Debts merely to evade the Deduction given by Law" The Upper House was not moved and no action was taken on the matter.³⁰

To the extent that merchants had circumvented the debt reduction clause, then, debtors had to pay in money (tobacco) that was worth more than when they contracted the debt. Furthermore, tenants' leases generally were contracted in terms of tobacco on a long-run basis, sometimes as long as three lifetimes; the omission of contracts from the original inspection law resulted in a sudden increase in the value of the tobacco that tenants had to pay landlords. Thus the law redistributed wealth from debtors to creditors in trash-producing regions, and from creditors to debtors in regions with better tobacco; the law also redistributed income from tenants to landlords.

The inspection law had an effect on the total money supply as well. The velocity with which tobacco circulated increased as a result of the use of inspection notes. A Virginia planter had written in the *Maryland Gazette* in 1747 that "the very circulation of the [inspection] notes in the country is a great advantage to the people, for perhaps they will pass from one to an-

²⁹ "An Act for amending the Staple of Tobacco," 1747.

³⁰ *Archives of Maryland: Proceedings and Acts of the Assembly* (22), vol. 46 (1748-51), pp. 50-1.

other fifty times before they return to the Inspector again.”³¹ “George Meanwell,” a pseudonym used by a Maryland planter on the Potomac, added in 1753 that he liked

... the Advantage of having Tobacco Notes in my Pocket, as giving me Credit for the Quantity mentioned in them wherever I went, and that I was thereby at large to dispose of them when, to whom, and where I pleased; whereas, before this Act, my Credit could not be expected to go beyond my own Neighborhood, or, at farthest, where I might be known.³²

The standardization of tobacco also increased the commodity's total value as money. “A planter” noted in 1753 that before the law some landlords forced tenants to pay in top tobacco; conversely, some tenants tried to stuff hogsheads full of poor quality tobacco [a Gresham's law of tobacco, perhaps]. Thus, he said, the inspection law “. . . ought to be highly valued, for the Equality it establishes between both [Landlord and Tenant], since it guards against the Oppression of the one, and the Fraud of the other.”³³

By decreasing the uncertainty associated with a stranger's tobacco, tobacco inspection notes could be used in far more transactions than bulk tobacco or notes on a future tobacco crop. Thus the velocity with which tobacco circulated increased, not only because inspection notes were easier to handle than bulk tobacco, but also because they were more readily accepted as money. This increase in velocity was accompanied by an increase in the actual amount of tobacco produced in the colonies. Both of these changes (*ceteris paribus*) would have been expected to cause a rise in prices. The same year as the inspection act, however, the Maryland legislature redeemed one third of the Maryland paper currency with bills on London; as a result, Maryland currency rose in value.³⁴ Thus, it remains for a future study to demonstrate what effects all these changes had on commodity prices in Maryland.

As one final benefit of the inspection law, centrally located inspection warehouses aided in the economy's growth by helping reduce in-port time for shippers and inventory for planters. In 1747 an anonymous writer had argued in a pamphlet favoring passage of the law that:

... there is another Reason why TOBACCO sells so low in this Colony, compared to what it yields in *Virginia*, and that is the much quicker Dispatch given to Vessels . . . the Commodity being there collected in public Warehouses, his Vessel may be soon dispatched from there after her Arrival: whereas here, a Ship sometimes waits four or five Months for her Loading.³⁵

³¹ *Maryland Gazette*, May 19, 1747.

³² *Maryland Gazette*, April 5, 1753.

³³ *Maryland Gazette*, July 12, 1753.

³⁴ McCusker, *Money and Exchange*, p. 192.

³⁵ *Maryland Gazette*, December 9, 1747.

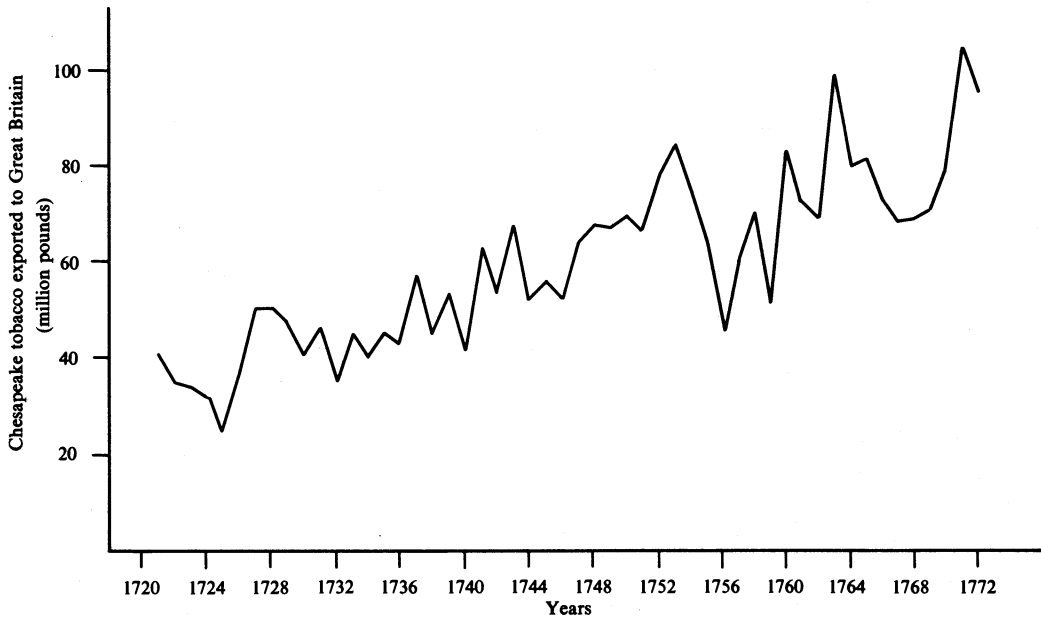


FIGURE 3
CHESAPEAKE TOBACCO EXPORTS, 1721-1772

Source: U.S. Bureau of the Census, *Historical Statistics of the United States: Colonial Times to 1957* (Washington, D.C., 1960), 765-66. The data represent a combination of total English imports of Chesapeake tobacco and Scottish imports of all American tobacco.

Historians have estimated that in-port time for tobacco ships was reduced by over 50 percent during this period.³⁶ Although the practice of sending factors to the Chesapeake to buy tobacco in anticipation of a ship's arrival was responsible for part of this reduction, clearly the establishment of the inspection warehouses completed the process. Furthermore, the inspection houses provided standardized packaging services that probably reduced the amount of tobacco ruined in the long sea crossing because they were loaded into the ship in damaged hogsheads. If reduction in transaction costs can explain much of the per capita growth of the colonial economy, then the inspection warehouse system represented a positive contribution to the economic welfare of the Chesapeake region.

CONCLUSION

The Tobacco Inspection Act of 1747 clearly contributed to the growth of the Maryland economy. Maryland tobacco was once again competitive

³⁶ James F. Shepherd and Gary M. Walton, *Shipping, Maritime Trade, and the Economic Development of Colonial North America* (Cambridge, 1972), p. 87.

with Virginia tobacco. Tobacco revenue rose significantly for the colony as a whole, as prices suddenly began an upward trend lasting to the Revolution, while the quantity of tobacco exported continued to increase. The inspection warehouse system reduced transaction costs in the tobacco trade by increasing the efficiency of distribution. Furthermore, the issuance of inspection notes served to standardize tobacco as a unit of exchange; what effects this had on the money supply and the economy will have to await a study of commodity prices.

The economy experienced internal changes as well. All of these changes were not favorable to the entire colony. The revaluation of tobacco as a medium of exchange effected a one-time redistribution of wealth from most debtors to creditors and a long-term redistribution of income from tenants to landlords. Other effects were positive. The law acted as a catalyst, helping to push marginal producers of tobacco into other agricultural endeavors, specifically the production of cattle and grains. Planters with very small (and perhaps very large) plantations, those with deteriorating lands, and those farthest from navigable rivers, responded to increased costs of tobacco production by shifting to food products. This left more efficient producers to specialize in tobacco. On balance, then, the law appears to have encouraged diversification and increased productivity, with long-run benefits for the Maryland economy's performance.

APPENDIX

Ideally, in order to assess the impact of the tobacco inspection law of 1747 on the Maryland economy, one would begin with a simultaneous-equations model incorporating all of the factors affecting the supply of and demand for Maryland tobacco. Unfortunately, values are unavailable for most of the relevant variables, including income of European consumers and weather conditions affecting the Maryland harvest.

Although the underlying economic structure must therefore remain hidden, it is still possible to use the available data on the quantity of tobacco exported from the Chesapeake and the price of tobacco in Maryland. Time series analysis can be employed to duplicate the price and quantity series, with dummy variables included to test the hypothesis that a significant shift occurred in the underlying structure after the law went into effect. Dummy variables in the quantity equation represent both the Virginia and Maryland laws. There appeared to be an abrupt break in the price data (see Figure 2), so both a slope dummy and an intercept dummy were used to represent the Maryland law in the price equations. A significant shift after 1747 would not prove that the inspection law had caused the change in market structure, but in the absence of other explanations we can conclude that the law was at least partially responsible. Since we are interested in the long-run trends in the Maryland tobacco market, I used five-year moving averages to wash out the effects of short-term shocks.³⁷ The variables used were as follows:

³⁷ In this particular case, weather is probably responsible for many of the short-term variations in prices and quantities, with planters over-reacting to high prices following a bad harvest by planting too much tobacco the following year, forcing prices down. These year-to-year variations probably say something about the elasticity of substitution for producers, but here we are interested in long-run shifts in production and revenue.

t = the integers 1 to 52, for the years 1721–1772,

Q_t = pounds of tobacco exported from the Chesapeake in year t (divided by 100,000),

PGP_t = price of tobacco in Prince George's and Anne Arundel Counties inventories in period t , in shillings sterling per 100 pounds of tobacco,

$TalP_t$ = price of tobacco in Talbot County inventories in period t , in shillings sterling per 100 pounds of tobacco,

$SomP_t$ = price of tobacco in Somerset County inventories in period t , in shillings sterling per 100 pounds of tobacco,

$$AvQ_t = \frac{1}{5} \left[\sum_{i=t-4}^{i=t} \right] Q_i,$$

$$AvPGP_t = \frac{1}{5} \left[\sum_{i=t-4}^{i=t} \right] PGP_i,$$

$$AvTalP_t = \frac{1}{5} \left[\sum_{i=t-4}^{i=t} \right] TalP_i,$$

$$AvSomP_t = \frac{1}{5} \left[\sum_{i=t-4}^{i=t} \right] SomP_i,$$

D = dummy variable representing the presence or absence of the Maryland inspection law: if $t \leq 27$, $D = 0$; if $t > 27$, $D = 1$,

DVA = dummy variable representing the presence or absence of the Virginia inspection law: if $t \leq 10$, $D = 0$; if $t > 10$, $D = 1$,

Dt = D times t : if $D = 0$, $Dt = 0$; if $D = 1$, $Dt = t$. This dummy variable will pick up changes in the slope of the equation; the other two variables (D and DVA) will pick up changes in the intercept.

The following equations were used to estimate the time trends:

$$AvQ_t = \alpha_{10} + \alpha_{11}t + \alpha_{12}D + \alpha_{13}DVA + u_{1t} \quad (1)$$

$$AvPGP_t = \alpha_{20} + \alpha_{21}t + \alpha_{22}Dt + \alpha_{23}D + u_{2t} \quad (2)$$

$$AvTalP_t = \alpha_{30} + \alpha_{31}t + \alpha_{32}Dt + \alpha_{33}D + u_{3t} \quad (3)$$

$$AvSomP_t = \alpha_{40} + \alpha_{41}t + \alpha_{42}Dt + \alpha_{43}D + u_{4t} \quad (4)$$

First-order serial correlation was present. I then made the assumption that the disturbance term u in all four equations could be represented by the following equation: $u_t = \rho u_{t-1} + e_t$, where e_t is a normally and independently distributed random variable with mean zero and a variance that is assumed to be independent of e_{t-1} . The regression results, using the Cochrane-Orcutt method to estimate a value for ρ , were as follows:

$$(1) \quad AvQ_t = 326.9^* + 8.85t^* + 24.49D + 5.91DVA$$

(5.57) (4.99) (0.77) (0.18)

$$R^2 = .96 \quad \rho = .77 \quad n = 47$$

(8.38)

$$(2) \quad AvPGP_t = 6.12^* - 0.04t + 0.50Dt^* - 13.62D^*$$

(2.35) (-0.36) (3.35) (-3.25)

$$R^2 = .97 \quad \rho = .84 \quad n = 47$$

(10.44)

$$(3) \quad \text{AvTalP}_t = 7.54^* - 0.07t + 0.37Dt^* - 9.74D^* \\ (3.36) \quad (-0.71) \quad (2.96) \quad (-2.71)$$

$$R^2 = .96 \quad \rho = .84 \quad n = 47 \\ (10.40)$$

$$(4) \quad \text{AvSomP}_t = 6.94^* - 0.06t + 0.38Dt^* - 9.58D^* \\ (4.88) \quad (-0.88) \quad (3.97) \quad (-3.54)$$

$$R^2 = .95 \quad \rho = .72 \quad n = 47 \\ (7.15)$$

* Significant at the 0.01 level of confidence.

The numbers in parentheses are the relevant t-statistics.

Looking first at equation 1, the results show that neither the Maryland nor the Virginia law had a significant effect on the quantity of tobacco exported from the Chesapeake region. The quantity exported rose annually by an average of 885,000 pounds with no discernible shift at the time of either inspection law. (Such a shift might appear if the data could be disaggregated between Maryland and Virginia. At the present time, however, there is not enough information to do so.)

The coefficients for the dummy variables are significantly different from zero at the 1 percent level of confidence for all three price equations. There is thus only a 1 percent chance of incorrectly concluding that there was a significant shift in the time trend after 1747. In all three counties, prices apparently stagnated before 1747, showing no trend at all. After the inspection law was enacted, however, prices began to move steadily upward. In Prince George's and Anne Arundel Counties, which produced brightleaf tobacco, prices rose by an average of half a shilling a year. Prices rose as well in the dull-leaf producing counties, Somerset and Talbot, although by only about one third of a shilling a year. Enactment of the Maryland inspection law thus appeared to end a period of stagnating prices as prices began an upward trend that would continue to the Revolution.

A NOTE ABOUT THE DATA

The quantity figures are a combination of total English imports of Chesapeake tobacco and Scottish imports of all American tobacco. Maryland export figures are available only for the years 1768–1772 (see footnote 19).³⁸

I considered converting the price series into real prices by using a commodity price index. The only index currently available for the Chesapeake colonies, that compiled by the St. Mary's City Commission for use in studying inventories, is inappropriate for my purposes, as it was designed for studying changes in wealth over time, whereas my study is concerned with income. Given the number of goods produced for home consumption in the 1700s in Maryland, I believe it would be difficult to weight properly a consumer price index for the period.

Many goods purchased in Maryland during the period in question, however, were imported from abroad. Since Maryland currency was not accepted by European merchants, it would have to be converted to sterling before it could be used. For that matter, sellers of land and slaves seldom accepted "current money" from purchasers—sterling, tobacco, or bills on London were preferred. The value of Maryland currency varied widely with respect to British sterling, particularly before the first redemption in 1748, whereas sterling appears to have been a relatively stable medium of exchange.³⁹ I therefore converted the

³⁸ *Historical Statistics*, pp. 765–66.

³⁹ Shepherd and Walton, *Shipping, Maritime Trade*, pp. 177–9.

original price series from Maryland current money to British sterling, using the exchange rates estimated by historian John McCusker from contemporary merchants' accounts. For the years before 1733 when there was no paper currency, I assumed that the prices were given in coin and used that exchange rate. From 1733 through 1765 when the last paper money was redeemed, I used the paper currency rate. Finally, I used the ratio of 133 1/3 pounds Maryland money to 100 pounds sterling for the years 1766–1772, when there apparently existed an official exchange rate for an imaginary Maryland currency.⁴⁰

⁴⁰ I am indebted to Lois Green Carr of the St. Mary's City Commission for her assistance in the use of these price series. The Talbot County price series was compiled by Paul Clemens and used with his permission. The Somerset County price series was supplied by the St. Mary's City Commission. The Prince George's-Anne Arundel Counties price series is published in Earle, *The Evolution of a Tidewater Settlement System*, pp. 228–29. Conversion rates from Maryland current money to British sterling can be found in McCusker, *Money and Exchange*, pp. 117–20.